

Volume 3:
Prevention and
Interventions in
Youth Suicide

Report of the Secretary's Task Force on Youth Suicide

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U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
Public Health Service
Alcohol, Drug Abuse, and Mental Health Administration

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Youth Suicide

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Edited by:
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U.S. Department of Justice
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NATIONAL CONFERENCE ON PREVENTION AND INTERVENTIONS IN YOUTH SUICIDE

INTRODUCTION

Since the mid-1950s, fundamental and important changes occurred in suicide patterns in the United States. Suicide rates among older persons decreased while rates for young persons between ages 15 to 24 nearly tripled. Between 1970 and 1985, approximately 75,000 young people took their own lives. Beginning in 1980, more than half of all suicides occurred among persons less than 40 years old. The taking of one's own life is now the second leading cause of death among those ages 15 to 24 and is one of the leading causes of premature death--200,000 potential years of life are lost annually because of suicide. White males account for the preponderance of all suicides and more males are using guns to commit suicide.

Suicide among the young was recognized as a public health issue of national importance when the nation's health priorities were reordered in 1979. The Surgeon General's report, *Healthy People*, called for reducing the suicide rate among persons 15 to 24 from 12.4 per 100,000 (in 1978) to 11 per 100,000 by 1990.

The Secretary's Task Force on Youth Suicide was established as a response to the public demand for action to end these tragic events. It was charged with the responsibility for coordinating suicide activities among various Federal agencies, Congress, State and local governments, private agencies, and professional organizations. Its major functions are to assess and consolidate information on suicide, to provide a forum for communication among health care providers, educators, social service profes-

sionals, and families; and to recommend and initiate activities to address the problem. The ultimate goal of this task force is to formulate a national plan comprised of research activities, educational efforts, and health services involving the public and private sector in efforts to reduce youth suicide.

NATIONAL CONFERENCES

The Task Force on Youth Suicide sponsored a series of national conferences which served as forums for exchanging the most up-to-date information on risk factors and preventive strategies. The first of the conferences made clear that while each suicide is different, a complex interplay of characteristics, or risk factors, contribute to suicide in general and youth suicide in particular; these contributing factors are complex, often interrelated, and only partially understood.

Indicators of risk include, but are not limited to, the presence of psychiatric disorders such as depression or schizophrenia, parental loss and family disruption, being abused or neglected, being a friend or family member of a suicide victim, having genetic or biochemical factors (such as elevated serotonin or 5-HIAA levels), sexual identity problems, being a runaway, having a family with a history of substance abuse, having an unwanted pregnancy, suffering a humiliation or perceived humiliation, and having a propensity toward impulsive and aggressive behavior. Alcohol and drug abuse often complicates and sometimes precipitates suicidal behavior. Cultural pressures and

socioeconomic variables also contribute to suicide among minority youth.

Conference on Prevention and Interventions in Youth Suicide

In June 1986, a national conference was held in Oakland, California to review the current state of knowledge in suicide prevention activities and intervention strategies. Participants in the conference included persons in many disciplines who work with troubled youth: researchers who study suicide; professionals in mental health, medicine, education, and social work; representatives of national and professional organizations, representatives of community-based service programs, including volunteers, civic and religious leaders, parents, and others who work at the front lines of prevention programs.

The papers and research studies presented at the conference addressed intervention strategies on several levels--primary and secondary prevention, community-level health and social services, the role of volunteers in suicide prevention, school-based education, interventions for special populations, early detection and treatment for suicidal adolescents, and federally supported research and demonstration centers. Issues relating to the effectiveness of prevention activities were thoroughly aired. The value of the conference was expanded by frequent open discussion periods and review panels that critiqued the presentations.

Many recommendations for intervention and evaluation approaches made by representatives of public and private interests have been integrated into the task force's recommendations to the Secretary; many more suggestions are included in the commissioned papers contained in this volume.

For many years, research into suicide concentrated on the well established relationship between suicide and psychiatric disorders in adults, usually white males over the age of 40. Intervention and prevention efforts generally involved the detection and

treatment of mental illness, most commonly depression. Recent research, however, suggests that among the young, the patterns of suicide differ from the traditional picture; only a portion of young people who commit suicide are known to have a diagnosable mental disorder. Many investigators now believe that treatment modes used for adults (e.g., treating depression) will not be effective with young people and that conclusions drawn from research on adults cannot be generalized to youth.

From the conference on risk factors, we learned that a multiplicity of factors contribute to a young person's decision to end his or her life, and from the conference on prevention and interventions that no single therapeutic model is ideal to combat the problem; multiple interventions are necessary. Clearly, we need to know a great deal more about the usefulness and effectiveness of interventions. Good epidemiologic data on suicides will help in identifying risk factors and in planning prevention and intervention approaches targeted to specific needs in the populations at risk. We need to evaluate carefully the services now in use and to develop well-planned interventions that include rigorous analyses and interpretation of results.

The participants in the conference believe that the precursors to suicide can be treated and that many potential suicides can be redirected toward alternate, life-sustaining choices. Success will require the combined efforts of all sectors of society: parents, peers, and caring people; and professionals in the fields of health, education, social and mental health services, collaborating to prevent a broad range of self-destructive behaviors in youth.

CONFERENCE SUMMARY

Suicide is a rare phenomenon, affecting about 1 out of 10,000 people. Most of our knowledge about the causes and prevention of suicide is based on relatively few cases. Research projects studying young people

are, with a few exceptions, poorly designed, lack adequate comparison groups or realistic outcome measures, and often involve too few subjects to be considered statistically significant.

A strategy for prevention of youthful suicidal behavior must reconcile two points of view. One view sees completed suicides as the culmination of processes that begin with some problem early in life—educational, behavioral, family, psychosocial, physical—and progress along a continuum of suicidal thoughts, attempts, and finally successful suicide. Many of these young people are highly vulnerable to the stresses of life and they are unable or refuse to adapt to life conditions. Inability to cope with these problems may be predictive of a number of self-destructive behaviors, including suicide threats, attempts, and completions.

The other point of view characterizes attempted suicides and completed suicides as distinct but overlapping entities. An estimated 25 to 40 percent of those who complete suicide are known to have made a previous attempt.

A prevention effort for the former entails a broad-based primary intervention at early points along the continuum, while the latter group requires an approach tailored to a smaller group of individuals whose characteristics or specific problems place them at high risk for suicide. A prevention program targeted only to those with demonstrable risk factors may miss reaching some potentially suicidal individuals in the larger population; on the other hand, a broad-based effort requires a large cohort, but one in which low risk individuals may be strengthened while helping those who need to be helped.

Primary prevention in youth suicide

The concept of primary prevention dictates that preventive efforts, grounded in a sound knowledge base, be administered before signs of a condition or problem develop. For suicide, this refers to any intervention that reduces the possibility of suicide by an

adolescent. Because the pathways that led to suicide are so varied, the issue of when to apply primary prevention may become a problem. For example, should efforts be instituted when a specific disorder identified with suicide appears? Or, should efforts begin when risk factors appear, such as early trauma, sexual identity problems, drug problems, or negative social behavior?

Dr. Felner (see paper, this volume) avers that youth suicide is part of a developmental pattern of general emotional and behavioral problems related to stress, including depression, acting out problems, risk-taking and other self-destructive behaviors such as alcohol and substance abuse, confounded by the intentional, perhaps impulsive, use of lethal means.

A broad-based primary prevention model as proposed by Dr. Felner involves two strategies. One strategy would be devoted to modifying social systems in which youth function in ways that make the youngsters' environment less difficult to adapt to. Making the school environment less anxiety-producing, for example, might affect the mental health and well-being of individuals such that stress is reduced and life opportunities are increased. The second strategy seeks to help youths develop skills that enable them feel better about themselves and less anxious about the future. Enhancing young persons' problemsolving, decisionmaking, and coping skills through educational programs and support networks are examples that might equip youngsters to function better in their environment.

While broad-based prevention programs require exposing a very large population of children to a "treatment," reducing suicide is not the only expected outcome. Numerous beneficial effects are possible with this approach that may generate better mental health even among persons at low risk for suicide including enhancing self-esteem, reducing school failure, increasing the sense of control young people have over their future, and reducing depression and a range of other health-related risky behaviors in

adolescents.

The effects of primary prevention are hard to isolate from other variables that may influence a potential suicide. Few data, no established models or sound evidence suggest that a broad-based primary prevention approach would be effective in reducing suicide among young people. Before proceeding with such a costly effort, models confirming the benefits of such programs need to be tested and evaluated.

Overview of prevention activities

Opinions of scientists in the field vary regarding the relationship between suicide attempters and completers. Data on unsuccessful suicide attempts are skimpy and uncertain, and it is not clear to what extent the psychological problems of attempters resemble those of completers. Nevertheless, it seems prudent to regard any suicidal behavior as presaging completion. In his review, therefore, Dr. Shaffer addressed a wide range of primary and secondary prevention activities (See Shaffer, this volume). The primary prevention activities critiqued by Dr. Shaffer include providing psychiatric care to vulnerable groups; increasing sensitivity of school personnel to the characteristics of the suicide-prone child, and providing skills for teachers, counselors, and other pupils to use when they identify a child at risk; providing information on suicidal behaviors to school children; encouraging students to talk about their suicidal thoughts; suggesting referrals to students suspected to be at risk; and intervening early and treating conditions which are known to predispose toward suicide.

Secondary prevention encompasses activities directed toward preventing completion of suicide among persons who have already threatened or attempted suicide. Approaches include psychological treatment for suicidal individuals, providing emergency crisis intervention at times of maximal stress (including crisis centers and telephone hot-lines for counseling and referral), and ongoing treatment after the crisis has passed.

Identifying suicidal youth through psychological autopsies

The psychological autopsy is a method used by investigators to obtain more information about suicide victims with the goal of identifying a set of conditions or warning signs which may predict other suicides. (See Litman, this volume.) Through interviews with family members, friends, teachers, and other contacts, the researchers attempt to reconstruct the lifestyle, symptoms and behaviors, personal and occupational histories, and medical records of deceased persons.

Psychological autopsies of adults show that depression and alcoholism account for most suicides. Analyses of younger victims, however, show that while adolescent suicides are preceded by psychological maladjustment, fewer young suicide victims suffered from depression; most had a combination of affective and antisocial, aggressive behaviors. The largest group of young suicides (mostly males) are those with conduct or personality disorders, often mixed with drug use. These include impulsive or antisocial young people, many of whom had gotten into some kind of trouble. Another group (usually females) suffer from depression. A third group of suicides consist of youngsters who are compulsive, hard striving perfectionists, socially inhibited and prone to extreme anxiety in the face of any social or academic challenge. A proportion of youngsters do not appear to have diagnosable psychological disorders and their emotional or psychological problems are sometimes unrecognized and untreated.

The researchers further found that adolescents who were presuicidal differed from one another in behaviors, psychological diagnoses, and responses to environmental stresses. School problems and conduct disorders were common as were social withdrawal and friendlessness. Some were high achievers, some were low achievers. The breakup of a relationship was a traumatic factor strongly contributing to suicide. Many suicide victims had been exposed to suicide previously

through suicidal siblings, friends, parents, or other relatives. Many had thought about, threatened, or made a previous suicide attempt.

What all had in common were periods of hopelessness and thoughts of death as a solution to their problems. Most of the youngsters gave clues to their suicidal intentions, to a peer, a family member, or a professional person, either verbally or by their behavior. These clues might be construed as "reaching out for help." Clues, however, were often recognizable only in hindsight because adolescents tended to camouflage them well. About half of the young suicides had recent, but brief contact with the mental health system. In fact, a major problem with young people at risk for suicide is getting them into a therapeutic contact and keeping them there. Families and therapists tend to ignore or deny clues to suicide, thus making it even more difficult for a child in trouble to enter treatment.

Role of alcohol and substance use

Few clinicians doubt the close association of alcohol and heavy drug use with suicide. An estimated one-half of all suicides are associated with alcohol use. The effects of chronic drug use increase the likelihood of depression, despair, and feelings of hopelessness. Dr. Meeks points out that a great deal of depression found in chemically dependent individuals is a result of addiction rather than its cause (see Meeks, this volume). Chronic use of cocaine, for example, produces depression and dysphoria. These drug effects are enhanced in adolescents who are developing emotionally and physically. Adolescents heavily involved in drugs are particularly susceptible to increasing feelings of guilt resulting from the loss of judgment and self control, alienation from families, accumulating failures, and personally unacceptable behaviors which the adolescent had to perform in order to get drugs. Although these feelings may be denied at first, continued drug use coupled with the feelings of uselessness, failure, and confusion, eventual-

ly may overwhelm the young person and lead to suicidal behavior as a way out of psychological pain.

In addition to depression, other frequently observed factors make chemically dependent youngsters more vulnerable to suicide: a strong family history of alcoholism or other drug abuse, and a recent loss or separation (most commonly parental separation or divorce).

In treating suicidal adolescent drug users, the crucial aspects in preventing suicide are recognizing when the adolescent is in crisis (e.g., stating a desire to die) and providing care and protection at the time. These patients are difficult to treat partly because adolescents and their parents resist treatment and try to make the process as difficult as possible. In addition, the underlying problems that led the youngster to use drugs in the first place are difficult to change on a permanent basis. They require long-term treatment and continued alertness to the recurrence of suicidal risk. A team approach treatment--involving family, friends, and peers--seems to work well for chemically dependent adolescents.

MINORITY AND GAY YOUTH

Some young people may respond to external pressures with which they cannot cope by exhibiting self-destructive behaviors, the most extreme of which is taking one's own life. Suicide victims who are homosexual, belong to minority groups, and children who are unduly influenced by violence in the media may fit this model.

Many significant life events ultimately determine one's behavior, personality, and coping styles. Adolescence is a turbulent period filled with many complex physical and psychosocial developmental problems which make the transition from childhood to adulthood difficult. A major developmental task for adolescents is to establish a stable identity. Adolescents are beginning to develop sexually and trying to understand their sexual identity. Those who have homosexual ten-

dencies are confused about their feelings and face a tremendous internal struggle to understand and accept themselves.

Stresses related to being a member of a minority group in the United States may complicate the adolescent maturing process. Environmental factors and conflicts a young person encounters in reconciling minority cultures with the dominant American culture have been postulated as contributing factors to suicides among black, Native American, Hispanic, and Asian youth.

Gay youth

Gay and lesbian youth are two to three times more likely to attempt suicide than other young people (See Gibson, this volume). Gay youth face a hostile and condemning environment, verbal and physical abuse, and rejection and isolation from families and peers (an estimated 25% of young gay males are forced to leave home because of conflicts over their sexual identity). The traumatic consequences of these external pressures make gay, lesbian, bisexual, and transsexual youth more vulnerable than other youth to a variety of psychosocial problems and self-destructive behavior, including substance abuse, chronic depression, relationship conflicts, and school failure, each of which are risk factors for suicidal feelings and behavior.

Help for these adolescents needs to derive from all levels of a society that stigmatizes and discriminates against gays and lesbians. For example, mental health and youth service agencies can provide acceptance and support for young homosexuals, train their personnel on gay issues, and provide appropriate gay adult role models; schools can protect gay youth from abuse from their peers and provide accurate information about homosexuality in health curricula; families should accept their child and work toward educating themselves about the development and nature of homosexuality.

Minority youth

Data show that the highest suicide rates

among minorities (Native Americans, blacks and Hispanics) occur in the younger age groups, a pattern that differs from whites among whom suicide rates increase with age. Strong cultural traditions and social support systems among minority groups are believed to play a role in protecting older age groups from suicide.

Because minority groups are made up of many different cultural entities, one must be cautious about using aggregate data to generalize about a segment of a larger group. For example, Hispanics include people with Mexican, Cuban, Puerto Rican, and other Latin American heritages; Native Americans include members of more than 500 federally recognized tribes, many of whom have different languages, customs, and cultural traditions.

Native Americans

Dr. Thompson (see report, this volume) points out that a true picture of suicide among Native American youth may not be accurate from the aggregated data furnished by the Indian Health Service (IHS). Suicide rates vary considerably among individual American Indian tribes and data from a few tribes cannot be generalized to all Indians. Several other reasons contribute to the unreliability of American Indian suicide data; few data are available on American Indians who live outside IHS service areas and off reservations. American Indians living in urban areas may not be correctly identified as Indians on death certificates; deaths may not be reported as suicides partly because of reluctance to bring adverse publicity to an American Indian community; and small changes in raw numbers of suicide may look very large in terms of changes in rates.

The IHS, nevertheless, reports an average rate of 27.9 suicides per 100,000 Native Americans of ages 15 to 24 during 1981 to 1983; the suicide rate for all Americans 15 to 24 was 12.2 during the same time period. The base population, however, used by the IHS to calculate these rates has changed over time, thereby presenting problems in observ-

ing suicide trends. Suicide patterns among Native Americans differ from those of their white peers in that the peak rate of suicide occurs between ages 15 through 24; white suicide rates are higher after age 35.

Preventive interventions for Native Americans should focus on those communities which can be demonstrated by epidemiologically sound research to have a problem needing a specialized response. A better approach is needed for suicide data collection and data comparisons. Addressing the enormous cultural conflicts between the white and Indian cultures is a necessary preventive strategy. Other efforts, such as primary prevention and early recognition and treatment of the social and psychiatric conditions which lead to self-destructive behaviors, must be planned in conjunction with the individual tribes themselves with unobtrusive measures and with cultural sensitivity.

Blacks

Dr. Baker (see report, this volume) reviewed black suicide rates and characteristics of black suicide attempters in an effort to discern reasons for the large increase in black suicide rates for 15 to 24 year olds--from 4.9/100,000 in 1950 to 11.1 in 1981. Except in specific instances, the suicide rate for blacks is roughly half as great as among whites for both males and females. Black male suicides outnumber black females by about 4 to 1.

Many scientists have suggested that the lower suicide rates reflected a strong support system in traditional black culture, reinforced by the black church and social and fraternal organizations, but that marked sociocultural changes in black families and black communities have caused those institutions to lose their appeal to many black people.

Dr. Baker discusses several theories that have been advanced to explain the rise of suicide among blacks, but only the theories which emphasize interpersonal conflicts,

familial discord, financial concerns, and the impact of poverty and racism on the individual and his family seem to hold up as specific etiologies of suicide attempts and completions among blacks.

Primary preventive strategies, Dr. Baker suggests, should focus on helping black youth understand the sources of their stress and identify effective action. For example, improving families' knowledge of symptoms of mental illness and alcohol and drug abuse will allow a family to seek help before a destructive episode occurs. Secondary prevention should focus on evaluation and crisis intervention for suicide attempters and their families, and, to prevent further suicide attempts, provide a family with alternatives for help in the event of a future crisis.

Hispanics

Suicide data on Hispanic youth were obtained from five southwestern States where more than 60 percent of all Hispanics in the United States reside (see Smith, this volume). The suicide rate for Hispanics (mostly Mexican-American in this geographic area), is lower than the rate for non-Hispanic whites but higher than rates for blacks. Young Hispanic males, however, in the 15 to 19 year age group, have a slightly higher suicide rate than non-Hispanic white males in the same age group. Contrary to the patterns observed among non-Hispanic whites for whom the suicide rate increases with age, the highest suicide rates for Hispanics occur in the 20 to 24 year age group. The ratio of male to female suicides is 4.3 to 1 for Hispanics.

The lower overall suicide rate among Hispanics likely reflects the strength of Hispanic cultural traditions in which close family ties along with the desire not to dishonor one's family through suicide decrease the risk of social isolation. The extent to which these cultural traditions continue to be held within Hispanic communities may influence the future incidence of suicide. As younger Hispanics become assimilated

into American culture, Hispanic traditions may lose their power to influence behavior. Hispanic youths, caught between traditional values and their experiences in the larger social order, coupled with the marginal socioeconomic status of this group, may experience stresses that explain the younger age distribution pattern of Hispanic suicide victims.

Asian-Americans

Very few studies have examined suicide among Asian American youth. Available information indicates that Chinese, Japanese, and Filipino male suicide rates are generally lower than those of American males except in the oldest age groups. Dr. Yu analyzed the sparse suicide data for Asian American (see this volume). By calculating proportional mortality rates, Dr. Yu showed that, within Chinese and Japanese-American populations, suicides have risen dramatically between 1970 and 1980. Possible explanations may be rooted in the social problems faced by young Asian Americans in their struggle to excel and establish themselves in American society.

Influence of the media on suicide

A social factor often cited as having an effect on suicide is the popular media. Several research projects have suggested that violence on television leads to imitative aggressive behavior by children and teenagers.

Other studies suggest that televised news stories or fictional portrayals of suicide contribute to suicidal behaviors among young people with imitative behavior of suicides. One study reported an increase in teenage suicides during the week following news or feature stories about suicide. Another group analyzed the effect of four fictional television programs about suicide that were broadcast in the New York City area. Much advance publicity generated public awareness of youth suicide and some areas provided telephone hotline numbers and information about local crisis services. The rates of both

completed and attempted suicides rose in the two weeks following the telecasts.

In his review, Dr. Berman (see this volume) believes that television's influence on suicides is equivocal. Broadcasts portraying violence or suicide (including news reports of celebrity suicides) might influence the method of suicide in persons already predisposed to killing themselves, but are unlikely to entice nonsuicidal youngsters.

As a significant part of the sociocultural milieu in which children are raised, television and other mass media have the potential to profoundly alter the message environment to which children react. The best use of the media for prevention may be in prosocial education in early childhood. Cooperation between media representatives and suicidologists might be useful in establishing guidelines for news reports and fictional presentations of suicides. Public information campaigns for suicide prevention should be guided by principles, learned from other health promotion campaigns, regarding dissemination, targeting, timing, frequency, and duration of messages. A media campaign should be reinforced by supplementary efforts in the home, school, or other settings where interpersonal communication is promoted. Careful evaluations must be incorporated into a public information campaign to establish rational bases for future campaigns.

Religious beliefs and family structure

Religion and the family are social contexts in which people are physically, emotionally, and psychologically bonded. Religious commitment and strong family ties, in general, provide protection from suicide by promoting shared values, strong social interaction and supportive connections with other people. The greater the intensity of people's ties and connections with each other, the less chance there will be of suicide.

Criminal and juvenile justice

Each year about a half million juveniles are put in adult jails. The risk of suicide for these young persons is particularly high. Jails are frightening, intimidating environments, especially for youngsters detained for the first time. Although many facilities have incorporated special precautions to minimize the opportunity for suicide and prevent detainees from taking their lives, the suicide rate for juveniles in jails is five times higher than the national rate.

Most of the juveniles arrested are coming out of drug or alcohol intoxication, runaways, children fleeing from abuse or neglect, or are retarded, disturbed, mentally ill, or handicapped individuals. Approximately 10 to 15 percent of young people are jailed for violence offenses. For all of them, the first few hours of confinement are the most dangerous.

Young people who have been arrested should be evaluated by a mental health professional to determine whether incarceration or hospitalization is appropriate. If placed in jail, careful observation, separation of juveniles from adults, and removal of personal items that can be used as a means for hanging might reduce the chance of suicide.

COMMUNITY EFFORTS IN SUICIDE PREVENTION AND INTERVENTION

Various suicide prevention programs emerged during the 1960s and expanded rapidly during the 1970s, but little attention was paid, until relatively recently, to the specific needs of young people. Very few reports appeared in the health or social scientific literature addressing detection and treatment of suicidal behavior in the young.

Among the earliest prevention concepts were the suicide prevention centers, which were consortia of psychologists, social workers, psychiatrists, and trained volunteers combining suicide research with treatment of troubled individuals. Although supported

initially with Federal funds, many suicide prevention centers evolved into locally funded, community-based services. About 1,000 suicide prevention programs or crisis programs, exclusive of community mental health programs, are in operation in the United States today; about 200 are specifically called suicide prevention centers. Most of the program names, however, e.g., crisis center, telephone hotline, reflect a broader, crisis intervention purpose than suicide prevention. They offer counseling, caring voices and listeners (by telephone or in person), and other crisis services such as short-term therapy delivered by trained para-professionals. These programs generally focus their efforts on adults, but with the increasing importance of youth suicide, some, but not the majority, of these programs have established components specifically directed at adolescents (see Comstock, Simmons, Franklin, this volume).

Centers usually have referral networks--a consulting staff of health professionals, access to other community services such as law enforcement, social service or mental health agencies, and emergency medical personnel, to serve as back-up resources.

After a teen's suicide, the surviving parents and siblings experience significant stress and dysfunction. Many centers, as well as private therapists, offer grief counseling to help family members, friends, and peers to deal with the pain, guilt, anger, and other emotions following a suicide. Counseling survivors often includes examining the emotional and mental problems experienced by the young suicide victim for the purpose of making it more difficult for survivors to identify with the dead person. Such therapy helps to lessen the chances of suicide by bereaved persons. (See Mitchell, this volume.)

Role of volunteers

Eighty percent of the suicide prevention centers in the United States operate with nonprofessional volunteers as their primary

staff. In fact, the centers are one of the few instances in which trained, lay volunteers provide clinical services that had traditionally been provided by professionals. The crisis worker's role is to establish a rapport with a caller, listen to a person's description of his problems, and work with him in setting a course of action. (Some researchers have reported that people with professional training are not demonstrably more effective than lay volunteers as crisis intervention workers.) Since the early 1980s, operating standards for suicide prevention centers and training and performance evaluation criteria for volunteer crisis workers promulgated by the American Association of Suicidology have made progress in alleviating public mistrust and professional skepticism about crisis intervention techniques and volunteer crisis workers. (See Wyatt, this volume.) Whether health professionals or lay volunteers serve as crisis workers, special training as well as in-service training is necessary to maintain the unique and special skills required for crisis intervention and suicide prevention.

Caring and intelligent young people can also be involved in suicide prevention strategies (see Bolton, this volume). Young people experience many losses and stresses (including body changes, moving away from friends and support groups, and living up to parental and social expectations) and need help in acknowledging and understanding their feelings and coping with sorrow and anger. With proper help and guidance, young people can take charge of their own lives, handle crisis and solve problems and feel valued and worthwhile.

An independent suicide prevention organization is The Samaritans, founded in England in 1953. (See Katzoff, this volume.) Samaritans have 275 branches worldwide and 14 branches in the United States. The branches provide walk-in and 24-hour telephone crisis services for lonely, suicidal individuals. Volunteers offer "befriending" by listening without judging, offering unwanted advice, or intervening without being

asked. With the caller's permission, volunteers can call in professional consultants. Several branches provide outreach programs such as developing school curricula on suicide awareness, distributing literature, and providing speakers for schools and universities.

Despite the variety of programs and community agencies available to assist young people in dealing with stressful situations, to obtain help, young people must be able to identify the appropriate community agencies (e.g., emergency medical centers, community mental health agencies, child abuse services, crisis hotlines or help centers). A high level of community awareness must be achieved and sustained over time in order to facilitate knowledge about resources available within the community which can provide services to people under various forms of stress.

Effectiveness

Of the wide range of interventions that administer to young people at risk for suicide or who have attempted suicide, little is known about their effectiveness--whether the intervention can prevent suicide or suicidal risk. The conference presenters emphasized that no evaluation studies of preventive activities targeted exclusively to young people appeared in the scientific literature. For example, no data demonstrate that the numerous community-based suicide prevention programs for young people (telephone hotlines, school-based suicide education programs, peer support groups, counseling of runaways, and similar attempts) are effective in preventing suicides. The same applies to psychiatric or psychological therapy and to other services that include suicide prevention as part of their mission, such as mental health centers, clinics, or counseling agencies.

EARLY DETECTION AND TREATMENT

A wide range of psychological, sociological or

psychiatric theories attempt to explain suicide among the young. Adolescence is a time when youngsters experience important physical and emotional changes, feel new desires, develop a sense of identity, and break the dependent bonds formed in childhood with parents. For some youngsters, this is a time of profound sadness, stress, and loss, causing serious mental and emotional adjustment problems. Understanding the behaviors and life events that precede suicide are essential to designing models for detecting a potential suicide, preventing the act, and treating the individual.

Detection

Prevention would be most efficient if we could identify some common characteristics which allow individuals who have a high probability of later suicide to be identified and brought into a prevention program. Drs. Blumenthal and Kupfer (see paper, this volume) have proposed a three-level model for detecting potentially suicidal behavior. The first level represents a detection strategy in which high risk groups are identified and "red-flagged" for tracking and educational purposes. While level I includes individuals who are not in immediate danger of suicide, they have certain risk factors such as being children of substance abusing parents, or children who have experienced extreme stress such as divorce or the recent death of a parent. Level II deals with young persons with major behavioral symptoms who do not meet criteria for a psychiatric disorder, but in whom assessment and intervention may be required. Children with emotional difficulties, learning disabilities, extreme aggressiveness, runaways, and those with severe self-esteem problems fall into this group. Level III represents the detection of a psychiatric disorder of sufficient severity to require assessment and intervention by mental health professionals.

The authors also propose a theoretical model of suicidal behavior consisting of five overlapping "risk domains" or groups of risk factors for suicide. Used together with the three

detection awareness levels, the overlap model of suicide risk may be usefully applied to treatment, clinical investigation, education, and clinical intervention. The five risk domains are:

1. Psychiatric diagnosis of a patient.
2. Personality traits that relate to suicide such as aggression, impulsiveness, hopelessness, and borderline personality disorder.
3. Psychosocial factors, such as the strength of a person's social supports, number of negative life events, and presence of chronic medical illness.
4. Genetic and family factors that predispose an individual to suicide.
5. Neurochemical and biochemical variables which may indicate a biological vulnerability to suicide.

The authors stress that physicians--pediatricians, internists, obstetricians, and others outside the mental health field--need to be aware of, recognize, and document suicidal risk behavior and psychosocial stresses. While health care professionals deal with stressful health issues such as chronic diseases or unwanted pregnancies, they often are unaware of the additional risk imposed by other factors in the model. Clinicians, therefore, should be educated to diagnose psychiatric syndromes and suicidal behavior, and to intervene and refer when appropriate.

Treatment of adolescent suicide attempters

Suicide attempters often have a number of coexisting problems--mood and conduct disturbances, drug and alcohol abuse, aggression--which are similar to those of other psychiatric patients. Suicide attempters are a very diverse group and it is difficult to know which problems will improve in therapy, but in general, suicidal behavior may not change in the long run.

In his review of treatment strategies for suicide attempters, Dr. Trautman (see paper,

this volume) found that no specific treatment approaches--behavioral, psychotherapeutic, or psychopharmacologic--are superior to some other treatment or to no treatment at all. Or, are there specific treatments that are applicable only to suicide attempters?

Once in the mental health service system after a suicide attempt, adolescents are difficult to manage and retain in treatment. Most drop out early in the course of therapy. Dr. Trautman estimates that 40 percent of adolescent suicide attempters do not have a psychological evaluation and only 20 percent complete a brief therapy program of three months. In addition, parents are often resistant to their child's therapy, may deny the need for continuing treatment, and refuse to participate in the child's treatment themselves.

Many suicide attempters have immediate problems of a brief nature which are often quickly resolved. Therefore, brief, crisis-oriented treatment and followup, on an outpatient basis, makes sense for many patients. Longer treatment is necessary for more severely disturbed patients. Good therapy for adolescents is active, explanatory, teaches problem solving and other social and behavioral skills, and uses outside resources (cognitive-behavioral therapy meets these needs). Because parent-child conflict is the most common immediate precipitating factor of suicidal behavior, family involvement, with the goals of decreasing destructive family interactions and increasing communication among family members, is an essential component of successful management of suicidal adolescents. New approaches, however, need to be developed to educate families about the therapy process, reach out to those who will not or cannot come to a treatment setting, and attract minority and low-income families to come for needed therapy.

SCHOOL-BASED PROGRAMS FOR SUICIDE PREVENTION

School-based intervention programs are becoming increasingly common, primarily be-

cause schools offer a good opportunity for reaching the largest number of young people. Schools are the most accessible place to make an early identification of troubled, or potentially suicidal youth. Many school initiatives in suicide were instituted in response to local legislation or community pressure following a wave of suicides within a particular school or school district.

The types of programs offered in schools and the populations they serve vary greatly. Dr. Garfinkel's review of school programs (see paper, this volume) emphasizes that successful school programs should integrate an understanding of risk factors for youth suicide, behavioral characteristics and clinical symptoms of suicidal individuals, and various psychosocial stressors experienced by suicidal adolescents. He proposes several components that he believes are critical in developing effective school-based prevention programs:

- Early identification and screening by teachers and other school personnel, which includes recognizing certain behavior patterns and stressful life events that suicidal adolescents experience.
- Comprehensive psychological testing and psychiatric assessment of students identified as needing further evaluation.
- Crisis intervention and management. Other individuals--for example, coaches, clergy, social workers--who may be able to provide help, should collaborate in therapy as part of a suicide prevention team, which should be present in every school. The team should act as an advocate for any youngster suspected of being at risk for suicide.
- Programs immediately following a suicide of a young person in the community. These efforts aim at preventing imitation and deemphasizing feelings of guilt, responsibility and anger from overwhelming the survivors.
- Educational programs for students, teachers, and administrative school per-

sonnel to develop sensitivity and awareness of youth suicide. School programs that deal with raising awareness of the student body to suicide and its prevention include discussions led by trained professionals that encourage students to discuss suicidal thoughts, talk about feelings for friends lost to suicide, and discuss how friends can help when a troubled youngster is identified.

Many school programs do not deal directly with suicide, but are designed to help youth function better in their environment by developing skills to cope with stressful life events, communicate more clearly, recognize depression in themselves and their peers, and feel better about themselves.

- Community linkage and networking. Any given school's suicide prevention team should link with other school districts and community social service and mental health resources in order to provide information or special resources in facilitating referrals for treatment and followup for young people at risk, or after a crisis or suicide attempt. Networking further includes coordinating community needs for education programs, and resolving media issues dealing with public coverage of suicides.

No one has been able to demonstrate that school programs directed to students or school personnel are effective in reducing suicide. In fact, school suicide prevention programs have generated controversy in some communities. Some parents fear that open discussion will introduce the idea of suicide to teenagers who were not suicidal, and some school officials believe that the many demands on the school system and limited funding for special initiatives preclude suicide prevention programs.

Others, however, believe that numerous beneficial effects are possible. For example, open discussion of suicide might facilitate disclosure of some student's preoccupations with suicide, which in turn will lead to inter-

ventions to reduce the risk of suicide. Improving coping skills might aid in raising self-esteem, reducing school failure, and reducing depression and self-destructive behaviors, thereby generating better mental health even among persons at low risk for suicide.

In the long run, we must work toward the rigorous evaluation of in-school suicide prevention programs on a large enough scale to provide statistically significant results of their effectiveness.

RISK REDUCTION

The cost of suicide in terms of mortality, the effects on lives saved, and the costs of health care are great. The numerous factors associated with suicide are far reaching and deeply rooted in the problems of society, family, and the biological makeup of the individual. Each of these issues suggests a specific set of interventions. Dr. Cantor (see paper, this volume) discusses a variety of interventions aimed at reducing risk of suicide through changing the environment in which young people function. She concludes that the interventions most likely to have the greatest impact on youth suicide are: decreasing the cultural pervasiveness of violence; limiting the availability of lethal agents such as firearms, medications, and drugs and alcohol; and instituting educational programs for youth, parents, and the public. Training others who come into contact with young people--school personnel, primary care health professionals, youth group leaders--to be aware of the warning signs of a disturbed youngster offers a way to bring young people into the helping system early enough to avoid feelings of hopelessness which can precede suicidal behavior.

Suicides are rare events that are difficult to predict, and effective interventions have not been identified even for the groups at highest risk--suicide attempters and psychiatric patients. Screening large high-risk populations is very expensive and catches relatively few suicides. Limiting screening to smaller high-risk groups yields even fewer suicides

such that the overall reduction in suicide is minimal. Introducing risk reduction measures enables young people at highest risk to be identified so that intensive and specific therapeutic interventions may be provided.

CONCLUDING NOTE

A considerable amount of energy and goodwill, human sensitivity and kindness has gone into suicide prevention activities. The costs are, for the most part, very high and little evidence demonstrates their effectiveness. Even though full knowledge of the etiology of suicide is not in our grasp and research on preventive strategies is not yet complete, the time for action is now. To postpone attempts at preventive interventions until answers are provided by experimental programs would be to ignore common sense and clinical experience. We must continue with new ideas and fresh strategies, trying new approaches until evaluative studies point the way. Further, interventions must integrate the diverse interests in the field, public and private, and involve a wide variety of support systems within the youngster's environment--family, school, business and industry, health care professionals, and social and religious institutions. As new data emerge, the strength of the scientific base of suicide prevention will expand.

The following major topics were convened in the papers presented at the conference on prevention and interventions:

1. Better statistical data on suicide and suicide attempts by persons between ages 15 and 24. Suicide, to an unknown extent, is universally understated as a cause of death in vital statistics. This underreporting results from difficulties in establishing suicidal intent, practical considerations (such as the loss of insurance benefits), and the social stigma associated with suicide. Problems with determining ethnicity of a decedent may cause underreporting of deaths in minority groups.
2. Epidemiologic analysis of suicide patterns to facilitate identification of risk factors, high risk groups, and trends in suicide. Epidemiologic and empirical evidence is needed to lay the groundwork for a scientific understanding of youth suicide. Research should focus on the nature, extent, and consequences of drug and alcohol abuse among youth, as well as the influence of mental illnesses such as depression, on risk and as precursors of suicide.
3. New strategies for primary prevention and treatment. There are few specific models of primary prevention programs and little or no information on the effectiveness of such programs on suicide. Development of new techniques in primary prevention should be encouraged and tested appropriately. Treatment techniques similar to those used to treat depression in adults are not, in general, applicable to young people. The mental health community must develop ways of identifying the early signs and behaviors related to suicidal intent and design specific interventions for those at varying degrees of risk. The appropriateness and effectiveness of individual and group therapy must be better understood.
4. Research into community level intervention efforts. While the nonmedical community has responded to suicides by establishing crisis services, such as telephone hotlines or drop-in clinics, more research is needed to investigate whether these approaches are effective and how they may be made more effective. These services need to be publicized in such a way that teenagers can identify an appropriate community agency (or suicide prevention hotline) to assist in coping with a stressful situation. Specialized training in suicide prevention should be provided to persons who give help to young people at risk for suicide.
5. Understanding the special conditions of minorities. Attention needs to be given to the unique needs of gay, lesbian, black, Hispanic, Native American, and Asian

youth, who may perceive a different and sometimes hostile world.

6. Education of the public. The general public and especially those who are in contact with youngsters, such as parents, teachers, and other gatekeepers (including the broadcast and print media) should become aware of the warning signs and circumstances that may lead to suicide. Young people should become aware that they can receive help in dealing with their problems. Special care must be taken to ensure that discussion of suicide does not become a stimulus rather than a deterrent.

7. School-based programs for prevention. Schools are one place for identifying youth at risk. School personnel, working with, or being trained by professionals, should develop screening methods for identifying children who may be experiencing stresses and personal problems. Prevention and intervention techniques and curricula for educating and counseling young people at risk and their peers are also needed. Although effectiveness has not been proved, teaching youngsters psychological strategies such as skills for coping with stressful life events, problemsolving, decisionmaking, confrontational skills, communication skills, and building self-esteem can be helpful for all young people. Schools should develop networks with community and professional groups such that teenagers with problems can be referred appropriately for treatment.

8. Developing services to detect and treat potentially suicidal young persons. Better methods of detection (triage techniques) in hospital emergency rooms should be developed to detect whether self-inflicted injuries are indeed suicide attempts. Protocols should be developed that provide for consistent diagnosis and treatment of young people suspected of having made a suicide attempt. In addition, methods should be developed to retain young people at high risk for suicide in a treatment regimen. Primary care physicians should take careful histories related to personal stress, substance abuse and psychological coping skills.

COMMISSIONED PAPERS

PRIMARY PREVENTION: A CONSIDERATION OF GENERAL PRINCIPLES AND FINDINGS FOR THE PREVENTION OF YOUTH SUICIDE

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The task that we were asked to address is one that we found both daunting and important: to provide a brief overview of the current state of knowledge in the area of primary prevention, discuss what we know about current research strategies, and link it to what we know about adolescent suicide, with a particular emphasis on the implications for future interventions and research. To begin, we need a common definition of primary prevention and then, what we mean by primary prevention of suicide among children and adolescents. The essential components of the most widely agreed upon definition of primary prevention are:

1. Primary prevention seeks to reduce the incidence of new cases of a disorder in a population, as well as the prevalence of that disorder;
2. A key distinguishing feature of primary prevention, when contrasted to secondary or tertiary prevention, is the timing of the intervention. That is, primary prevention efforts are by definition "before the fact" in their application, i.e., before signs of the disorder are present; and
3. Primary prevention activities are "intentional" and based in sound generative and executive knowledge bases (Cowen, 1983).

We have learned these principles from prior intervention efforts and well articulated conceptual frameworks or theoretical models. Now let us see what happens when we apply these issues to youth suicide.

Being less certain of our expertise regarding suicide, per se, than we were about adolescence and prevention generally, we turned to the work of some colleagues, particularly those who, by their inclusion on this program, we could identify as experts in the area of suicide. Our first hope was that their work would tell us just when we could first identify/categorize someone as suicidal (so we would know whom to target and if we prevented it). We also hoped the work of others would provide us with a thoughtful perspective on the current state of our knowledge concerning the causes of suicide so that we could then tie all this up in a neat set of suggestions for prevention. What we found was a field where the "answers", to our questions were highly ambiguous and, indeed, the data and models available to support whatever tentative answers at which we might arrive, was often in the formative stages of development. The state of the knowledge base specific to suicide is well articulated by Dr. Maris; he summarizes the literature thusly: "the fact remains--and this may come as a surprise to

most readers,--that few interdisciplinary surveys of suicidal behavior based on systematic samples have ever been done...thus one of the major problems in understanding self-destructive behaviors is that the data base for [generating] such potential explanations is conspicuously absent" (Maris, 1981, p. 6). He goes on to note the lack of sophistication in the designs employed even in those studies that have been carried out (e.g., lack of adequate comparison groups). Although this volume is dated 1981, our own reading of the research which has occurred in the intervening time seems to indicate that little has changed. While there have been several notable exceptions--for example, the data reported by Dr. Maris in his volume and elsewhere (Maris, 1985), and efforts by Drs. Motto and Garfinkel (Motto, 1985; Motto, Heilbron & Juster, 1985; Garfinkel, Froese & Hood, 1982) that focus more generally on "risk" factors--the cumulative weight of evidence necessary to address our concerns seemed lacking. Indeed, if one thing seems clear it is that whatever we knew about suicide in general, we knew somewhat less about youth suicide specifically.

Confronted by this state of affairs, it did not seem that we could make specific recommendations about the primary prevention of youth suicide because two of the basic requirements, i.e., an adequate generative and executive knowledge base and the presence of sound conceptual models, did not seem to be met.

We soon realized there were certain issues, such as the three identified earlier, that are basic to the mounting of all prevention programs and might be extremely helpful in moving us toward developing adequate ways of thinking about the prevention of youth suicide from the perspective of a "preventionist." Given the current state of the literature and debate about suicide, its causes, and its prevention, this literature does not allow us to answer several basic questions which need addressing if we are to mount effective prevention efforts. These include:

1. When are efforts aimed at the prevention of youth suicide primary prevention rather than secondary or tertiary prevention?
2. Who are the groups to whom interventions should be targeted?
3. Where do we intervene, i.e., at the system or individual level?
4. What are we trying to prevent?

As shall become clear, all of these issues interlock. Thus, conceptual or empirical slip-page in one area may have a snowball effect. Let us turn to these issues now in the context of the youth suicide literature.

The question, "when is an effort termed primary prevention?" seems to be one which, by the focus of the suicide literature, if not attended to, could become a source of unintended conceptual confusion and dead-end efforts. A careful examination of the suicide literature reveals that an incredibly broad array of factors are seen as placing youth and others "at risk" for self-destruction. Maris (1982, p. 5) tells us that "under the best of conditions life is short, periodically painful, fickle, often lonely and anxiety generating" "only if the human condition were dramatically changed would suicide change much" (ibid., p. 6) and, finally, "suicide derives from one's inability or refusal to accept the terms of the human condition" (ibid., p. 8). The general point is that each of us may be more or less vulnerable to the stresses and strains of daily life and, under certain conditions of heightened vulnerability, may choose a suicidal alternative as the solution for adapting to these human conditions. By contrast, a number of other authors, including Drs. Garfinkel and Motto, as well as Dr. Maris in some of his other work, point to more specific factors such as parental divorce, a family history of mental illness, increased stress and alienation among the young, being other than heterosexual in sexual orientation, the presence of depressive symptoms or substance abuse, prior psychiatric hospitalization, parental employment history, the occurrence of non-lethal

attempts or a "suicidal career pattern", and the availability of lethal means, as all being risk or etiologic factors, most of these being empirically derived from epidemiological survey research (Garfinkel, Froese, & Hood, 1982; Greuling & DeBlassie, 1980; Maris, 1981; Maris, 1985; Motto, 1980; Motto, Heilbron, & Juster, 1985; Peck & Litman, 1973).

What becomes immediately apparent from this non-comprehensive set of risk factors is that, depending on which ones you elect to include on your list or to emphasize, the answers to: "To whom do we target our preventive efforts?" "What should be the focus of the intervention?" and "When should it occur?" are all quite different. The next step is to ask whether conceptual models or issues existed in the prevention literature which could help us think about these issues as they pertain to youth suicide. Having thus redefined the questions for ourselves, we can now answer these questions a bit more clearly.

Assuming that primary prevention is targeted toward people who are not yet showing signs of disorder, the range of risk factors identified by suicidologists coupled with questions yet to be resolved, such as whether unsuccessful attempts are at all comparable to lethal ones (Garfinkel, et al. 1982), present real problems for the design of preventive interventions.

Inherent in deciding the target of an intervention is that the timing of prevention is critical. Given the risk factors noted and a literal interpretation of the "before the fact" nature of primary prevention, it could be argued that any intervention to reduce the possibility of suicide by an adolescent who has not yet successfully taken his/her own life would qualify as primary prevention. Here, the reasoning goes, since one has not yet committed suicide one does not yet have the disorder. This position may seem a bit extreme and certainly a caricature of what a good prevention definition would be but for the fact that it is a position reflected in much of the risk instrument development research

(Maris, 1981; Motto, et al. 1985). In these works, there is much talk of how a suicidal career, prior suicide attempts, or major symptoms of depression and psychiatric disorder may be "risk" factors. It is clear that what we are really talking about is **identifying predictors** of a future lethal attempt, not precursors of suicide that are truly discontinuous with the disorder. The former is, of course, an important goal. However, identifying too many risk factors may be more paralytic than enabling for prevention efforts--particularly for the development of conceptual clarity to guide us in establishing a sound knowledge base for the prevention of youth suicide.

At this point, a key debate in the prevention literature becomes salient if we are to decide how and when to move from "risk factors" to programs. We need to be clear on how we answer the questions: a) Do we attempt to tailor primary prevention programs to the prevention of a specific disorder, or b) do we develop programs which are effective in alleviating a number of conditions that are antecedent to a range of emotional and physical problems, including, but not limited to the target problem?

The "specific disorder prevention" model rests heavily in a classic medical-public health paradigm which views diseases as caused by specific conditions that interact with individual vulnerabilities, again, specifiable. In contrast, the antecedent condition model argues that at least for a wide range of emotional and behavioral disorders, particularly those related to stress and other elements of the normal life-course, the specific etiology model is not appropriate (Goldstein, 1985).

Since many of the conditions that seem to predict youth suicide (for example, early trauma, sexual deviance, drug and alcohol problems, and negative social interactions (Maris, 1985), predict other predictors of lethal attempts (such as depression and non-lethal "gestures"), and are themselves predicted by these latter predictors, we see that a "specific etiology" strategy for prevention may not fit the problem. On the other

hand, as Maris (1985) has pointed out, the overwhelming majority of adolescents do not kill themselves. Further, we note that the overwhelming majority of those adolescents and youth who display the previously identified predictors and others like them, do not kill themselves. When viewed this way, it appears that a specific etiology strategy may be more relevant. To be sure, a research strategy that focuses on factors relating to differential vulnerabilities appears appropriate to both strategies. Resolving this dilemma at the program implementation level is more difficult. To some extent "they are both right--and also wrong." This is an issue that the working groups and the conference must resolve if we are to progress. We do have some suggestions, however, as to directions that may be helpful in structuring the discussion.

We need to distinguish between predisposing conditions, precipitating conditions, necessary circumstances, and causal factors. Let us work backwards from the simplest issue, causal factors.

As should be clear by now, the causes and pathways to youth suicide are multifactorial--a set of conditions on which my colleagues will elaborate further, and to which we will return shortly. Hence, to search for a specific etiology or specific set of causal factors seems somewhat futile and based more on our desire to emulate medical treatment of disease than on our understanding of the phenomena with which we are concerned. Indeed, even the medical establishment has embraced the concept of health promotion targeted at alleviating broadband risk factors as a major weapon. For us to include such a strategy under the rubric of prevention is neither inappropriate nor incorrect. To the extent that specific causal factors can be identified, we are generally able to do so only on a case-by-case basis. But, by this time, we believe we are far past anything that may be construed as primary prevention. Although we may intervene in specific causal factors and call this effort prevention, in that it may result in the individual's retreating from a

lethal attempt, in every other sense the intervention would be labelled by the medical establishment as heroic care and late intervention. Further, if we wait until specific causal or predictive factors are clearly present, the timing and targeting of the interventions can be determined only at the level of the individual case. That is not to say that such efforts are not critical to reducing youth suicide, but they are not primary prevention and attempting to label them as such will simply make the already murky conceptual waters even less penetrable.

Necessary conditions also seem easy to deal with. The youth needs both the means and the opportunity to engage in a lethal attempt. The availability of firearms, access to motor vehicles, "inviting" high places, and certain drugs may increase the probability of a successful attempt. At this point, we should also recognize that just as a knowledge of what dosage, height, or weapon is required for a lethal attempt, a lack of such knowledge frequently may move what was meant to be an attention-seeking gesture into the realm of a lethal attempt. Education and access are critical, at both the individual level, e.g., in the home, and through policy efforts, such as gun control and efforts to reduce teenage drinking or substance abuse and driving. We hope our working groups will attend to these issues in developing their recommendations.

In attempting to deal with the more general antecedents of youth suicide--predisposing conditions and precipitating conditions--there appear to be more opportunities for true primary prevention, at least when contrasted to the specific etiology approach. As noted above, we may be required to decide first whether youth suicide is a specific phenomenon or part of more general behavioral or emotional problems such as depression, acting-out problems, risk-taking behaviors, and other self-injurious behaviors such as alcohol and substance abuse. It may be that we decide that suicide is both, i.e., that it has a large degree of shared variance with these other conditions as well as its own unique attributes, especially the intentional

use of lethal methods. Certainly, any clinician who has spent more than a few hours with adolescent clients and has seen their depression and sadness following the break-up with a boyfriend or girlfriend, or after a fight with their parents, knows the frequency with which they voice the wish to die out of revenge or for dramatic effect, is not low. Thus, if we find that the antecedents of some youth suicides are much the same as conditions predisposing to depression or acting-out behaviors, it should not surprise us. Indeed, one only has to remember adolescence and the verbalizations or judgments of our own friends to be surprised that more youth do not actually kill themselves. These observations make us realize that we should focus more attention on why more youth do not engage in suicidal behaviors, i.e., what conditions make them less vulnerable. To direct our inquiry and develop a greater understanding of the antecedents to youth suicide requires a perspective on prevention that will guide the questions we ask and will systematize the answers we obtain.

Elsewhere (Felner, Farber, & Primavera, 1983; Felner, Ginter, & Primavera, 1982; Felner & Lorion, 1985), the senior author of this paper and his colleagues as well as others (e.g., Lorion, 1983; Seidman, 1986) have begun to elaborate a model that we believe helps to meet these needs and is especially appropriate for the prevention of youth suicide given what we have discussed thus far. The model defines preventive interventions within a developmental framework and will allow us to view the full range of levels of preventive interventions for youth suicide. Within this model, a preventive intervention involves systematically altering the processes related to 1) the development of adaptation and well-being and 2) the evolution of dysfunction. The goals, quite clearly, enhance the former processes and reduce the latter processes that are experienced by children and adolescents. Further, given the emphasis accorded to the processes underlying the evolution of a specific disorder or set of adaptive difficulties, a developmental model that is transactional in nature (such as that of

Sameroff and Chandler, 1975), and that emphasizes the necessity of understanding the ecological context in which the child or adolescent is attempting to adapt, is clearly the paradigm of choice for moving toward more specific variables of concern. Such a transactional-ecological perspective emphasizes that dynamic transactions between individual and environmental factors lead to health or disorder, and specifying "a path" is not an outcome we should seek. Rather, specifying ways of understanding the relevant processes are of paramount importance. Moreover, to paraphrase Sarason and Doris (1979), it is worth emphasizing from a transactional perspective, that the individual and his environment can never be understood separately...from a transactional perspective the direction of the developmental influences is always reciprocal.

A brief example of how this approach may be combined with our notions of predisposing and precipitating factors to understand youth suicide may be helpful here. One of the "hot" media issues of the past few years has been "cluster" suicides among youths in the same school or town. The predisposing conditions for the youths who follow the first suicide may be depression or other psychiatric problems, low family support and/or a high degree of alienation from friends and family. All of these conditions both contribute to and are contributed by the emotional problems present. Children's feelings of not belonging in school or having a restricted future because of doing poorly in school may have similar impact. These latter conditions might result from the social climate of the school, its structure, or recent school transitions imposed by the system. Thus, individual, family system, and broader social system (e.g., peer/school) factors may all contribute to predisposing the adolescent to be vulnerable at this time. Nonetheless, these adolescents in general, have not yet considered suicide seriously or attempted it as a solution to their adaptive difficulties. Indeed, they may have attained relative equilibrium, however unsatisfactory, in their coping efforts.

Into this pot we put not only the model of another adolescent demonstrating that suicide may be an alternative coping strategy, but the response of the social system to that event. For a lonely, highly stressed adolescent, with the particularly strong needs for identity and acceptance that characterize this age, the overwhelming attention and grief that the system and other persons pay to the suicide, may be sufficiently attractive and satisfying to many of the adolescent's immediate needs at a level that results in disequilibrium and, in turn, precipitates an attempt. It is this change in equilibrium which seems to discriminate between those who make a lethal attempt from those who do not, and for whom it is so difficult to specify a distal causal pathway. In this situation, more proximal factors seem more salient. If access to lethal means is relatively easy (e.g., if guns and ammunition are available in the home), the probability increases that a momentary, impulsive act may occur. Similarly, anything which enhances the attractiveness of suicide as a coping strategy may also tip the scales (e.g., another incident with resulting publicity, a fight with one's parents or significant other, etc.). That environmental factors may contribute here is obvious from the pattern that seems to indicate that cluster suicides tend to be less common in large systems (e.g., schools, towns) where anonymity is greater, where there may be less publicity, and the possible pay-off, in terms of the adolescent's own developmental issues, seems less certain or clear. This example illustrates the very complex interplay of developmental and environmental circumstances and the individual's own limited range of coping ability. Further, we see that:

- (1) both predisposing and/or precipitating conditions may be necessary for many youth suicides to occur and;
- (2) even when both sets of conditions are present, in most instances, suicide does not occur.

Perhaps even more ironic is that children experiencing these conditions may be more "at risk" in systems in which we might assume lower risk, i.e., small, cohesive ones. Similar examples may be developed for the high rate of suicides among

children who seem to be doing very well academically or socially (Maris, 1985) as well as those who are more obvious risks for the full array of psychological and self-injurious difficulties that plague adolescents.

The above may make it seem as if primary prevention programs targeted to youth suicide will have little pay-off and that broad scope suicide prevention programs may actually influence the actions of only a small group of children. We would like to argue that such views are short-sighted but, given base rates, perhaps natural conclusions will result from specific etiology or specific outcome-targeted prevention programs. What we mean is, if we develop broad-based prevention programs for the prevention of youth suicide, with our only goal being the reduction of actual cases of suicide, the very limited resources available for medical and mental health programs may force us to conclude that what little funding is directed toward prevention of youth suicide may be better spent.

What strikes us as particularly ironic is that although other federal agencies such as the Department of Defense and NASA take pains to convince us that we get far more for our dollar, especially our R & D dollar, than the targeted "product", we in human services, at least at this time, are going the other way. We fail to see the harm in reducing the incidence of school failure, adolescent depression, non-lethal suicide attempts, and the rest of the range of health-risk behaviors that adolescents engage in, while we also attempt to reduce the suicide rate. Indeed, if we follow the model we have advanced above, such multiple-outcome effects seem expected and, if the programs are effective, unavoidable. Documenting the positive as well as negative, but unintended or "ancillary" consequences of suicide prevention programs should not be discouraged. Indeed, studying the full range of outcomes associated with such programs may provide important clues on how to maximize our effectiveness in the prevention of youth suicide *per se*.

If one implements the preceding transactional model with the goal of reducing antecedent or predisposing conditions and influencing the individual's threshold of vulnerability to these conditions in addition to preventing youth suicide *per se*, then the lack of information specific to the effective prevention of youth suicide becomes less of a barrier to action. Programs which represent both levels of primary prevention, as outlined by Cowen (1985), may be effective as well as essential for dealing with youth suicide. The first level is system-focused with the emphasis on understanding and modifying the multiple social systems that affect the mental health and well-being of individuals in ways that reduce stress and increase life opportunities. Examples that have been powerful influences on the general mental health and well-being of adolescents are a) policy interventions which increase the sense of control youth feel they have over their futures, b) modifications of major ecosystems in which adolescents must function, such as schools, and/or c) efforts at grass-roots level interventions, such as the much publicized group of New York city students receiving free college educations from an alumnus of their grade school.

Similarly, second-level primary prevention programs, which are more person-focused, may also be effective in achieving our goals. Rather than influencing the individual's threshold of vulnerability by making systems to which a person must adapt less difficult or reducing the levels of challenge that the environment poses so that the adolescent's pre-existing competencies may ensure well-being, second-level programs seek to enhance the problem-solving and coping skills of the individual more directly. Education programs, skill-building curricula, and resource/support networks may accomplish these goals.

Both strategies may be applied to either general populations of youth or youth in specific high-risk circumstances, e.g., school transitions, parental divorce, households

with a parent with serious emotional disturbance. The elaboration of the specific systems, competencies and vulnerabilities that need addressing, and the definition of the predisposing and/or precipitating conditions that may be appropriately "co-targeted" with youth suicide, we leave to our colleagues.

For the general purposes of prevention, if we adopt a developmental-transactional-ecological perspective, several points need to be addressed further:

1. When and how do we identify a child or adolescent who is the appropriate concern of a primary prevention program for youth suicide?
2. Are antecedent conditions the appropriate and/or necessary targets of such programs? Are adolescent suicide and the search for specific etiologies the only conditions with which we should concern ourselves?
3. If we choose broad-based preventive approaches, as we propose, how can we draw on our understanding of general developmental data and models, as well as prevention programs that have been developed for less focused outcomes, such as the problem-solving approach of Spivak and Shure and the senior author's own transition program efforts, to implement and evaluate effective primary prevention efforts.

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A CRITICAL REVIEW OF PREVENTIVE INTERVENTION EFFORTS IN SUICIDE, WITH PARTICULAR REFERENCE TO YOUTH SUICIDE

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INTRODUCTION

The Purpose of this Review

The principal goal of this review is to identify studies which have used reasonable methodologies to evaluate the success, or otherwise, of prevention activities in youth suicide. We have, however, identified no such studies. Given the quantity of preventive activity that is being conducted, this is a matter of concern. Rather than simply concluding that the lack of research is critical in this area, we have extended this inquiry to summarize what is known about the value of suicide prevention activities for other age groups. Many activities intended for adults may also be appropriate for teenagers; we hope this review will provide some guidelines for those concerned with preventing teen suicide.

General reviews of the suicide prevention literature which the reader may find valuable, include Motto et al., 1974; McGee, 1974; Stelmachers, 1976; Auerbach and Kilmann, 1977; Stein and Lambert, 1984.

Defining Prevention

The classification of suicide prevention follows the classification of suicidal behaviors.

If suicidal thoughts, attempts, and completions are on a psychological or behavioral continuum, as common sense would suggest, then primary prevention efforts should be broadly directed, aiming to reduce all suicide morbidity including threats and attempts, for all are signs of suicide potential. On the other hand if attempts and completions are separate but overlapping entities as has been proposed by Stengel and Cook (1958), Neuringer (1962) and others, and if only a minority of those who attempt or threaten suicide really want to die, then the focus of "primary prevention" should be that subgroup of attempters or threateners who bear a "high risk" profile for later completion.

This question is sufficiently important that it is worth considering the evidence for the continuous versus the separate theories of suicide and attempted suicide.

Demographic Differences Between Suicide and Attempted Suicide.

The case for the two disorder hypothesis relies on both the manifest ambivalence of many survivors and the marked demographic differences between suicide attempters and

completers which have been shown in most studies (Dublin, 1963; Sainsbury, 1955; Kennedy et al., 1974). Suicide attempts are more common in females than in males whereas suicide, especially in the young is more common in males than females. In our current New York study, the ratio of males to females for under 19 year olds is approximately 4:1 for completed suicides. National statistics for 1981 reveal a male:female ratio of 4.35:1 among 15-24 year olds, and 3.6:1 for the total population of all ages. Although these statistics rely upon medical examiners' determinations, there is evidence that more aggressive case finding methods do not materially alter the ratio (Kennedy et al., 1974).

Another demographic index which is believed to discriminate between attempts and completions is AGE. Studies undertaken 2 to 3 decades ago indicated that the incidence of suicide attempts peaked in the teens and early twenties (Kennedy et al., 1974) and then declined, whereas completed suicide became increasingly common with advancing age. This age discrepancy has now diminished, at least for males, as completed suicide is now more common in younger than in older males and no evidence suggests that the previously identified pattern of high incidence of suicide attempts among the young has changed.

While the epidemiological data are undoubtedly accurate, one cannot infer from them that the outcome of suicidal behavior, i.e., whether it is successful or unsuccessful, defines two different conditions. This is because both age and sex are related to method preference which in turn, is closely tied to outcome.

Age-related method preference is not well documented, but what evidence exists suggests younger children and teenagers overdose with less lethal drugs than adults. Morgan et al. (1975) found that teens most commonly overdosed with over-the-counter analgesics, whereas older patients favored more dangerous psychoactive drugs (usually

obtained by legitimate prescription from a physician). This difference might be expected to result in a smaller proportion of suicides attributable to overdoses in the young, which is precisely what is found (Centers for Disease Control, 1985).

Females are more likely to take an overdose (Weissman, 1974), males to use firearms or to hang themselves. Given current medical skills, overdose is generally an ineffective way to commit suicide. It could be argued (and usually is) that these differences in method preference arise because suicidal females are less motivated to die and knowingly choose less lethal methods. The difference in lethal intention is cited as further evidence of a two disorder hypothesis.

It may be, however, that the sexes are similar in their (generally ambivalent) motivation to die, and that choice of method is a sex-related behavior. That is, the sex differences between completed and attempted suicide may not reflect different degrees of intention, but rather that when the sexes feel suicidal they do different things about it. These different things, at least in North America and Western Europe, have a high probability of leading to death in boys and a low one in girls. Interestingly, a report of consecutive suicides in India (Sathyavati, 1975) shows no sex differential, suicides being as common in teenage girls as in boys. One could speculate that this occurs because resuscitation methods are less effective in that country.

The gender association of method could be a sex-specific behavior preference without psychopathological significance; or, it could be mediated by difference in psychopathology in suicidal males and females. Some evidence supports this. In our New York study we find high rates of aggressive and antisocial behavior and relatively low rates of pure major depressive disorder in boys who have suicided, but the reverse in girls. One cannot infer from this difference, however, that intention to die is different in the two conditions.

Direct Evidence for Continuity Between Suicidal Thoughts and Behaviors.

Paykel et al. (1974) in their New Haven study of a household probability sample of adults, posed questions about different degrees of suicidal ideation and behavior. These were strongly interrelated in a hierarchical fashion. Almost all subjects with more severe symptoms had experienced those that were less severe. More interesting for the present argument is that the correlates of different levels of severity were similar. Individuals who wished they were dead resembled those who had actually made a suicide attempt (the two extremes of the continuum) with respect to both demographics and associated symptoms. Pfeffer et al. (1984) reports similar findings in school children. Those who had thought of dying were as deviant as those who had made a suicide attempt and showed a similar profile of associated symptoms.

There is also evidence for overlap between suicide attempts and completions. Most retrospective psychological autopsy studies show prior attempt rates of between 30 percent and 50 percent (Shaffer, 1974; Kennedy et al., 1974; Robins et al., 1959; Dorpat & Ripley, 1960; Barraclough et al., 1970). Conversely, followup studies of attempters show suicide rates 50-60 times that in the general population.

Poor Predictive Specificity of Attempter Characteristics.

If attempters and completers are drawn from the same population, we would expect difficulty in predicting future completions among suicide attempters. Although not extensively studied, the evidence supports this prediction. Motto's (1984) 5 to 15 year followup of teenagers admitted to hospitals after an attempt or with serious depression showed that although certain factors were proportionally more common in those who would go on to suicide, the same factors were numerically many times more common in at-

tempters who would not, i.e., the base rate in non-completers was high and there were no pathognomonic features for later completions.

The same has been found in followup studies of adults where, not only demographic characteristics, but the extent to which the suicide attempt could be judged to be serious (i.e., isolation during the commission of the attempt and its medical seriousness) were not predictive of later death (Greer and Lee, 1967). Discriminant function studies which identify differentiating characteristics in suicides and attempters (Pallis et al., 1982) draw upon different population bases, and it is not clear whether the apparent independence is a function of different conditions or different population frames.

Suicide Accelerators Affect Both Deaths and Attempts.

We cite evidence below (Gould and Shaffer, 1986) that certain television programs which dramatize the plight of the suicidal teenager serve to increase both suicidal deaths and suicide attempts.

COMMENTS: Given these uncertainties it seems wisest to adopt a conservative approach and regard any suicidal behavior as presaging completion. Primary prevention would prevent the initial occurrence of suicidal ideation or behavior; secondary prevention would prevent non-lethal suicidal behavior from progressing to death.

We have adopted this approach in organizing this paper and have grouped as **primary preventions**:

1. Altering the set towards suicide in unaffected individuals by, for example, providing information on suicide behaviors in classes to normal non-disturbed school-children, or in special services for survivors.
2. Early identification and treatment of conditions which are known to predispose towards suicidal behavior, before suicide is contemplated.

Secondary preventions should reduce the potential for completion among those who have already threatened or attempted suicide, through:

1. Removal of the means for committing suicide.
2. Emergency crisis interventions at times of maximal distress.
3. Ongoing treatment after the crisis has passed.

PRIMARY PREVENTION

Preventing Suicidal Behavior in Vulnerable Groups

General Psychiatric Care

We have argued above that the feature most likely to be shared by suicides is a history of mental illness. It follows, other things being equal, that the introduction of psychiatric services to a community should reduce the burden of mental illness and with it the suicide rate. This has not been found to be the case.

Neilson and Videbech (1973) examined the impact on suicide rates (all ages) of the introduction of a psychiatric service to the island of Samso off the coast of Denmark. There were no differences in suicide rates during the 5 years before and after the introduction of the service. Similarly Walk (1967) examined suicide rates in the county of Sussex in Great Britain before and after the introduction of a community service and found no effect on suicide rates.

COMMENTS: These studies are often cited as evidence that psychiatric treatment does not reduce suicide morbidity. However, neither of the studies had a control and so it is possible that apparently stable rates were occurring at a time of a more general rate increase. This is unlikely to be true in the Walk study however, because at the time, suicide rates were declining in Great Britain. More importantly the studies were conducted before the widespread use of antidepressants

and lithium and therefore, do not reflect the impact of current effective antidepressant therapies.

High Risk Groups

Prevention would be most efficient if we could identify individuals who have both a high probability of later suicide and some common characteristics which allow them to be centrally identified and taken into prevention programs.

If we believe that suicide arises because of a set of social circumstances or life conditions, and that to commit suicide is in any way a "reasonable" response to untenable life conditions, then the high risk group would most likely be accessible to social rather than mental health agencies. However, there is good evidence that no matter how understandable a suicide may be to an outsider, it is almost always a sign of psychopathology. Primary prevention is, therefore, most appropriately an activity for the mental health professional. Brown (1979) summarized this view succinctly "...although psychiatric disorder may not be sufficient cause for suicide in current Western cultures, it is a necessary one...". The evidence derives from a number of sources:

- a. Psychological autopsy studies on representative groups of suicides (Dorpat and Ripley, 1960; Robins, 1959; Barraclough et al., 1974; Shaffer, 1974) have found very few suicides to be free of psychiatric symptoms.
- b. There have been similar findings among suicide attempters (Morgan et al., 1975; Birtchnell and Alarcon, 1971; Silver et al., 1971).
- c. A majority of suicides have had contact with a mental health professional before their death.
- d. Followup studies of formerly hospitalized psychiatric patients indicate that they have significantly higher suicide rates than non-patients (Temoche, 1964; Pokorny, 1964, 1983).

e. Super-normal control groups, created by screening out individuals with psychopathology have very low suicide rates (Winokur and Tsuang, 1975).

It follows that the most appropriate group for preventive interventions are individuals with current or previous psychiatric disorders--a dauntingly large group. However psychological autopsy studies carried out on adults have found that a rather narrow range of associated psychiatric disorders (affective disorder and alcoholism) account for most suicides.

Similarly, diagnostic analyses of child and teenage suicides carry the promise of defining more specific groups. Shaffer (1974) found that a small proportion of suicides (predominantly girls) are depressed and that a large group show a combination of affective and antisocial behaviors. The epidemiologically-based study we are currently carrying out in the New York metropolitan area will provide detailed DSM III related diagnostic information on approximately 150 teenage and child suicides and will, we suspect, confirm the findings of the other studies. We also hope that it will allow us to define the suicide group more precisely by seeing whether other characteristics such as a family history of suicide, and specific family constellations and social circumstances, are more common in suicides. The highest risk group, however, appears to be individuals, who have made a prior suicide attempt.

Suicide Attempters or Depressives

It is generally assumed that the diagnostic group with the highest risk for later suicide are individuals suffering from an affective disorder. Lists of warning signs generally include the symptoms of depression and findings are generally consistent in adults relating suicide to depression. Temoche et al. (1964) and Pokorny et al. (1964) both found that suicide was significantly more common in previously hospitalized patients who had received a psychiatric diagnosis of depressive psychosis. Robins (1959), reviewing studies which mainly dated from before the

widespread use of lithium and antidepressants computed an overall 15 percent suicide rate for manic depressives. However, our work with adolescents (Shaffer, 1974) suggests that only a minority of suicides show a picture of uncomplicated depression and that the largest diagnostic group comprises youngsters with both aggressive and antisocial symptoms and depression.

Depression may not be a very specific group for later suicide. Major Depressive Disorder (MDD) has an estimated one year prevalence of 2,000/100,000 in adolescence (Anderson et al., 1985; Weissman et al., 1985; Kashani et al., 1983). In our current New York study we have found that only 25 percent of suicides meet criteria for Major Depressive Disorder giving a one year incidence of 3/100,000. In one year the ratio of depressed teenagers to depressed suicides would be approximately 660:1 (higher for females). This high risk group would not only identify many false positives, but also non-specific in failing to identify approximately 75 percent of suicidal deaths.

Attempted suicide would seem to be a better bet, although not strictly within the domain of primary prevention. We have already referred to studies that found that a significant proportion of suicides made a previous known suicide attempt, i.e., the attributable risk among suicides for prior attempted suicides is high. The relative risk among attempted suicides for later suicide is, perhaps, a more important statistic. If there is an effective way of aborting the natural history of suicide attempters which terminates in suicide, this ratio will indicate the magnitude of the task.

One way of finding this out is to examine the relative frequency of suicide and suicide attempts in an unselected population. We have found no studies which have generated age and sex-specific attempt and suicide rates for the same area. Rough and ready calculations can be done and we have tabulated data from studies into the incidence of suicide attempts. Paykel (1974) found a one-year prevalence of suicide attempts of

600/100,000 (The prevalence of suicidal ideation was 9000/100,000). Johnson et al. (1973), in a survey in London, Ontario found an attempt rate of 750 to 1,500/100,000. Given an overall suicide rate of 12/100,000 in adolescents this would put the ratio of attempts to deaths at 50 to 120:1. These figures are not corrected for age or multiple attempts and it is expected that the ratio would vary in different age and sex groups, being higher in teenage girls. Nevertheless these ratios are a good deal lower than those for major depressive disorder (MDD).

A better strategy is to identify all of the known attempts within a given geographical area. Studies approaching this goal, which have included studies of non-accidental drug overdoses by Morgan et al. (1975) in the British city of Bristol and Daly et al. (1986) in the Irish city of Cork, generated age-specific attempt rates. Neither study evaluated suicide attempts treated by non-clinic based general practitioners and both confined their study to overdoses. The rates are therefore likely to be an underestimate of the true rate.

However, if the same attempt rates prevailed in the United States it might appear that between 30 and 50 attempts at suicide for every completed male suicide, and between 150 and 300 suicide attempts for every completed female suicide. These would provide quite reasonable rates for focusing on an at-risk population.

Suicides, however, are not drawn uniquely from the pool of known suicide attempters. Studies in different age groups and in different countries are surprisingly consistent in showing that only between 25 and 40 percent of suicides have made a previously known suicide attempt. These rates were found by Shaffer both in his British study of children under age 15 (1974) and in his U.S. study of predominantly older teenagers. Similar rates were reported for adult suicides in the U.S. (Dorpat and Ripley, 1960; Robins et al., 1959) in England (Barracough et al., 1974) and in Scotland (Kennedy et al., 1974). (There is as yet no information about whether the proportion of deaths at-

tributable to prior attempts varies with sex or ethnicity.)

The ratios of attempts to completions should, therefore, be modified and minimum estimates would range from around 60:1 for older male teenagers to approximately 600:1 for younger female teenagers. These are formidable ratios and certainly indicate that if we can find out how best to treat these patients we should put most emphasis on male adolescents generally and older ones most specifically.

Case Finding

Effective prevention requires that vulnerable groups be identified and apprised of the preventive intervention. Although many adult suicides are known to be in contact with a treating physician shortly before their death (see below), this finding may not apply to children and teenagers. Preventive efforts for this age group have characteristically concentrated on identifying potentially vulnerable cases in schools or through the public media.

Case Finding Through Physicians

It appears that many adult suicides contact their physicians shortly before their death, suggesting that preventive identification channeled through primary health providers may be effective.

Barracough et al. (1974), in their British study of 100 consecutive suicide completers found that just under 50 percent had visited their physician during the week before their suicide. Murphy et al. (1975) and Motto and Greene (1958), in their study of previously hospitalized suicide attempters and depressives found that a high proportion of suicides (all ages, predominantly adult) had visited a physician shortly before their suicide, 17 percent in the month before death. The difference could be due to the ex-patients' insight into the psychiatric nature of their condition, or to the different nature of the health services in Britain (with minimal charges and universal enrollment with a primary

physician) compared to the United States.

The same is true in the case of attempted suicides. Motto and Greene (1958) reported that 60 percent of suicide attempters had consulted a physician during the 6 months before their death. Johnson et al. (1973), in a followup of 878 attempter cases, found that 55 percent had seen their physician during the month before their death. Morgan et al. (1975) found that 21 percent of a sample of consecutive suicide attempts seen at an emergency room in Bristol had contacted their physician during the week before their attempt and more than half had done so within three months of their death.

Studies are also consistent in showing that the physicians contacted are not aware of their patient's suicide potential. In Murphy's series, two-thirds of the suicides had a prior history of suicide threats or attempts, yet only 40 percent of their physicians knew this. A high proportion of the attempters in Johnson's study had made a previous suicide attempt, but again, only 20 percent of the affected physicians knew of this.

Motto (1969) has suggested that physicians' own anxiety about suicide or about handling a potentially suicidal situation inhibit them from making appropriate inquiries. Johnson suggested that physicians tend to view suicide attempts in the same light as alcoholism, as a repetitive self-induced disorder for which they can do little in the face of absence of motivation by the patient.

We do not know if the same is true for teenagers, but clearly it would be advisable for physicians to inquire routinely whether any depressed or suicidal patient has made a previous attempt, has ever been hospitalized for a psychiatric condition, or is a heavy user of alcohol or drugs, all factors which appear to increase the probability of suicide.

Case Finding Through School-based Programs

Description of School Programs

School-based intervention programs are becoming increasingly common, often being es-

tablished by local or State legislation, as a result of community pressure, following a wave of suicides. Most aim to:

- a. Increase the sensitivity of responsible individuals within the school to the features of the suicide-prone child. Methods include lectures, videotaped interviews with teenagers who have made a previous suicide attempt, small discussion groups, and the distribution of lists of "early warning signs".
- b. Provide information about special resources where pupils suspected of being at risk may be referred for treatment or help.
- c. Provide some training in the behavioral skills that teachers, counsellors or other pupils can use when they identify a child at risk. The goal is to establish a relationship of trust and support with the child at risk, encourage open communication of troubling thoughts, and make it easier for the child at risk to accept a referral to a specialist resource.
- d. Lower the constraints children and teenagers have about discussing suicidal thoughts and preoccupations, thus encouraging self disclosure. This may be done by raising the subject in open group discussions, sometimes with known disturbed youngsters in attendance (Ross and Motto, 1984). These discussions may take place in large assemblies, in smaller groups of 10 to 20 students, or in the context of a regular class.

Such programs are variously addressed to groups of school personnel, parents, and/or students. Some school districts have expressed reluctance to offer "suicide education" to students and have, instead, developed programs or curricula dealing with the more general topic of adolescent stress.

Evaluation of School Programs

One of the most striking features of this review is the almost complete absence of any systematic evaluation of in-school programs.

Ottens (1984) describes responses to a questionnaire distributed before and after a 4 hour

course to 31 college counselors and students. Post-course scores on questions about appropriate responses to a hypothetical crisis situation more closely approximated the responses that were taught in the class. Correlations are described but no statistics are presented and there is no evidence that the paper and pencil responses are in any way representative of real skills. In fact, this seems unlikely as student responses were apparently similar to those of experienced therapists.

Descriptive material prepared by the program in Fairfax County, Virginia, notes that during its first year of operation there were 5 deaths and during the second year only 3. It acknowledges that this change could be due to coincidence. The publication states that the administrators believed the program was going well and stated, anecdotally, that since it started, school-based counselors had experienced an increase in referrals and school staff had become more sophisticated in identifying pupils in trouble. However, as Stein and Lambert (1984) have demonstrated, counselors' self-evaluations (Apsler and Hoople, 1976; Getz et al., 1975) of their own usefulness and efficacy tend to be optimistic, are prone to bias, and cannot be accepted as reasonable evidence of efficacy.

Ross (1980), describing the San Mateo county program, reports (anecdotally) that the introduction of the program led to an increase in referrals to a suicide prevention program. Workers in this field often comment on the absence of systematic evaluations, but they usually state, with some justification, that staff who are excellent at intervening may not have the necessary skills to do a sound evaluation. Others comment that the problem is too urgent to await the results of any research evaluation.

Comments on School Programs

Given the dearth of systematic evaluation of these important programs it is reasonable to comment from general principles.

a. Early warning signs: Most are brief lists

which emphasize the features of a recent onset of depression, i.e., changes in mood, decreasing sociability, decline of school performance, increasing irritability, and some specific behaviors such as making suicide threats and giving away possessions. They have presumably been based on either the collective experience of professionals who have investigated individual cases of suicide, or on stereotypes. They are not derived empirically from representative samples, quite simply because no systematic descriptions of the natural history of changes prior to death exist for teenagers.

We hope that when the New York study has been completed that we will be able to provide this type of information. However, at first sight, the traditional warning signs do not fit the large number of cases we have seen who have longstanding behavior and academic problems and were often frequent users of drugs and alcohol. Only a minority present a picture of recent onset of a major depressive disorder.

Given that lists of signs which do not emphasize the chronically disturbed youngster may be ineffective because they do not identify the cases at greatest risk, might the lists be harmful? As stated above, epidemiological studies indicate a one year prevalence of depression in teenagers of 1 to 3 percent (Weissman et al., 1985; Anderson, 1985; Kashani et al., 1983). The one year incidence of teen suicide is around 12/100,000, i.e. in one year, depression affects 1,000 to 3,000 times more teenagers than suicide. Linking the common problem of depression to the uncommon one of suicide may serve to expedite referrals and increase compliance with treatment, but it may also introduce the notion of suicide as an appropriate response to teenagers who were not suicidal. We emphasize that there is no evidence either way on this point, but we believe it is an important question that needs to be answered.

b. Promoting discussion of suicide in class: Enough evidence suggests that young people imitate actual and fantasized suicide to warrant concern about this technique. The

evidence includes:

1. Phillips' (1979) demonstration that prominent display of the news of a suicide leads to an increase in suicidal deaths during the period immediately following the display. (Only two weeks ago we participated in a case conference on an eight year old child who attempted to stab his abdomen with a kitchen knife, the day after a prominent politician committed suicide in this way.) In a recent communication Phillips indicated that most of the excess suicides which occur in this context are of younger people.
2. Gould and Shaffer's study of television docudramas (see below) has demonstrated that these broadcasts have the effect of increasing teen suicide attempts and deaths.
3. Kreitman's (1970) observation that young attempters had many more close contacts with those who had made a suicide attempt than non-suicidal psychiatric controls.
4. The occurrence of suicide clusters which are very probably the result of imitation.

This evidence raises the possibility that classroom discussions will, as intended, raise awareness of the topic and introduce, *de novo*, suicide in the range of contemplated behaviors for the teenage pupil, i.e., that it will "put ideas in their head". This risk must be weighed against the intended benefit, i.e., that it will facilitate disclosure of some pupils' pre-existing suicidal preoccupations and that this will, in turn, lead to intervention which will reduce the risk of suicide. This important issue remains unanswered. It is clearly a matter of some urgency that quality research be undertaken to determine whether the effects are benign or beneficial.

Case Finding by Television

Attempts have been made to harness the impact of television to promote awareness of suicidal situations and to encourage appropriate referral. Holding (1974; 1975) examined the impact in Edinburgh of an 11-part weekly television series, "The

Befrienders," which illustrated the predicament of a suicidal individual who was then helped by the Samaritans. During the calendar year in which the programs were shown, referrals to the Samaritans increased 140 percent. However there was no change in the number of attempted suicides treated by hospitals in the city.

The effect on suicide deaths was examined by tabulating both suicides and undetermined deaths (a group usually considered to consist largely of suicides (Holding and Barraclough; 1978)) during the ten weeks after and the ten weeks prior to the series and for the same period of time in 4 previous years. In each of the previous years the number of suicides had declined during those weeks. However, during the year under examination the rate remained stable. There was no reduction in the number of suicides during the broadcast of the television series.

Gould and Shaffer (1986) have examined the impact of dramatized television presentations of suicide on a youthful audience. Over a period of approximately 4 months, the major U.S. networks broadcast 4 dramatizations of either a young person's suicide or the reaction to a suicide in a parent. The programs were broadcast with advance publicity clearly stating that they were intended to make the public aware of the problem of youth suicide. To a varying degree they were coordinated with community programs. In some cases this took the form of advance distribution of informational material indicating where treatment for the suicidal adolescent was available or material for teachers, parents, and teens outlining the clinical features which may be present in the teenager who may try suicide. In some cases the local affiliate arranged for a hotline number to be flashed onto the screen at varying times during the program.

The incidence of completed suicides among teenagers aged 19 or under was examined in the States of Connecticut, New Jersey and part of New York State in 14 day blocks during the 4 months when the programs were shown, and for two one-month periods

before the first program and after the last. Comparisons were made between the death rate during the 14 days before and after each program, and between an overall expected rate and observed rate after each show. Similar comparisons were made of the number of attempted suicides treated at 6 large hospitals in the New York City area.

Suicidal deaths increased significantly during the ten days following three of the programs but there were no deaths after one of them. A similar effect was noted on attempted suicides.

It seemed unlikely that the increased number of referrals for suicide attempts was due solely to increased awareness or a decreased referral threshold for parents or teenagers (which might have been expected to increase the proportion of minor attempts during the after period) because the severity of attempts after the programs was similar to those before the programs and because the effect was on both attempts and suicides.

It also seemed unlikely that the increased number of deaths was due to a bringing forward of suicides which might have occurred anyway. If this had been the case, one would have expected to note a reduction in the frequency of deaths at some point after the program, but this was not seen.

COMMENTS: Television programs are effective in publicizing the availability of services. However, they do not reduce the number of suicide attempts and may, in fact, increase them. They also appear to have a provocative effect on suicide deaths. The discrepant findings from one of the programs studied by Gould and Shaffer, while not statistically significant, is intriguing because it holds out the possibility that the dramatization may have special features which prevent it from having an unwanted effect and which might even have a preventive effect. These features could lie in the associated community work or in some of the contents of the dramatization; this is clearly an important area for future research. Finally, the fact that the "Befrienders" series resulted in an in-

creased number of referrals to a crisis service without reducing suicide morbidity, suggests that crisis services on the model of the Samaritans are ineffective in reducing suicide morbidity.

Interventions after a Suicide

Parent Survivor Groups

After a teen's suicide, the surviving parents and siblings experience significant distress and dysfunction. There is also evidence of increased suicidal morbidity in the surviving families (Murphy et al., 1964; Augenbraum and Neuringer, 1972), so that postvention with survivors may have a preventive function. The effects on subsequent suicides may be difficult to assess. In the only prospective study we know--a five year followup of the families of 100 successful suicides--Shepherd and Barraclough (1974) found no examples of suicidal behavior.

In practice, "postvention" and prevention activities are frequently carried out by the same units. Survivors of suicides are an important source of manpower for suicide prevention projects and may initiate or give other support to these activities.

We found no studies which specifically set out to examine the impact of survivors' groups on the subsequent suicidal behavior of survivors. In a series of publications, Videka-Sherman (1982a; 1982b; Videka-Sherman and Liberman, 1985) examined changes in coping responses and mood in recently bereaved parents who attended meetings organized by "Compassionate Friends," a self-help group which provides support to parents who have lost a child by any type of sudden death. The number of losses through suicide, if any, is not indicated. However, in the absence of other data, the findings of the study are reported:

2,422 parents on the register of several chapters of Compassionate Friends were surveyed by mail on two occasions to ascertain coping responses to their child's death and to elicit depressive and other psychiatric symptoms. The response rate was low; only

667 (28%) answered the first survey and only 391 of these (17% of the original sample) provided additional followup information. The social demographic distribution of the responders indicated that they were predominantly white and upper middle class.

There was no bereaved non-referred control group and comparisons were made between those who attended several meetings and those who either did not choose to attend or who dropped out of the program at an early stage. Depression scores were not influenced by attendance, dropping equally in both those who attended and who dropped out of group sessions. The coping style most likely to be associated with high depression scores was an obsessive preoccupation with the memory of the child. The coping styles associated with best adaptation were immersing oneself in another activity, or having a replacement child. Attendance at the group did not influence the development of either of these styles but did enhance altruistic activity which regardless of its beneficial effects for society did not, in itself, appear therapeutic.

Rogers et al. (1982) reported an uncontrolled study of a Survivors Support Program coordinated professionally but administered by volunteers. Groups met in 8 sequential 2 hour didactic sessions followed by 4 biweekly discussion groups. The attendees were divided evenly between spouses of suicides and parents of young suicides. When asked to identify their current problems almost all indicated that they felt guilty, detached from the event, and abandoned. Many idealized the deceased. They scored high on the somatization, phobic, and obsessive compulsive scales of the SCL-90. At followup several weeks after terminating the program, 33/37 cases were contacted. Most of the participants reported that the program had been helpful and showed a decline in SCL-90 scores.

COMMENTS: Only limited conclusions can be drawn from these studies. Without a control group it is not possible to know whether the improvement in SCL-90 scores reflects

the natural history of mourning or the effects of intervention. Videka-Sherman's studies did not specifically examine suicide survivors. It examined a self-selected population and did not randomly assign eligible survivors to group or no group conditions. It therefore suffers from all of the drawbacks of any inference about the effects of an intervention that is based on a comparison between compliers and non-compliers.

SECONDARY PREVENTION

Reducing the Lethality of Suicidal Behaviors

With the sole exception of suicide by hanging, which in 1981 accounted for 40 percent of all suicides among U.S. boys under age 14, but for only about 20 percent of male suicides in older age groups, the methods used by young children and adolescents are very similar to those used by older individuals of the same sex (CDC, 1985). Preferred methods also vary in different countries and appear to be generally stable across time. It is, therefore, reasonable to expect that an attempt to reduce accessibility to, or to improve the treatment of the outcome of any common method, should reduce the suicide rate in general and have impact on teenagers.

The British experience is an example of how reducing access to the means of suicide can have a significant effect on reducing the suicide rate. Starting in 1957, the mean carbon monoxide content of domestic gas was reduced from 12 percent to 2 percent through the introduction of natural gas and modifications in the conversion process from coal. The process was completed by 1970. Prior to these changes, self asphyxiation with domestic cooking gas accounted for more than 40 percent of all British suicides and for an even higher proportion of male suicides (Hassall and Trethowan, 1972; Kreitman, 1976).

During the period of gas content change, British suicide rates from carbon monoxide asphyxiation declined precipitously, accounting for fewer than 10 percent of all suicides

by 1971. Furthermore, the overall suicide rate declined by 26 percent and analysis of death by different methods showed that almost all of this reduction could be attributed to a fall in deaths from domestic gas asphyxiation.

What appears to have happened was that the suicidal population, denied access to a universally available, non-deforming, non-violent method, did not then turn to other more violent (and more lethal) methods, but instead chose another non-violent method which was similarly, readily available--self-poisoning. The incidence of suicide attempts from overdoses increases markedly during this period (Johns, 1977). The impact of this change of method on suicide deaths appears to have been dampened because over the same period self-poisoning became progressively less lethal, in part because of the substitution of the less dangerous benzodiazepine drugs for the highly toxic barbiturates, and in part because of improved methods of resuscitation. Most significantly, however, British rates, in contrast to those in all other countries, have remained at the new lower level (Farberow, 1985).

The detoxification of domestic cooking gas also occurred in other countries in Europe, specifically the Netherlands, where it was not associated with any reduction in rate. In these other countries, however, the base rate of self asphyxiation from domestic gas before its composition had been changed, was not considerably lower than it had been in Britain, (%) and the expected impact was proportionately less.

COMMENTS: Prevention methods that do not require the active participation of the public have traditionally been the most effective (e.g., changing the water supply in South London at the time of the great London cholera epidemics). It appears to have good potential for prevention in suicide as well. The importance of improved methods for treating suicide attempts may be the reason for the sex-specific changes in the suicide rate in the United States. Suicides have been increasing only for males. It may be that at a

time when suicide morbidity (i.e., the number of suicidal behaviors including both attempts and completions) is increasing in both sexes (Weissman, 1974; O'Brien, 1977), the impact has only been felt by males who favor methods for which treatments have not improved. The increase in female attempts is compensated for by improved treatment methods for self-poisoning, the preferred method.

Care During a Crisis

Individuals who have already attempted suicide or expressed suicidal thoughts or wishes, seem to be an optimal target for suicide prevention efforts.

1. They are at high risk. Most post-mortem studies show that between 30 percent and 50 percent of suicides have made a prior attempt; the suicide rate in followup studies varies from just under 1 percent to nearly 10 percent, over 100 times the risk carried by the general population.
2. They are potentially easy to identify for it seems that most visit an emergency room after their attempt (Kennedy, Kreitman and Ovenstone, 1974), and many will be admitted to a hospital.
3. Directing a preventive effort to individuals who have already demonstrated suicidal behavior avoids concerns that the "idea" of suicide will be introduced to a naive listener.

A preferred intervention with the suicidal individual has long been the crisis center. The rationale for suicide crisis care has been articulated by Schneidman and Farberow (1957) viz;

1. suicidal behavior is often associated with a crisis;
2. suicide is contemplated with psychological ambivalence--wishes to die exist simultaneously with wishes to be rescued and saved;
3. humans have a basic need to express them-

selves and to communicate with others;

4. the suicidal individual's ambivalence about dying stems from a psychiatric illness in which the suicide represents a partially unsatisfactory means of achieving "fantasies of....surcease, revenge, atonement, ecstasy, rescue and rebirth..." This confusion leads to an oblique communication or signal or "cry for help" which is best identified by those with special training (Litman et al., 1965).

In practice, telephone crisis services offer several advantages. They are convenient and accessible and thus offer an individual in crisis the opportunity for discussion and support without having to travel or wait for an appointment. Their anonymity may be reassuring and may allow callers to say shocking or embarrassing things which they could not otherwise do in a face-to-face interview.

The first crisis center, "The Antisucide Bureau," was started in 1906 in London by the Salvation Army. In the same year, the National Save a Life League was established in New York City. Shortly after World War II, the Neuropsychiatric Institute in Vienna established a counseling center run by volunteers. Six years later in London, the Samaritans was started by the Reverend Chad Varah (Varah, 1973 and Fox, 1976). Twenty-two years after its establishment, the Samaritans had 165 branches in Great Britain alone and received over 1 million calls a year. It is staffed by volunteer "listeners" and insists on strict confidentiality. Its interactions, characterized as acts of "befriending", are predominantly non-directive.

The influential Los Angeles Suicide Prevention Center (LASPC) was established in 1958, initially concerned with evaluation and rehabilitation of hospitalized survivors of suicide attempts (Litman et al., 1961). In 1961, it broadened its activities to include community outreach, and a short while later, a 24-hour telephone hotline, thus becoming the prototype of American crisis centers. It has regularly sponsored research projects, many of which are referred to in this review.

Its early goals and operations have been described by Helig et al. (1968) and Litman et al. (1971).

There was a rapid proliferation of crisis services modelled on this program during the late 1960's and the early 1970's. By 1974, nearly all metropolitan areas in the United States had such a center and many had two or more (Miller et al., 1979).

Differences and Similarities Between Crisis Centers

Telephone crisis services have certain characteristics in common; they have the capacity to offer immediate emotional support; they are available outside of usual office hours; they provide the opportunity for anonymity; they tend to be staffed by volunteers; the assistance they offer is often problem rather than "diagnosis" specific and help is always short term.

Within these similarities there exist differences in emphasis. Some function predominantly as information or referral services, rapidly ascertaining the problem and then referring the caller to an appropriate treatment center. This service sometimes extends to the volunteer making the appointment and checking that it has been kept. Sometimes this type of case management is offered by multi-service agencies which link the caller with the most appropriate unit of the service. When appropriate, calls may be passed directly to a duty psychiatrist or social worker. At the extreme of the intervention spectrum, there are crisis services which primarily offers a psychological environment which the person in crisis may find supportive and which encourages callers to drop in (particularly true of the Samaritans).

Centers vary in the stress they place on confidentiality. The Samaritans generally offer total confidentiality (Hirsch, 1981), whereas, many services in the United States are willing to intervene very actively (including summoning the police) in order to avert a suicide.

The "befriending" process of the Samaritans has been likened to Rogerian psychotherapy

with its emphasis on acceptance and warmth. This is shared by many Centers in the United States. Ross (1980), a leader in the suicide prevention movement, states that the "most important objective in responding to suicidal youth is to open the lines of communication...accomplished by showing concern, interest and understanding in a non-judgmental manner". It has been suggested that the anonymity centers provide may be especially helpful to callers who find a discussion of their problems embarrassing. Additionally, patients who are concerned with issues of control and power may be more comfortable with telephone counseling as they have the option of hanging up.

Volunteers are usually, but not always, supervised by social workers or other mental health professionals. These mental health professionals are also available for consultation. This would generally not be the case with Samaritan services.

A number of programs target a specific population such as college students (Ottens, 1984) and at least one (Glatt et al., 1986) has a telephone situated on a bridge that is renowned as a place for fatal suicide leaps.

The differences between centers are sometimes subtle and are implicit rather than stated. This makes research difficult and requires that rather general operational criteria be adopted by researchers. For example, Bridge et al. (1977) designated any entity a suicide prevention center if: a) there was an identifiable person in the community responsible for the service; b) if it provided 24-hour telephone or emergency service coverage; and, c) if it advertised its existence.

Impact of Crisis Centers on Mortality

A number of cross sectional studies have compared the rates in areas with and without crisis centers, or in areas before and after the introduction of a crisis center.

Two early studies (Litman and Farberow, 1969; Ringel, 1969) reported a drop in the suicide rate in Los Angeles and Vienna respectively, after a service was introduced at

a time when the rates in California and in the rest of Austria were reported to be increasing.

However, suicide rates vary with the demographic composition of a population. Rates are associated with sex, age and ethnicity. The demographic profile of a given area, and hence its potential suicide rate, are all susceptible to change and simple correlational studies of this kind are inadequate. Account of these factors must be taken and appropriate control areas need to be studied. It should be said here that with one exception (Bagley, see below), no methodologically adequate study has been able to demonstrate an impact of suicide prevention centers on the number of deaths from suicide.

One of the first studies to use a control population, was carried out by Weiner (1969) to assess the impact of the LASPC. Comparisons were made between the suicide rate during the 6 years prior to the introduction of the hotline services at the LASPC and the 6 years afterwards and between two major California metropolitan areas that had services (Los Angeles and San Francisco) and two that did not (San Diego and San Bernardino county). However, changes in these rates were not corrected for demographic differences between the cities studied. The study noted that there was a significant increase in the suicide rate after the introduction of the hotline service in Los Angeles, but this increase does not seem to have been systematically related to the presence of suicide prevention centers, for there were similar increases in San Francisco which had a service and San Diego which did not, and a fall in San Bernardino county, which did not have a service. These fluctuations in rate are common and cannot be interpreted without corrections for changing socio-demographic profiles. An additional confounding factor in this study was that the study period covered the development of a close collaboration between the Center and the medical examiner and this may have resulted in a broader definition of suicide (Litman and Farberow, 1969) and with it, an increase in coroner's

determinations.

Lester (1973), examined the suicide rate in a number of major metropolitan areas in the United States, comparing rates in cities before 1967 and after 1969. He compared cities where a suicide prevention center had been established with rates in cities where no center existed. An analysis of covariance was used to control for the size of the city. No differences were found, but the study did not control for changes in reporting procedure or for differences in demographic make-up. The sample of cities was small and the duration of surveillance short, given the low incidence of suicide.

In a methodologically rigorous study, Bridge and colleagues at Duke University (1977) compared the incidence of suicide in counties with and without suicide prevention centers in all 100 counties of North Carolina. They used a multivariate approach to account for a number of possibly confounding variables at the same time. These included duration of existence of a center, and a large number of socio-demographic variables. The mean duration of existence of a center was 2.8 years. No changes in reporting procedures occurred during the time under study. The highest incidence of suicide was in communities characterized by a high proportion of older, white, married persons; suicide centers were more often located in areas with different demographic characteristics. Their results suggested that compared to the influence of demographic variables, suicide centers have a minimal effect on rate. They also found only trivial interactions between the presence of a center and community characteristics such as age distribution, type of "cause of death" determining system, and population density of an area, i.e., there was no evidence that hotlines were more effective in certain communities than in others.

The British study by Bagley (1968) is the one that was most widely quoted as supporting the efficacy of suicide prevention centers. It was noted that suicide rates in that country were in decline and that the period of decline

coincided with the growth of the Samaritan movement. In fact this was not accurate: the decline in British suicide rates (which was almost certainly due to the introduction of non-lethal domestic cooking gas to substitute for coal gas--see above) halted in 1971 although the number of Samaritan branches and clients continued to rise until 1975 (Brown, 1979). In this study, Bagley used both empirical and a priori techniques to identify control communities. The empirical match was based on the two most important factors derived from a principal components analysis. The a priori match was for population over age 65, percentage of females, and social class index. (These factors accounted for 35 percent of the variance.) He compared cities with and without centers matching those with centers to control cities identified through the two methods.

Bagley found that 15 Samaritan boroughs experienced a fall of 6 percent whereas control boroughs experienced a rise of 20 percent (empirical) or 7 percent (a priori). Research scientists from the Medical Research Council Suicide Research Unit attempted to replicate Bagley's findings (Barracough et al., 1977; Jennings et al., 1978). They employed methodological improvements including using a wider variety of matches, examining more geographical areas, and using matches which accounted for more of the suicide rate variance. On the same target boroughs, they used 4 coordinates to do the empirical matching instead of 2, thus accounting for 65 percent of the variance instead of Bagley's 43 percent. Further, they broadened the search for matchable boroughs and used a different predictive rate match. To accomplish this, they choose boroughs with similar rates before the establishment of a Samaritan center and also matched for proportion of single person households. Both of these methods accounted for significantly more of the variance than those adopted by Bagley. They examined suicide rates for 6 years prior to the establishment of a center and 6 years after its opening. It was not possible to replicate Bagley's findings; no difference was found between Samaritan and control towns. They

also noted that the rates of suicide decrease did not parallel the increase in Samaritan usage (Barraclough et al., 1977). Bagley (1977) responded to this critical exercise by stating that the difficulties in evaluating the impact of services were too great and that there was no reasonable way to demonstrate their efficacy.

In the United States, Miller et al. (1984) elaborated on the effects of suicide prevention services on suicide rates. The period of study began in 1968, when most cities did NOT have suicide prevention centers and ran until 1973 when most cities *did* have such centers. During this 6-year period, they examined the effects of suicide prevention services on age-, race-, and sex-specific population groups. After going through a lengthy series of procedures to verify the date of a center's introduction, they compared suicide rates in 25 locations that had no center prior to 1979 but which then introduced and maintained one until at least 1973, with 50 counties which experienced no change in the number of crisis centers during that time. Age-, race-, and sex-specific rates were examined for all years for all centers. Difference scores were calculated by covarying on the base rate. It was reasoned that if crisis centers serve predominantly younger women, then, any impact of a service could be expected among that group. They found a small but significant reduction in suicide rate (1.75/100,000) in white females after the introduction of a service, but no evidence of an impact in other population groups. Their examination was repeated on a second set of data at a different time period and their findings were replicated.

A variant to the crisis service provision method of studying this problem can be seen in the study by Chowdhury et al. (1973), who randomly assigned suicide attempt repeaters to routine out-patient care or to an enhanced service which also provided an emergency telephone service and a walk-in facility. The latter group received home visits if they failed to keep an appointment. The groups did not differ in reattempt rates nor on any measure

of mental state at the end of a six month followup period.

COMMENTS: The disappointing impact of crisis centers on suicide mortality needs to be explained. To explore this question further, we have further analyzed the literature on who uses and does not use centers, whether they are suicidal and whether any particular types of cases seem resistant to their impact.

Who Uses Crisis Centers?

Descriptions of adult callers (Sawyer, 1972; Murphy et al., 1969) and teenage counseling services (King, 1977; Slem and Cotler, 1973; Morgan and King, 1975) indicate that U.S. suicide prevention centers are predominantly used by females. A disproportionate number are under age 30 and they show the same ethnic distribution of the area in which the center is based. They do not, therefore, reflect the special demographics of suicide completion in which males predominate and blacks are underrepresented.

It also seems that many, non-suicidal individuals in crisis use these services. They may be lonely, isolated people. This is not in itself incompatible with the goals of a suicide service unless it diverts resources from suicidal callers.

Hirsch (1981) monitored 100 calls each at the LASPC and at the London branch of the Samaritans. About 40 percent of the Los Angeles center's calls did not concern suicide. The incidence of non-suicide related calls is higher in Europe. In Helsinki, Aalberg (1971) found that only 25 percent of calls concerned suicidal ideation or suicidality. The same proportion of suicidal calls was found among callers to the Samaritans (Hirsch, 1981). A considerable proportion of non-suicidal calls to the Samaritans were characterized as "sex" calls.

Studies of Teenagers

Very little published work evaluates the impact of hotline or crisis services on teenagers. This section will identify teenage usage rates of general hotline services and review the

findings of the single evaluation study of a hotline service designed specifically for teenagers.

In an early report of 1,607 consecutive telephone callers to the LASPC (Litman et al., 1965), 5 percent of the callers were under age 20. Greer and Anderson (1979) interviewed 90 percent of 364 consecutive cases of attempted suicide in a busy hospital in South London of whom 19 percent were under age 19. More than 70 percent of the total group had knowledge of the Samaritans, but that proportion was far smaller among teenagers. King (1977) surveyed 3,000 college students who had passed their freshman year and reported that 3 percent had called a service, two-thirds of these were for personal counseling rather than to report disturbing behavior in others. This 3 percent utilization rate compared favorably with the proportion of students who used the student mental health service. Only 8 percent of the surveyed callers were currently in some form of therapy, indicating that the hotline was reaching a population not served by other community agencies.

Slem and Cotler (1973) studied the impact of a hotline service for teenagers (not specifically oriented towards suicide prevention) in an upper middle class community in suburban Detroit. The service had been introduced through advertising in newspapers and on school and community bulletin boards, and widely distributed business cards. At an unspecified later time, 1763 students in a local high school were surveyed to find out whether they knew of, or had used, the service. The answers indicated that the hotline was acknowledged as a community service of which they were aware with the same frequency as the YMCA and high school counselling services. 98 percent recognized the name of the service from a list of community services and 5.6 percent had used it. When asked to rank preferred sources of help for problems, users ranked the service higher than non-users. Both groups listed friends as being the most important source of help. Not very much information was available about

the users except that approximately two-thirds were female and that users ranked help from parents as being potentially less valuable than non-users, perhaps indicating a less satisfactory home background. There was a relatively low response rate among former hotline users about whether they had found the service useful, but two-thirds of the responders confirmed that their contact had been useful.

These studies, while indicating that a hotline service can obtain satisfactory community recognition, are inadequate for our purpose because neither specify the proportion of calls that pertained to suicide and neither examined the impact on psychiatric morbidity generally, or suicide morbidity specifically.

Studies of Adults

—Suicide and Crisis Service Users; What Proportion of Callers Are Suicidal?

Litman et al. (1965), in an early report from the LASPC, noted the following: 45 percent of the callers were either currently receiving or had previously received psychiatric treatment. 50 percent talked about suicide during their call; 40 percent had made a previous suicide attempt of which 22 percent were within the preceding week. Only 10 percent of calls were unrelated to "suicide potentiality" (a rather loosely defined concept). Usage patterns may have changed because Hirsch (1981) in a survey of 100 calls at the LASPC noted that 40 were not related to suicide.

Evidence for the suicide potential of hotline users has been gathered from studies which have looked at the subsequent suicide rates in callers. In interpreting studies of this kind it should be remembered that several factors tend to lead to an underestimate of later suicides among users. These include:

- a. Many studies match callers' names with death certificate data collected from the same administrative area (e.g. county) as the service, and will miss people who have died in other locations.

b. A sizable proportion of calls are made anonymously and cannot be linked to death certificates or clinic records. There is some evidence (Tabachnik and Klugman, 1965; Nelson et al., 1975) that anonymous callers are more likely to be living on their own, which would place them in an especially high risk group.

It is also important to note that subsequent suicides among crisis center callers cannot be used to infer information about the efficacy of a center because no comparison can be made with the suicidal individuals who do not call the center. Given those caveats, the studies that are available tend to confirm that crisis center users are deviant and carry a much higher risk of later suicide than a normal control population.

In uncontrolled, followup studies of a random sample of LASCP callers, Litman (1970) and Wold and Litman, (1973) noted that between 1 percent and 2 percent of callers had committed suicide within 2 years of their initial contact.

Sawyer et al. (1972) reported a study which drew comparisons with the rate in the same geographic area but which did not correct for age and sex. They found that 0.6 percent of the approximately 11,000 callers to the Cleveland Suicide Prevention Center had committed suicide within 4 years of their call. This figure represents a rate of 288/100,000 or approximately 25 times the expected death rate (uncorrected for age and sex). Three-quarters of the suicides had been referred to the center by others, compared with one-quarter of the group overall. The median interval between time of contact and suicide was 4 months. Only 6 percent of all suicides in the city of Cleveland had been in touch with the Suicide Prevention Center at some time before death. In the absence of age- and sex-matched controls, these rates are difficult to interpret but appear somewhat lower than the 2.5 percent to 5 percent suicide rate noted by Greer and Lee (1967) in their 2.5 year followup of serious suicide attempters treated in general hospitals. The lower death rate found in such crude com-

parisons cannot be used to infer the efficacy of the prevention centers; it may simply reflect different demographic composition of callers to different centers.

Barracough and Shea (1970) found death (suicide and other causes) rates, corrected for age, sex, location of call, and death, of individuals who had called the Samaritans in six British counties to be 32 times the expected rate during the first year after the call. This rate fell to 7 times the expected rate 3 years after the call. 30 percent of the deaths occurred within the first month, 71 percent within a year and 90 percent within 2 years after the call. The death rates were intermediate between that of former mental hospital patients and currently depressed patients, but were considerably less than those among former psychiatric in-patients who had been admitted following a previous suicide attempt (Temoche et al., 1964). There were marked differences between different centers, some having a lower than expected death rate, others a lower initial (first year) rate, but a comparable or higher second year rate (suggesting that suicide had been deferred). These differences could have reflected the quality of interventions or a different clinical base.

COMMENTS: Suicide crisis centers attract potentially suicidal individuals.

—Who Will Go On To Suicide?

Several studies (Ovenstone and Kreitman, 1974; Wold and Litman, 1973; Wilkins, 1970; McKenna et al., 1975) have found that suicidal patients who make use of crisis telephone services fall into two groups: a chronically suicidal group and an acutely stressed group without a history of prior attempts. Litman et al. (1965) predicted that crisis centers would be most helpful to the suicidal individual who is isolated and friendless or one who has suffered the loss of an important person through death or rejection. Crisis centers were predicted to be least helpful to suicidal individuals with chronically disorganized behavior, or long standing dysphoric or psychotic states.

This is, in fact, what was found by Wold and Litman (1973) in their detailed followup of a random 1 out of 10 sample of suicide prevention center callers. Among those who subsequently committed suicide, most had a chronic history of psychiatric disturbance and several previous episodes of suicidal behavior. The crises which had led to their original call were different from those which ultimately preceded their death. They had gone on to experience, and in all likelihood, generate, additional crises.

These findings were supported by Wilkins (1970) in a death certificate match of approximately 1,300 callers. Suicides were more likely than non-suicides to be unmarried, to have made a previous attempt, and to have received previous psychiatric treatment.

COMMENTS: There is evidence that chronically disturbed callers who have made previous attempts and had previous psychiatric treatment are an especially high-risk group for later suicide and that crisis management is inappropriate for them.

—How Suicidal Users Compare To Suicidal Non-Users

Differences between attempters who have used hotlines previously and those who have not, have been reported in several studies.

Barraclough and Shea (1970) found that 4 percent of a consecutive series of adult suicides had used the Samaritans. Wold (1970) compared the characteristics of 26,000 LASPC contacters with a group of 42 suicides and noted that 75 percent of the center contacters were women, compared with 36 percent of the completers. Center contacters were, on the average, 9 years younger than completers. A disproportionate number of center contacters were less than age 30.

Motto (1971), who studied 575 individuals consecutively admitted to a psychiatric inpatient unit for treatment of either a depressive or a suicidal state, found that 11 percent had used suicide prevention centers. More

than 50 percent of these felt that they had been helped by the contact, 10 percent said they had been made worse. The most commonly stated reason for not calling was that they had been unaware of the centers' existence. Greer and Anderson (1979) interviewed 90 percent of 364 consecutive cases of attempted suicide in a busy hospital in South London, 19 percent of whom were under age 19. Approximately 14 percent of these attempters had had some contact with the Samaritans in the past, but very few had done so just prior to their recent suicide attempt. Overall, just over 70 percent of the group had knowledge of the Samaritans; that proportion was far smaller among teenagers. Among those of all ages who knew of the crisis service, the most commonly stated reasons for not calling were:

- a. it did not occur to the caller,
- b. they wanted relief from their distress or wanted to die,
- c. they thought that the crisis center would be unable to help.

Half of the group that felt that the Samaritans could not help had prior contact with the Samaritans.

Greer and Weinstein (1979) studied suicidal patients who were receiving mental health treatment, comparing those who had first contacted a hotline with those who were identified by a mobile emergency team which made outreach endeavors to families or individuals in crisis. Hotline patients had a lower suicide potential score on certain standard measures and were less likely to require admission after being seen. The findings from this study may tell us as much about the seriousness of cases identified by a mobile team as they do about the mildness of disorders seen in patients who call hotlines.

COMMENTS: In general, this is a sparse literature but an important one. There is a lot of evidence that hotlines do not have impact on a community's suicide rates (see below). It is clear that their utilization rate by suicide attempters is low (the highest rate

in the studies cited being 14%) and although in Greer and Anderson's study there were a proportion of attempters who reported having been disappointed at the intervention they had received previously, most of those who did not call did not think about it or did not know of the hotline's existence. Lack of knowledge is a special problem with teenagers.

Other Problems With Crisis Service Techniques

Low Compliance Rates After Triage

A number of studies document the low rate of compliance with care after emergency room triage interventions have been provided to suicide attempters or to hotline callers. Only one study has been carried out with adolescents. Litt et al. (1983) studied 27 adolescents seen in an emergency room. All were offered further appointments but only 33 percent kept them. Failure to keep an appointment was similar in groups referred from an emergency room or from an in-patient ward, but was more common in those who had made a previous attempt. The numbers in this study were too small to permit adequate statistical analysis to which a variety of interrelated factors might have contributed. Additionally, there was no adequate examination of the clinicians' technique which has been shown to be important in studies among adult attempters.

A similar low "show" rate has been reported for adults. Chameides et al. (1973) found a compliance rate of 35 percent, and Paykel et al. (1974) reported a compliance rate of 44 percent with out-patient referrals made in the emergency room. Compliers with the out-patient referral did not differ from non-compliers with respect to clinical characteristics. Furthermore, many of those who do keep their first, or first few, assigned appointments will fail to maintain contact with the center to which they are referred, and will drop out of their treatment program prematurely (Kogan, 1957b; Jacobsen et al., 1965).

Factors contributing to referral failure have been studied by Knesper (1982) in nearly 300

emergency room cases managed by 15 different clinicians. Failure was found to be independent of patient characteristics, at least so far as suicide intentionality was concerned, but an "outlier analysis" showed significant clinician variation. The fact that some clinicians can persuade most of their patients to attend a later appointment while others can persuade very few, suggests that clinician behavior is important. The fact that referral failure is not an index of seriousness of disorder was found specifically by Paykel et al. (1974) who noted that attempters who complied with their referral and attempters who did not comply with a referral did not differ in clinical characteristics including the seriousness of their attempt. Chameides and Yamamoto (1973) found that many of those who fail to comply will see some other mental health professional during the year after their attempt.

The same appears to hold true for other referral situations. In a study of the failure of hotline callers to comply with suggested appointments, Lester (1970) found that the percentage of shows after a telephone call to a crisis service ranged from 29 to 56 percent with some seasonal variation and considerable variation with individual volunteers. Approximately half of the 20 different personnel involved had a success rate of less than 40 percent, whereas the other half had a success rate of between 50 percent and 80 percent.

What contributes to clinician/volunteer failure? Knesper (1982) noted that a clinician who would spring the question of admission on a patient suddenly and without warning at the end of an examination had a very low rate of success in making referrals to an in-patient unit.

Slaike et al. (1975) found no significant correlations between compliance and the hotline volunteer's conversational characteristics in particular, whether they made specific reference to words like suicide or instead used euphemisms in referring to such matters. They noted a higher show rate when attendance for an appointment was initiated

by the caller.

Several studies suggest that compliance can be improved if the volunteer or clinician makes an actual appointment for the patient/caller rather than simply providing them with a name and number to call. Kogan (1975a) recorded a 37 percent compliance rate for attempters seen in an emergency room when the patient was provided a name and telephone number compared with 82 percent when an appointment was made during triage.

Rogawski and Edmundson (1971), using a more stringent index of compliance (2 kept appointments), found that only 30 percent of those given a name and telephone number kept their appointment, but that 55 percent did so when an appointment was made for them. However, neither were random assignment studies and there may have been other selection factors which contributed to being chosen for the more active intervention and to later compliance.

There is also some evidence that compliance may be improved if referral is made to a specific clinical service rather than to a local generic service. Welu (1977) contrasted compliance to a specific, new outreach program with 57 cases seen before the establishment of the new program who had been referred to their community mental health service. He found that 90 percent of the cases attended the new program compared with only 54 percent of the cases referred to the original program. No details are given about whether elements other than the novelty of the program played any part in attaining this unusually high compliance rate. Those who attended the novel program made significantly fewer attempts.

Sudak et al. (1977) reported compliance rates at the Cleveland Suicide Prevention Center. Approximately two-thirds of the referrals to this center are females. A center professional routinely makes an appointment for the individual who has been triaged and will then followup to see if the appointment has been kept. The overall compliance

rate was 60 percent with higher rates being reported for patients who were already in treatment with another therapist. Similar rates were reported for those who had made a recent suicide attempt as for those who called for other reasons.

COMMENTS: Low compliance with recommendations is clearly a pervasive problem and should be monitored routinely by any crisis service. Some variation with helpers will occur, but evidence is sufficient that active procedures result in a significantly improved compliance; they should become standard and expected.

Conveying Inappropriate Information

Bleach and Claiborn (1974) and Apsler and Hodas (1975) simulated real callers and found that about 15 of 96 volunteer-answered calls generated inappropriate information from the volunteer. Volunteers tended to give callers a range of referral sites without doing any editing or attempting to find a best fit for the callers' problems.

Interference With Other Treatments

It has been argued that the existence of readily accessible crisis services could complicate other therapeutic interventions. Certainly many callers are receiving treatment elsewhere. King (1977), in a study of college student crisis service users, found that 8 percent of callers, were currently in some form of therapy. Litman et al. (1965) noted that about 20 percent of 1,607 consecutive callers to the LASPC were currently in some form of therapy. Hirsch (1981) noted that many of the calls to the LASPC dealt with complaints about therapists.

COMMENTS: The undermining of other effective forms of treatment is likely to be a problem if a center has a strong theoretical bias, but there is no evidence of a negative impact through this mechanism.

Popularity With Users

Slem and Cotler (1973) in their assessment of high school users, reported that 68 percent had had a good experience with crisis ser-

vices. The findings of this study must be interpreted cautiously because the followup rate was relatively low (58%) and the number of suicidal users was not specified.

King's (1977) study of college student users indicated that the majority of girls found the counseling services helpful, but fewer than half of the male students did so. The difference between the sexes was statistically significant. However, between 20 and 33 percent of males and between 10 and 20 percent of females reported that the experience of hotline usage made their problem worse. Satisfaction among users who called because of suicidal ideation or attempt was markedly less for males than it was for females. Females who received counseling from a male listener on the whole reported greater satisfaction with the help received. Similarly, males who received help from a female listener reported more satisfaction than males who spoke to male listeners.

Getz et al. (1975) found that patients with like problems, e.g., problems with their parents, felt more positively about the crisis intervention than callers who had serious mental illness or drug problems.

COMMENTS: It is difficult to know whether the reports listed above are parochial, i.e. apply only to the center which has been studied, or have a more general application. Judging from the number of repeat calls reported by most centers, there must be a reasonable level of satisfaction, but this may not in itself be related to efficacy.

Volunteers vs. Professionals; The Impact of Training

Bleach and Claiborn (1974) and Genthner (1974) used students to simulate clients and rated empathy of volunteers working in crisis centers. Using standardized rating scales, both found that most volunteers were functioning at low levels of warmth and empathy.

Hirsch (1981), in an essentially anecdotal comparison of volunteers and professionals, suggests that volunteers show more warmth,

empathy and patience but are less skilled than professionals in eliciting relevant past history and in being able to integrate information from the volunteer. This has been at least partly confirmed by comparisons between trained and untrained volunteers. Knickerbocker and McGee, (1973) found greater warmth and empathy in untrained volunteers. It was not clear, however, whether the more experienced volunteers had received specific training in empathy and warmth and where this has been the case--training in empathetic response--improvements appear to occur over time (France, 1975; Kalafat et al., 1979). Differences in trained and untrained workers in these skills may be moot because the literature on psychotherapy outcome shows only poor agreement between therapist characteristics and good outcome (see Stein and Lambert for details).

Another relevant dimension is that of permissive vs. directive. Knowles (1979) and Mcarthy and Berman (1979) noted a tendency for untrained volunteers to be very directive and to offer advice, often prematurely and on the basis of inadequate information.

Ottens (1984) developed a program initially used to train key faculty, residence hall coordinators, and other staff at Cornell University. The program focuses on how to take a proactive, and directive approach to crisis management, familiarity with available resources and how to use the resources, and how to interact with the crisis victim. The program was evaluated by designing a set of situational vignettes with multiple choice answers designed to depict possible intervenor actions. The validation criteria were established by obtaining responses on the same questions from Crisis Center staff. Although it is stated that there were changes in the rank ordering of several of the different items, data are not provided. Statistical values are not given nor are the statistical procedures described.

Elkins and Cohen (1982) found little improvement in hotline volunteers after 5 months of training, but those who received

pre-job training did appreciably better than others. The less dogmatic, the more sensitive and skilled the person was likely to be.

The relationship between knowledge of suicide lethality and ability to deal with suicidal individuals was examined in a group of nursing students by Inman et al. (1984). There seemed to be little relationship between the lethality knowledge and skill required for effective management of suicidal patients.

COMMENTS: Suicide crisis services are used by seriously ill individuals who have a high suicide potential. Despite their high usage rates and the high proportion of calls which pertain to suicide, an overwhelming majority of attempters do not call these services. The literature does not allow us to conclude whether their failure to effect death rates--except marginally on young white women--(See Miller, 1984) is due to the failure of their technique to meet the needs of a residual suicidal population or to their failure to attract an appropriate population. On the one hand, information on the nature of callers who suicide suggests a mismatch of technique with recurrent suicide attempters. Data from studies which compared users and non-users suggest low utilization rates. However the evidence is drawn from a variety of studies of different populations at different times in different countries. The issue remains an important one and should, perhaps, be a specific focus for further research.

It is important to determine whether the findings relating suicide repetitions can be applied to adolescents. Despite their youth, teenagers frequently have a history of repeated attempts and attempt repetition has been found in at least one study to be a predictor of later suicide (Otto et al., 1972).

It seems that a fruitful exercise for the future would be to investigate how best to increase and sustain knowledge about the availability of a hotline service to a vulnerable population group. This can be done (see Slem and Cotler's work demonstrating a high rate of

recognition in their suburban community). It may also be true that the skills of telephone answerers in a crisis service decay when the service is used predominantly by non-suicidal callers. Research is needed to see whether more narrowly demarcating the caller population improves the quality of advice or information that volunteers give.

Finally, there is evidence that hotline volunteers may have defective mastery of information, may be deficient in empathy and may use inappropriate techniques to ensure compliance with referral recommendations. Research indicates that, although experience does not ameliorate these problems, training may. Clearly, regular evaluation of these elements of a crisis intervention service, using techniques that have already been developed, should be a routine for established centers.

After the Crisis

There have been no satisfactory studies in which suicidal teenagers have been randomly assigned to differing systematic treatments with outcomes observed in a controlled fashion. (See Trautman and Shaffer, 1984) The bulk of this section, therefore, relates to studies of adults.

Clearly, the expected efficacy of any psychiatric intervention is dependent on its success in attracting disturbed patients, on their compliance with treatment being recommended and on the effectiveness of the treatment recommended. The literature contains relatively few adequately designed studies for this purpose. Most are quasi-naturalistic studies in which individuals who comply with treatment recommendations are compared with those who do not, or in which outcome for those who were treated routinely before a new program was instituted are compared with those who enter a new program. Such studies present considerable problems in interpretation. There is no control over the type of treatment that is offered. It will vary in type and quality with different practitioners. Non-compliers are a poor control group because they may be either more

(i.e., don't adhere to schedules, etc.) or less (i.e., not severely disturbed so don't see the need to attend) deviant than compliers. Differences between compliers and non-compliers may either negate or enhance the apparent effects of treatment. Before and after studies may also present difficulties because the opening of a new service will tend to attract a different category of patients than those served before the existence of a new program.

Naturalistic Studies

Greer and Bagley (1971) contrasted suicide attempters who, due to staff oversight, had been discharged from an emergency room without a further appointment, and those who were given and complied with an appointment to attend a psychiatric clinic. Non-referred cases had significantly higher suicide treatment rates than those who were seen by a psychiatrist. There were intermediate findings when those who had had more than 2 treatment visits were compared with those who had made only one visit. The seriousness of the initial attempt did not predict reattempt.

These findings have not been replicated and it is not clear whether the non-attenders were denied additional appointments or whether they also included some cases who were given a telephone number to call and who failed to do so and were thus classified as non-compliers. If the untreated control group did include cases of this sort then the poor results might reflect some selection factor which was predictive of both non-compliance and repetition. On the other hand, if they were all systematically excluded, then the findings would suggest an effect. Other things being equal, oversight would more likely occur with less seriously disturbed patients.

Ettlinger (1975), in Denmark, instituted a new service for suicide attempters which encouraged unfettered access to mental health professionals, daytime hotline and walk-in clinics, frequent home visits made at the patients request, close consultation with other hospitals to which the patient might be

admitted, and proactive outreach for a one-year period. The subsequent five/six year suicide rate for 670 consecutive admissions was examined and compared with the death rate for 681 attempters who had been admitted to the hospital before the service had been started. The new service appears to have been popular and was used freely. Despite this, no differences were found in subsequent suicide rates or social adjustment between the two groups. The study is somewhat flawed by the low retrieval rate for the control group but that would not have been expected to effect knowledge about later suicides.

Welu (1977) contrasted suicide repetitions among 63 patients seen in an innovative outreach program with 57 cases seen before the new program was introduced and who had been referred to a local community mental health center. Cases assigned to the new program were more likely to attend and made significantly fewer attempts during the 4-month followup period.

Kennedy (1972) reports differences in repetition rates of 204 suicide attempters: 142 were selected for short-term admission to a suicide crisis unit, 672 were referred to a psychiatrist for out-patient after care, and 56 received no after-care. Repetition rates were significantly lower for those who were admitted for a short-term stay, but there were no differences in reattempt rates between the group that received long-term psychiatric treatment (which was often started several weeks after the attempt) and those who received no treatment. These findings persisted even after corrections were made to account for previous suicide attempts, a factor which is thought to be a strong predictor of further repetition. The authors inferred from these findings that crisis management is important.

Random Assignment Studies

Chowdhury and Kreitman (1973) randomly assigned repeat attempters to routine out-patient care or an enhanced service which included emergency telephone access and a

walk-in facility. Patients also received home visits if they failed to keep an appointment. The groups did not differ in their reattempt rates or on any measure of mental state. However, the experimental group experienced fewer social problems (housing difficulties, unemployment, collection of benefits, etc.) at the end of the evaluation period than the controls. One cannot argue from this study that psychiatric care was not helpful as it was received by both groups.

Motto (1976) and Motto et al. (1981) identified a sample of 3005 hospitalized patients at "high risk" for suicide. All were offered after care. Of these, 862 declined. These were then randomly assigned to a group which received intermittent telephone contact at decreasing intervals over a 5-year period, or to a group which received no further contact. During the first 2 years, suicide rates were twice as common in the non-contacted group as in those who received contact. During the remainder of the followup period the rates converged. This study is difficult to interpret because of the way that non-compliance with treatment is handled. There was a relatively poor followup rate among those selected to receive contact (243/417 contact subjects either refused to receive contact or else could not be contacted). It would have been interesting to know what their death rate was, but in the study descriptions which have thus far appeared in print, they are not differentiated from the remainder of the contact group.

Gibbons (1978) and Gibbons et al. (1980) randomly assigned 200 cases each to a course of intensive, but time-limited (3 months), task-centered case work, and to routine treatment (some cases were followed up by a psychiatrist, others by a general practitioner, etc.). Cases with high suicide intent were precluded from the random assignment and were all designated to receive the intensive approach. No differences were found between the two experimental groups but the high risk "excluded" group had a significantly higher repetition rate. There were a significant number of drop outs from the treat-

ment groups and the report does not specify the repetition rates for the partially treated groups.

Only one random assignment study has been identified which assigned patients to different types of psychological treatment. Liberman and Eckman (1981) randomly assigned a small group of attempters to either 32 hours of behavior therapy (social skills training, anxiety management, and contingency contracting) or to insight-oriented psychotherapy. The groups did not differ with respect to repetition of suicide attempts but the behavior therapy groups were generally less symptomatic and less preoccupied with suicidal ideation and threats.

COMMENTS: Although none of the studies are adequate methodologically, none present clear and consistent evidence that suicide repetitions can be prevented by whatever array of interventions may have been offered in these different settings. The very high relapse rate of patients with a history of chronic personality disturbance and previous suicide attempts in Chowdhury and Kreitman's study, even though they were provided with optimal and varied management, is particularly relevant in the light of Litman's observations that this is the group of crisis service contacters who are most prone to ultimately commit suicide. The absence of psychopharmacological studies is especially striking and highlights a research priority area.

CONCLUSIONS

The prediction of rare events from common ones is a dispiriting process which has been commented on by several reviewers (Rosen, 1954). Predictions are plagued with low specificity (high false positive rates) which might be acceptable if the interventions were either inexpensive or efficacious or both. That is far from the case, however, in suicide. The general wisdom is that preventive interventions should focus on suicide attempters or on depressed patients.

With respect to the latter, Temoche et al.

(1964) undertook a rather dispiriting analysis of what the impact might be of an optimally efficient prevention scheme focusing on patients with a serious psychiatric illness which had required hospitalization. Using Massachusetts data, they matched psychiatric hospitalization records with suicidal death notifications. Suicide rates were low during the patients stay in hospital, but were very high in comparison with the general population after their discharge. Most deaths occurred during the first year after discharge and the group with the highest suicide rates were those that had received an in-patient diagnosis of depressive psychosis. Assuming that optimal protection (which might involve prolonged institutional care) was provided for the highest risk group for the period of maximum risk (one year after discharge) the (very expensive) intervention would only reduce the suicide rate by 4 percent. They conclude that any more effective program would have to broaden the net of patients taken into care (thus radically increasing the cost), or would have to improve the efficiency of any predictors so that a smaller but more specific high risk group could be identified. This exercise did not take account of the very low compliance rate for treatment in this group of patients.

Prevention based on the effective treatment of suicide attempters has not been subject to the same analysis, but given the lower ratio of attempts to completions we would expect that it would be more cost-effective than the management of depression if we could identify an effective intervention. While the literature which deals predominantly with psycho-social interventions fails to provide us with any indication that these interventions are effective, we cannot conclude from this that suicide attempts are untreatable. The literature, at least as we have surveyed it, is strikingly deficient in the area of psychopharmacology which, given its efficacy in the general area of affective illness, is surely the area where most hope should be directed and which is most deserving of research support.

Recent work on biological predictors of suicide repetition and completion (Asberg et al., 1976; Stanley, 1984) has not been discussed in this review but it offers the prospect of increasing the specificity and thus reducing the cost of preventive interventions.

A considerable amount of energy and goodwill, human sensitivity, and kindness has gone into the conventional suicide prevention activities but there is little evidence that they have been effective. Can we accept the bitter logic of research or should the findings be qualified with the customary apology that not all benefits can be researched? Certainly there is room for more research on the benefits of hotline calls and crisis centers for problems other than suicide, but there is precious little encouragement for the suicide preventer. We all want crisis services to work, but if they do not, we should have the fortitude to discontinue them.

To postpone attempts until answers are provided by experimental programs would be to ignore the evidence of common sense and clinical experiences (Rogers et al., 1982).

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OVERVIEW OF PREVENTION EFFORTS IN ADOLESCENT SUICIDE

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SUMMARY

The development of general suicide prevention efforts in the United States and beyond is reviewed, with emphasis on the paucity of attention to youth suicide until recent years. Training programs are reviewed, again with few found specific to youth. A current survey of prevention and intervention programs in the United States is introduced, detailing the types of programs which could be identified. Special therapy needs of adolescents are considered, and recommendations for future programs are detailed.

INTRODUCTION

Suicide stands out among major causes of death when accounting for deaths which might have been prevented by an act of will. Prevention efforts in communicable diseases and in disorders with parameters influenced by human choice, such as lung cancer and smoking, are considered relatively effective; suicide, however, is the choice not to live and it can be prevented only by a change in choice. As a result, prevention efforts have held the attention of those concerned with suicide for as long as suicide has been approached as a public health problem. During the past decade the dilemma of increasing

rates of suicide by American youth has brought into focus the waste of life involved when the very young choose to take their lives. The purpose of this paper is to review what has been done in suicide prevention in the past and to summarize the types of suicide prevention efforts currently occurring in American communities, with specific reference to youth.

HISTORICAL REVIEW

The suicide prevention movement had its origins in the mid-1960s; there was little attention paid to suicide before that time. The authors studying suicide most often quoted in earlier years were Freud (1), and Durkheim (2). Freud believed that suicide was the ultimate example of introjected rage and self punishment; he also speculated on the existence of a separately operating, biologically established death instinct. Durkheim's early studies of sociological factors associated with suicide are best remembered for his elaboration of the anomie of the suicidal individual.

Of particular interest in the context of youth suicide was the 1910 meeting of the Vienna

Psychoanalytic Society, reported in *On Suicide* (3). The meeting was planned because of the suicide death of a school boy and focused on harmful influences affecting young people. Actually, suicide as a problem was well established long before the work of these two giants. Goethe, another literary giant, brought attention to romantic suicide in his book, *The Sorrows of Young Werther*. It is said that after Goethe's love-struck Werther's story was popularized (4), a number of imitative suicides occurred among German youths. The romanticization of suicide may have accounted for other clusters of youth suicides over the years, although this phenomenon was not actively studied until very recent times when alarm over the increase in absolute numbers of youth suicides stimulated research.

It was not suicide among the young that stimulated the beginning of the suicide prevention movement. During the 1960s, suicide prevention centers came into being in a number of different locations. The earliest centers generally developed out of the interest of mental health professionals and, for the most part, consisted of telephone answering services staffed by trained volunteers offering crisis intervention counseling anonymously.

Impetus was given to suicidology as a field of study by legislation enacted in the 1960s by the United States Congress. Early advocates for suicide as a deserving and needed field of study included Dr. Edwin Shneidman, Dr. Robert Litman, Dr. Norman Farberow, Dr. Harvey Resnik, Dr. Seymour Perlin, and others. The legislation established a Center for Studies of Suicide Prevention within the National Institute of Mental Health (NIMH). This center, headed first by Dr. Shneidman, and later by Dr. Resnick, provided a focus for suicide efforts over a number of years.

Beginning in 1968, the center published the *Bulletin of Suicidology*. Research money distributed through its grant program gave major impetus to investigations throughout the nation.

During and preceding this period in the United States, several organizations in other countries became involved in suicide prevention activities. The Samaritans organization originated in England and spread worldwide. Their activities are detailed in another paper in this volume. A parallel effort by Contact Teleministries world-wide accounted for many additional telephone answering, crisis intervention services.

By 1968, sufficient interest in the field of suicide prevention had developed in the United States and a sufficient number of workers existed in the field to warrant a national meeting. The first meeting was organized in Chicago, Illinois under the sponsorship of the University of Chicago and became the formative meeting for the American Association of Suicidology (A.A.S.). Suicidology was a new term introduced by a charter member and original leader of the association, Dr. Edwin Shneidman, and indicated the scope of the new organization, that is, the study of suicide and its psychological, sociological, and clinical manifestations. Despite the academic focus indicated by the title and expressed by the early members, an immediate division developed within the organization between those who were primarily invested in suicide prevention (especially the volunteers) and those who were academicians. Over the years this divergence of interests has persisted within the organization, nevertheless, the intent of the original organizers has been honored in that the A.A.S. has not been divided. It remains a multidisciplinary organization where research and application reinforce one another. Through an annual national meeting, the organization has fostered research and reporting on varied aspects of suicide. One of its most important contributions has been the development of standards by which suicide prevention centers can be judged and certified. The organization's scientific journal and newsletter have had the desired effect of stimulating continuously increasing interest in the area.

Youth suicide was a special focus among the early students of suicide. Review of the annual programs of the A.A.S. indicates that an increase in suicide among youth was noted as early as 1974, although the increase at that point was not marked enough to allow firm conclusions about the dimensions of the problem. In the decade from 1974 to 1984, the very clear increase in youth suicide was documented and led, not only to an increase in the number of publications and specialized programs in suicide prevention for youth, but also to specific federal responses. In 1979, the U.S. Public Health Service promulgated the 1990 Objectives for the Nation; among them were a number of objectives related to control of stress and violent behavior. NIMH created a staff position relating to suicide issues, announced a programmatic goal of a 10 percent reduction in youth suicide in the next decade, and aimed for identification of crisis telephone services by 60 percent of youth. Specific legislation at the State level, first in California and subsequently in other States, was introduced for dealing with suicide prevention programs for youth. In 1985, the Secretary of Health and Human Services established the Secretary's Task Force on Youth Suicide. A series of meetings and reports have been generated by this task force.

During the approximately two decades when suicide prevention was a specific focus of professionals in the United States, the number of suicide prevention programs steadily grew throughout the country. Since 1981, new programs dealing with primary prevention efforts in schools have been developed. Currently in the U.S. about 1,000 suicide prevention or crisis programs have been identified exclusive of community mental health programs. Generally these programs were organized with goals broader than suicide prevention. Their names often reflect the broader crisis intervention purpose, such as Crisis Center, Telephone Hotline, etc. Some, but by no means the majority, of these programs have established components specifically related to adolescent suicide. School programs have become

quite widespread, generally having been initiated only after a suicide involving a student has brought the issue of youth suicide strongly into focus. In some instances, school programs are provided by outside experts, in others educational psychologists employed in school systems have developed training programs for student bodies. An ongoing component of these programs is the task of dealing with students directly affected when a close friend has died from suicide.

In the late 1960s and early 1970s a number of crisis programs were organized specifically for the youth population and were advertised as such. They tended to use youthful volunteers as telephone respondents. Typically, these programs were organized by young people, training was less rigorous than for the more general suicide prevention programs, and, for the most part, these programs have disappeared from American cities. There is some appeal to the notion that a young person in crisis might prefer to talk to a willing peer volunteering in a telephone response service; nevertheless, the relative lack of survival of these programs might suggest otherwise. In any case, the appropriate and adequate training of youthful volunteers remains problematic and has not been attempted by most established services.

Other suicide prevention efforts have developed in connection with the emergence of emergency psychiatry as a sub-specialty. General and psychiatric hospitals have installed discrete programs for dealing with emergencies brought to hospitals and with psychiatric aspects of medical treatment in general hospital emergency rooms. These programs encounter a large number of patients who have taken overdoses, and, especially in training hospitals around the country, have developed program components specific to suicide. Recognition of the need for ongoing care after emergency interventions with suicidal patients have led to the establishment of outpatient programs for suicidal patients. Several centers provide ongoing care through therapy groups homogeneous for suicide ideation. Many of

these are located in public outpatient clinics associated with teaching hospitals, in community mental health programs, and as walk-in services in a few suicide prevention centers. The author maintained a therapy group for several years for adolescent suicide attempters treated in a general hospital emergency room. Yet another type of suicide-related effort involves therapy groups for survivors of a suicide. Typically, these attract the parents of young people who killed themselves. Such groups exist as free-standing services staffed by mental health professionals. Many have developed as walk-in services in suicide prevention centers.

AFFILIATIONS IN OTHER COUNTRIES

Thus far, we have focused primarily on programs within the United States. In fact, the suicide prevention movement was active in Europe earlier than in the United States. In 1960, the first international suicide prevention meeting was held and the International Association for Suicide Prevention was formed with central offices in Vienna. The name of the organization was later changed to indicate the broader interests shared by member organizations. It continues today as the International

Association for Suicide Prevention and Crisis Intervention. This group, like the A.A.S., holds plenary and regional meetings and publishes a scientific journal. The 25th anniversary meeting was held in Vienna in 1985. The A.A.S. has functioned as a national member of the international association since A.A.S. was formed.

SUICIDE PREVENTION TRAINING

Training for mental health professionals in the area of suicide prevention has increased steadily in recent years as the visibility of suicide, especially among adolescents and youth increased. Schools of social work, nursing, psychology, and psychiatry have par-

ticipated in and expanded their emphasis on training. There remains, however, a substantial lack of uniformity among programs across the country; some refer to suicide prevention in single lectures and case reviews, and others provide discrete curriculum segments containing many hours of both didactic teaching and case experience in suicide prevention. The scope of instruction in professional schools generally covers the identification of populations at risk, individual case assessment techniques with respect to suicide risk, techniques in crisis intervention relevant to suicidal persons, and special care needs of particularly high-risk populations. Specific attention to adolescent suicide may not go beyond acknowledging that suicide in this group has shown recent increases. The dilemma for professional schools is that a well-defined body of knowledge about adolescent suicide does not yet exist and few individuals have specific experience or training in this area to be able to teach it well.

Several specialized training programs deserve mention. The National Institute of Mental Health provided funding since 1967 for a fellowship program in suicidology at the Johns Hopkins University School of Medicine. One outcome of this program, headed by Dr. Seymour Perlin, was a handbook (5) which provided an important resource for other training programs (4). Of interest, this volume published in 1975, did not index adolescents or youth or teens, an accurate reflection that special concern for youth had not yet emerged. Many of the current leaders in the field were trained in that program. After the close of the Johns Hopkins program, there was no specific training opportunity for individuals motivated for an academic career in suicidology. Recently Dr. Ronald Maris developed a new fellowship program at the University of South Carolina which offers promise of renewed leadership in the field.

It seems to be the general case that programs for physician's assistants and on-site interveners such as emergency medical tech-

nicians (EMTs) and policemen are relatively unsophisticated in suicide prevention treatment. Model curricula have been developed for these groups and have been promulgated by the American Psychiatric Association's Task Force on Emergency Psychiatry Care Issues (6).

The situation for volunteers in suicide prevention centers is relatively better defined than that for mental health professionals. Training curricula for volunteers have been developed (7) and widely promoted and standards and criteria for training of volunteers has improved the uniformity of training around the country. The scope of training for center volunteers includes didactic instruction in crisis intervention techniques, experiential involvement through role-playing, and supervised participation in crisis work on telephone lines. Volunteers often become extremely proficient in dealing with people in crisis and may have more training for this task than do mental health professionals. It remains the case however, that specific training in dealing with adolescents is not separately addressed in most programs.

Textbooks devoted in whole or in part to suicide prevention inevitably lag a number of years behind the current state of knowledge in the field. It is not surprising that the recent books offer relatively little in the area of adolescent suicide prevention. Several books, in the past two years, do address this area and include *Youth Suicide*, (Peck, et al. 8).

Two scientific journals are devoted to suicide-related topics: *Suicide and Life Threatening Behavior*, the journal of the A.A.S., and *Suicide*, the journal of the International Association of Suicide Prevention and Crisis Intervention. An earlier publication, *Bulletin of Suicidology* was published by NIMH during the years of the Center for Studies of Suicide Prevention.

There have been some efforts to develop model curricula in suicide prevention. Dr. James Lomax has written curriculum recom-

mendations for psychiatry residency programs which were accepted by the organization of heads of psychiatric training programs and is available from them (9,10). Dr. Alan Berman, in heading an educational committee for the American Association of Suicidology, collected curricula from training programs around the country and developed specific professional training recommendations.

The most effective way to upgrade educational emphasis in an area is to influence the accreditation examinations in that area. Efforts have been made, for example, to increase the number of questions about suicide and its prevention in the examinations of the American Board of Psychiatry and Neurology. These examination questions have not yet focused directly on adolescent suicide, but it is hoped that they will do so in the future.

The development of standards in suicide prevention efforts has been a uniquely thorny problem. Standards of care are needed both in specific suicide prevention programs and in any program offering mental health services. Workers have been reluctant to delineate highly specific standards because of the likelihood of related litigation in the event of a completed suicide. A.A.S. has considerable experience with standards developed more than a decade ago for suicide prevention centers (11). These were organized as minimal standards of competence for programs and have been used as the basis for a certification process for suicide prevention centers. This has been an outstanding effort in that it has had obvious and gratifying impact on the quality of services developed within programs and has not induced troublesome litigation.

In contrast, the experience of hospitals in establishing suicide prevention standards has been very mixed. Tremendous lack of uniformity exists among hospitals around the nation in policies directed to suicide prevention. Some hospitals have very strict requirements whereas others have decided to do nothing in order to avoid the problems of

diversity in care (12). A.A.S. has worked for a number of years in surveying hospital practices and currently is developing a set of recommendations for consideration by the Joint Commission on Accreditation of Hospitals. The latter group has been reluctant to establish standards for care of suicidal individuals although it does require documentation of risk assessment. In contrast, a major care provider, the Veteran's Administration (V.A.), has had a set of nursing regulations and a manual on suicidal and violent patients for several years. These standards are far more specific than are those encountered in the private sector. It is unclear whether these have substantially raised the awareness and sensitivity of V.A. staff members to suicide issues compared to professionals in the private sector. As expected, the V.A. standards did not address youth suicide as a special problem. Since adolescents requiring psychiatric hospitalization generally are segregated from the adult population, it seems likely that a professional group such as the American Society for Adolescent Psychiatry may become involved in development of specialized standards of care for this group.

SUICIDE PREVENTION EFFICACY

One of the most troublesome aspects for planners in the area of suicide prevention for adolescents is the lack of substantial and convincing data about the efficacy of existing programs. Outcome research is made difficult by the mobility of the young population, the lack of adequate and accurate reporting of suicide deaths, and ethical dilemmas encountered when specific intervention programs are to be compared to a control population deemed equally at risk; that is, withholding intervention from populations at risk cannot be sanctioned. A few outcome studies have been greeted with enthusiasm but also with considerable methodological criticism. One study involved the comparison of similar towns in England where the Samaritans were and

were not active, with a favorable decline in the suicide rate in the town where the Samaritans intervened through a program of befriending those identified as being at risk (13). Another piece of evidence involved the cessation of carbon-monoxide-producing coal oil as a cooking fuel in Great Britain with a corresponding drop in the suicide rate (14). These data have been particularly interesting to advocates of firearms control in the United States because they suggest that the control of a popular means of suicide may indeed influence the overall frequency of death. Lester has reported a correlation across States between handgun control and suicide (15) and most important, has extended his analysis to show fewer adolescent deaths in States with stricter controls (16). No convincing studies, as yet, in adolescent suicide show that specific kinds of intervention other than gun control absolutely decrease the suicide rate. The shifts in the suicide rate over time are confounding variables. It appears, for example, that the alarming rise during the past 15 years in adolescent suicide is now reaching a plateau and we may be experiencing the beginning of a gratifying drop in these deaths. The stated goal of the Department of Health and Human Services to achieve a 10 percent drop in adolescent suicide may have been fortuitously timed. That, of course, does not guarantee that anything efficacious has been done. The task of identifying suitable comparison groups and discretely defined intervention strategies remains for researchers in the future.

PUBLIC AWARENESS

In the absence of interventions of proven efficacy, suicide prevention planners intuitively have assumed that factual information serves the public well and that increased sensitivity to adolescent suicide may decrease its occurrence. This area of concern has been enjoying considerable popularity in recent years as evidenced by a number of television documentaries treating the problem of adolescent suicide in some depth. The human interest potential for such program-

ming is very high and, in general, the quality of media productions has been considered high. The national media, when airing such documentaries, have taken responsibility for alerting community service providers and for developing expert commentary on the content of such programs, particularly with the goal of guarding against suicide by suggestion to viewers and listeners. One network distributed elaborate and high quality school curriculum materials in advance of airing a youth suicide documentary (17).

Local school districts have become alerted to the problems of adolescent suicide and have responded with a great variety of suicide prevention programs in schools. Most of these include educational efforts to heighten the awareness within the student body of the possibility of intervention by friends when a troubled youth is identified. School curriculum planning is very active in this area at the present time. In various locales, depending on school personnel, educational psychologists and guidance counselors make classroom presentations or invite outside professionals to teach about youth suicide. Charlotte Ross in California was a pioneer in the latter type (18). Schools also have stimulated parent-teacher organizations to attend to this area and presentations in their annual programming are becoming very frequent. A.A.S. is currently collecting suicide prevention materials developed for schools and will develop specific recommendations and models for school awareness programs. In a closely related development, A.A.S. and other groups are giving attention to plans for school intervention programs when suicides occur or are threatened.

PROBLEMS IN SUICIDE PREVENTION

One of the major difficulties in planning for suicide prevention programs is that parameters for identifying the population at risk are so non-specific that inevitably a very large population must be dealt with. Interventions focusing on public awareness obviously do not suffer from this problem and

this may account for the great amount of energy directed toward that effort. George Murphy (19) has clearly defined the dilemma of overinclusiveness of risk measures. For example, very high risk groups, such as suicidal manic depressive and schizophrenic patients are underrepresented in the adolescent population. For groups in which suicide risk can be identified by individual behavior, such as suicide attempt or threat, the actual risk is only about 5 percent and all cases identified in advance account only for about 20 percent of the eventual fatalities (20). Prevention efforts, then, must be rather broadly directed and must approach individual dynamic issues which in the future may be found to be associated with suicidal impulses in youth.

A further problem in implementing suicide prevention efforts arises from the conflicting need to control the behavior of an identified potentially suicidal individual on the one hand, and the need to promote growth and personal responsibility on the other hand. Every therapist is or should be aware of this conflict in every situation of intervention with potentially suicidal youth. There seems to be great variation among therapists in the way this is addressed. Some go to great lengths to prevent the possibility of death, even though this provides considerable interference in the progress of therapy. Others reason that some suicidal deaths inevitably will occur even in therapy and that the greater preservation of life and quality of life is assured by promoting personal responsibility on the part of suicidal individuals. With so much disagreement among therapists it seems unlikely that clear standards for intervention techniques can be developed.

There is a further conflict in the intervention models endorsed for suicide prevention efforts. Historically, major emphasis has been given to the crisis model where suicide is seen as a time-limited crisis in the life of an individual whose pre- and post-crisis ego functions are at a reliable level. The task addressed in the crisis model is that of

restraining destructive acts by the individual until the crisis is passed. This seems a defensible model with considerable support from existing crisis intervention services, even in the absence of rigorous research validation. In contrast, a number of suicidologists see suicide as an end-point in a suicidal life style. Both Edwin Shneidman (21) and Ronald Maris (22) have written extensively on this point of view.

Indeed, most clinicians from time to time have had experience with a chronically suicidal individual. Such experiences discourage adherence to the crisis model. It is possible, of course, for an individual therapist working with an individual client to accomplish some combination of these viewpoints, paying attention equally to the meaning over time of self destructive patterns in the individual and to the crisis which occurs when a suicide impulse is active. In program planning, however, such individualized attention may be neglected. Suicide interventions tend to be very time-limited with relative neglect of the important areas of referral and long-term followup.

Longer term treatment of suicidal youth appropriately expands beyond the issue of the self-destructive behavior which typically is the cause for initiating therapy, and which is often referred to as a cry for help. Review of the dynamics of youth self-destruction inevitably becomes a review of the multiple psychological tasks required in the passage into adulthood and of the psychopathology specific to this age group. For the purpose of this overview paper, only a few points will be made.

In satisfactory maturation, the adolescent or young adult reworks, in a definitive way, the conflict between the wish to gain security from the care provided by others and the wish to gain independence and self reliance. Under the best of circumstances this conflict produces trial solutions and failures, disappointments, and changes of direction. The extraordinary grandiosity of mid-adolescence, when anything seems possible and confidence may outreach wisdom, must be

revised in the light of limitations in personal abilities, social resources, and the exclusions required by progress in a particular direction. Major changes in interpersonal relationships occur, especially in families; and investments in relationships outside the family become crucial. This is the interval when, if development is satisfactory, self concept reaches a relatively stable form, including such important aspects as body image, self esteem, self motivation, and differentiation from others. Failures in this stabilization of self concept have far-reaching consequences.

Youth suicide in general terms can be understood as a reaction to living with such failures. The compelling question in the context of recent increases in youth suicide is "why now?" The compelling need in intervention in youth suicide, in the absence of useful answers to that question, is for individualized work with individuals in distress. Crisis interventions, at best, can keep a young person alive during a period of very high risk and can facilitate entry into longer-term therapy. It is mainly in the course of longer work that the individual life course can be altered.

Crisis events at times are referred to as growth opportunities, and this idea has merit both in the sense that crisis-anxiety promotes development of new coping skills and in the sense that failing character defenses become rather transparent during crisis, making it relatively easy to grasp underlying dynamics. It must be remembered, however, that a protective boost through a crisis interval also may reinforce a young person's sense of incompetence. The quality of work done in crisis resolution is critical to the final impact of the crisis, and that work may require an extended therapy interval.

With respect to adolescent suicide there exists a troublesome lack of convincing data on the outcome of intervention techniques, on the means by which suicide ideation and urges seem to be contagious in groups of young people, and on the importance of major sociological variables such as family mobility, divorce in the family, changes in academic standards in schools, lack of youth

optimism about future employment, etc. There is immediate need for research in all of these areas.

TYPES OF PREVENTION PROGRAMS

In preparation for the National Conference on Prevention and Intervention in Youth Suicide, a research task force in Houston surveyed programs throughout the United States which may provide services to suicidal youth. Details of the methodology and summary results are presented in a separate paper (23), and a survey analyzing characteristics of programs, by program type, are presented in another paper (24). For the survey, programs were classified as crisis phone lines, walk-in crisis clinics, hospital-based emergency programs, mental health centers with crisis components, school intervention programs, free standing crisis stabilization units with beds, and combination programs. It is noteworthy that these programs consistently identified a combination of prevention and intervention goals. They seem generally to subscribe to a crisis model of intervention, although most programs described extensive referral linkage in their communities. Neither their titles nor their services defined them as being organized specifically to respond to youth clients. Probably the single outstanding result of this survey was to learn that adolescent suicide has not, as yet, had direct impact on community agencies except for schools.

In yet another paper, the responses of communities where youth suicide has had special visibility are discussed (25). Clusters of adolescent suicides are special and alarming events. They have been reported from many regions of the country, from small communities and large but common characteristics that might identify communities at risk have not emerged. Current research will contribute better understanding of this phenomenon. Interventions in youth suicide clusters generally have provided emergency training for school personnel, awareness education for students, rapid reinforcement

of the treatment community by referral networks, and organizing professional volunteer services. As yet, no systematic examination of the effectiveness of such efforts has been performed, and no natural history of a cluster has been defined. It is not known whether the interventions undertaken have decreased or increased the suicides, although it seems that they have been effective in ending the clusters. Detailed case studies are needed, with particular attention to the role of the media.

ADOLESCENT SUICIDE PREVENTION NEEDS

In evaluating the planning for expansion of the services available in any community for the prevention of youth suicide, the following considerations seem important.

First, programs within the community need to be especially visible to young people. This can be accomplished through public service announcements of entry sites, especially for suicide prevention programs. At least two types of crisis services are needed: those available by telephone contacts and those available for individuals identified in hospitals as suicidal youth. To this may be added crisis services for individuals identified in schools where the intervention needs go beyond the capability of school personnel. For all of these entry categories, a strong referral network is needed.

Second, there is unfortunately, substantial loss of individuals who have undergone some treatment in the course of a suicidal crisis and been referred for on-going therapy. The referral network needs to be well understood within the community and should include the following components: 1) Therapists experienced in family therapy, especially family therapy involving adolescents. 2) Specialized support groups of peers. (Experience shows that the old-fashioned adage against dealing with suicidal people together in a group is unwarranted--such therapy seems to work.) 3) Social work assistance needs to be available to troubled youth to at-

tend to specialized needs, including residential placement, educational needs, and legal help. 4) Long term psychotherapy needs to be available. This is especially true in the public sector where it often may be difficult to obtain. 5) Both hospital and partial hospital programs need to be available with staffs trained specifically in dealing with suicidal youth. Partial hospital programs are especially attractive for the large number of individuals who have survived through a suicide crisis, have no immediate suicide intent, and can both remain in contact with school and family and simultaneously can have the advantage of daily part-time hospital treatment.

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COMMUNITY RESPONSE TO ADOLESCENT SUICIDE CLUSTERS

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SUMMARY

The typical community reactions to disaster, as identified from the literature, parallel individual reactions, including death-preoccupation, guilt, psychic numbing, rage, and a search for explanations. Adolescent suicide clusters are examples of disasters of limited scope but nevertheless generate fear responses because of their uncertain duration and extent, and their implication that something is wrong with community quality of life. A cluster of suicides in Clear Lake, Texas is reported as a case study, and recommendations for community planning are suggested.

INTRODUCTION

Youth suicide is increasing; knowing that it is increasing invokes many questions. Is there something about the quality of community life in recent times that accounts for the increase? What is the role of the family as an institution? Is the growing instability of families and the frequency of divorce directly connected with the increased incidence of adolescent suicide? What are the roles of other institutions in our communities: churches, schools, the justice system, the media, and mental health service providers? Are these institutions failing our young people in

some crucial way or ways that connect directly with the increase in adolescent suicide? How have communities responded to adolescent suicides? How should they respond?

A significant literature exists on community responses to natural and to man-made disasters from which much can be learned about the after-effects of crisis on survivors and about responses of individuals and community groups not directly involved in the disasters (1). How these experiences and data obtained from them can be applied to adolescent suicide has hardly been studied.

The suicide death of a young person is a remarkably personal and private event, but it has powerful impact on many others who knew the dead youth. Since the network of acquaintances of a young person tends to be large through school contacts, and because a young person's death is so unexpected, youth suicide generates complex bereavement patterns and invites comparison with the bereavement tasks following a disaster. When a cluster of adolescent suicides occurs and is reported in the media, many more comparisons are invited. Lifton (2,3) has identified five survivor reactions after a disaster: death-preoccupation, guilt, psychic

numbing, poorly focused rage, and a search for meaning or explanation. These seem easily transferable to the situation following adolescent suicide clusters.

Green (4) reviewed studies of psychological sequelae of disasters and emphasizes the importance of the geographic centrality of events as determinants of outcome. For example, a plane crash does not affect the support network of survivors, and is considered a peripheral disaster. A natural disaster, however, may cause death, property loss, and residential displacement within a community, and thus is a central disaster. Erickson (5) focused on the community response to disasters, studying the Buffalo Creek flood where whole communities were destroyed. He suggests that the availability of pre-existing community support is a critical factor in the severity of disaster sequelae. These observations seem relevant to planning community responses to suicides. Suicide clusters are relatively central events in communities, although they do not involve property loss or residential displacement. Applying a typology developed by Berren et al. (6), a suicide cluster is a man-made crisis, which has a slow onset, affects the community widely but has relatively few individuals directly at risk, has a worrisome potential for reoccurrence, and has limited possibilities for control over its future impact. The impact of a suicide can be prolonged and fosters widespread fear in the community. Because it is difficult to know when the impact has ended, uncertainty tends to heighten anxiety.

EMOTIONAL REACTIONS TO SUICIDE

Cluster suicides evoke many more emotional reactions within communities than do individual suicides. In general, these reactions follow patterns common to other kinds of crisis events within communities. What are referred to as community emotional reactions are not, in fact, very different from individual reactions in an individual crisis. They include: initial disbelief or denial of any

direct impact of the crisis, followed by an interval of questioning: "Why our community?" "What is wrong here?" Fear develops in the community. In the case of adolescent suicide, the fear is related directly to concern that the cluster of suicides may not have ended. A mentality develops in the community of waiting for the next bad news to arrive. Collective fear extends beyond the concern for the lives of individuals and the effects of suicide deaths; it is also fear that something mysterious, poorly understood, and obviously lethal is afoot in the community. A subsequent reaction may be one of outrage. "Too much is being made of this!" "Why don't people just leave us alone?", etc.

Following the painful reactions of confusion, fear, and outrage, a number of pathological defenses can be identified. Obviously, different individuals in the community react in different ways and labeling reactions as pathological defenses does not imply that a community is "sick"; but the defensive nature of these reactions and their connection with shared, painful emotions seem clear. Defensive reactions include efforts to place blame; for example, people may believe the fault is with the school or family instability, or that drug abuse is ruining the lives of our young people. The message behind any blaming effort is "we are not to blame", that is, an effort to dispel a sense of guilt which a community attaches to the suicide crisis. A different defense reaction is isolation. Communities turn inward in a crisis and become curiously resistant to interventions from elsewhere. A third defensive posture is detachment. "This does not involve us;" "Yes, I guess there is something going on over there somewhere--we do not know anything about it."

The final or resolution phase of crisis reactions, when viewed from a community perspective, may range from acceptance of an ongoing stigmatization in relation to the crisis, to a gradual restoration of the status existing before the crisis. Various efforts may be made to address the causes of the crisis and possible preventive actions and long-term efforts to deal with the aftermath

of the crisis. In the specific instance of a suicide cluster generating a community crisis, the tendency is certainly toward return to the status quo, although many preventive efforts seem appropriate.

Of all the community reactions to a suicide crisis, probably the one most troublesome and most deserving of attention is the fear response. It seems to be precisely because the phenomenon of cluster suicides is so poorly understood, that in the course of such suicides a sense of great fear develops. A remarkably different course is easy to imagine if, in fact, the causes of suicide clusters were well understood, if interventions had been researched, and the most effective interventions identified. In such a situation communities would marshal efforts with the confidence that they were doing something appropriate and that the situation would be contained.

That clusters of suicides are a distinct phenomenon has been appreciated only recently even though they have been reported for many decades. It is understood that not every suicide cluster is like every other. When faced with multiple suicides, communities must wonder within the context of their specific community what is going on and what can be done. The way is open for all sorts of fantasies and worst-case accounts. Fear of a lethal phenomenon which is not understood is a normal and predictable response. In my estimation, fear contributes very substantially to what can be identified as community reactions in cluster suicide.

CLEAR LAKE TEXAS AS A CASE STUDY

The Clear Lake area in southeast Texas is a circle of towns around Clear Lake, the best known of these being the city of Clear Lake, where NASA's Johnson Space Center is located. The population center is about 70 miles from the center of Houston.

In October 1984, residents of Clear Lake, Houston, and the surrounding communities became aware that they were experiencing a

cluster of adolescent suicides. A sense of emergency developed and a great deal of activity was generated in an effort to identify, understand, and intervene appropriately to put a stop to the youths' deaths.

Two former students of the Clear Creek Independent School District, both age 19, killed themselves in August and in September 1984. Because they were not connected directly with the student body at the time and because the deaths were separated by more than a month, no significance was attached at the time to these two deaths, other than that attached to any suicide--that is, grief for the families and sadness among those who knew of the deaths. Later, on September 28th, a very popular high school student died in an auto/bicycle accident. It was stated that his death was "mourned throughout the school district" because of the prominence of the student and the considerable sense of tragedy associated with his death. Six days later, on October 4, another former student, also 19 years old, killed himself. No crisis was sensed at this time, but within a week of that death, on the 5th, 9th, and 11th of October, three high school students killed themselves, making four adolescent suicides in the community in one week and a total of six suicides in a two-month period. By the fourth suicide, the school district was convinced that there was problem; and by the time of the sixth suicide the entire community had been alerted by the media. A very considerable sense of dread developed.

Following the acknowledgment by the school district and the media-generated publicity of the cluster of suicides, a great many community actions occurred. The Clear Creek Independent School District called in two professionals from Houston, who had previous experience in suicide, as consultants. They also contracted with the Houston Psychiatric Society to intervene with the families of the dead students and former students. The school district administration organized, publicized, and held a public meeting specifically for parents of all students to review what had happened and what

was being done. The school district held a press conference which was attended by representatives of the major national news services as well as by the local media. The school district established an in-school intervention process which included meetings, by grades, with all junior and senior high school students led by a group of clinical and educational psychologists, some of whom were hired on a temporary basis. Meetings were held between the psychologists and all the teachers and guidance counselors. An internal system was established for identifying children who seemed at risk for suicide on any basis, for counseling those children, and for facilitating referrals for treatment if that was deemed appropriate. The school district consultants organized a treatment referral network through professional organizations related to psychotherapy. Hospital beds and professionals offering treatment were identified and agreements were made to provide no-cost or low-cost therapy whenever it was indicated for children referred by the school district. Referrals, of course, were possible only when parents cooperated with them. Dozens of volunteer professionals participated in evaluating students and in establishing therapeutic interventions. In addition to these efforts, a number of organizations providing mental health services announced special services available in the Clear Lake area. These included teams from Houston International Hospital; the Family Emergency Intervention Team from the Houston Child Guidance Center, and special services provided by the Bay Area Crisis Hotline. The Houston Crisis Intervention Service, which is linked organizationally with the Crisis Hotline, provided major leadership and provided many volunteers to deal with calls from distressed residents of the community. The Houston Psychiatric Society established teams of its members who intervened directly with the families and friends of those who had killed themselves. Community leaders, drawn from the Clear Lake area and from Houston, organized a series of planning meetings with leadership from the Mental Health Association and the

Houston Crisis Intervention Service, and sponsored a public forum on adolescent suicide. In Houston, a research group of representatives from the major academic institutions was organized to try to reach better understanding of the phenomenon in the Clear Lake area and to develop other research efforts related to adolescent suicide.

A number of problems were encountered in the course of all of these activities. It seems most fitting to discuss the things that did not go well.

Residents in the Clear Lake area felt considerably intruded upon by the flurry of activities resulting from the cluster of adolescent suicides. Some expressed concern that they felt indicted by the suggestion that there was something wrong in the community.

Second, a number of mental health professionals in the community felt disregarded when their offers to provide assistance were not accepted. No mechanism was in place for identifying the individuals who had relevant experience and expertise in suicide beyond the usual training and experience of every mental health professional. Every mental health professional considers himself of herself an expert in suicide, because this is a problem encountered from time to time in almost any work setting. In the Clear Lake situation, it was considered desirable to identify those professionals most qualified in specific suicide-related experience. A number of children were referred to Galveston and Houston for treatment. As a result, the professionals in the Clear Lake area felt that their turf had been intruded upon.

A third problem involved the lack of clarity about roles and responsibilities for the many agencies that were mandated to respond to any community crisis. Agency representatives came to Clear Lake from three counties and seven municipalities with a high level of interest and motivation to provide services. Regrettably, no clear network was established with the Clear Lake community by which the services could be administered.

A fourth problem, related to the third, had to do with unclear community leadership. The school district responded rapidly in establishing a case-finding and referral network which seemed to function relatively well. The school administration was very clear, however, in stating that it was not a treatment entity and that it wanted more appropriate community agencies to take over that responsibility whenever possible. Clear leadership for this task actually did not emerge. In a series of planning meetings, community leaders attempted to organize themselves; these meetings for the most part were orderly and congenial but they involved the kind of status-seeking group process and jockeying for position that is inevitable when people come together who have no structure for working together.

A fifth problem, related to the previous two, involved the need perceived by almost everyone for an orderly transfer of initiative from outsiders temporarily coming to the community to the community agencies and leadership already in place. Despite general agreement that this should happen, no clear plan ever was worked out by which it would happen; as a result, a number of plans initially greeted with energy and enthusiasm in fact floundered; and, to my knowledge, no long-term plans have emerged for community activity centered on adolescent suicide.

A sixth problem involved the media. There seems to be general agreement that media personnel in the Clear Lake suicides, in general, behaved responsibly and recorded events accurately. Nevertheless, some intrusions were problematic. In the first week, the school grounds adjacent to the administration building were encircled by reporters waiting for students to leave the grounds, the reporters having been barred from school property. Students were assailed by cameras, microphones, and the associated people, and were asked rapid-fire questions: "Do you know anyone who has committed suicide? Are you thinking about killing yourself? Do you know anybody who is going to kill himself? What would you do

if it were a friend of yours?" etc. It is doubtful that anyone could answer graciously or even sensibly to such a barrage of questions. The media continued to be problematic because of the possibility of suggestion received by vulnerable or at-risk individuals.

A seventh problem identified in Clear Lake was defining how extensive the problem was. The suicides occurred in a defined community served by one school district. A considerable number of volunteers and media and civic planners who flowed into this area focused on the identified problem and problem area. Simultaneously, a number of other youth suicides were reported in neighboring areas. Overall, these received far less attention than did the Clear Lake group simply because they were in outlying geographic areas. There was no equally coordinated effort to deal with the so-called "outliers" which, in fact, may have been related, in some as yet undefined way, to the Clear Lake cluster.

The eighth problem, already referred to briefly, has to do with geographical divisions and community organization. The Clear Lake area in fact involves so many governmental groups that coordinated planning in a community crisis was extremely difficult. Parts of three counties were involved, and 7 different police departments were involved in one way or another from 7 different municipalities. Part of the area received public mental health services administered from Austin and other parts received mental health services administered from community programs. The Clear Lake area certainly is not unique in having so many adjacent community organizations. In such an organizationally complicated area the need for a preplanned mental health response is especially clear.

On the positive side, a number of good things happened in the Clear Lake experience. At the top of the list, of course, is that no further suicides occurred after the week with the four suicides. In addition, appropriate interventions were made and a number of at-risk children were successfully referred and es-

tablished in needed therapy. A third positive outcome of the experience is that a more careful look at community response and problem identification was made possible.

COMMUNITY BEHAVIOR IN CRISIS

In reviewing the Clear Lake suicide cluster as a case study, a number of issues about group behavior present themselves. Often the same vocabulary and the same ideas are applied to individual and to group psychology; however, some comments about the similarities and differences are in order.

It is the case that groups experience shared emotions. Groups are made up of individuals with memories in common and frequently prevailing or unifying ideas and behavior can be identified. On the other hand, these common themes within groups are less stable than are parallel emotions and ideas and behavior in individuals. This is true particularly because the participants vary over time and groups are not themselves stably constituted. In referring to whole communities as groups, it is especially true that there is not the kind of strict connection between past and present experience that is encountered in individuals. For example, in the Clear Lake area there are sub-communities which have had remarkably stable populations where parents and grandparents have been in the same homes and the shared memories and sense of community past are very strong. Other areas within the community involve a very mobile population, many members of which have very short histories in the community and cannot share in the sense of longer-term memory and stability.

When a crisis occurs, shock and disbelief are normal individual and group reactions. There tends to be an early effort to grasp the dimensions of what has happened. This may vary from wild over-estimation in a rather sensational way to problematic under-estimation in the form of denial that anything very serious is going on. Specific negative reactions to crisis discussed earlier include

fear, resentment, guilt, blaming, isolation, and opposition to interventions. Community planning for intervention in a suicide crisis certainly needs to take into account the presence of these reactions. The shock and disbelief and misassessment of the situation are best dealt with by the availability of factual information, and for this the media serve a very needed and appreciated role. The group negative reactions may be underestimated. Unless these are taken into account, ventilated adequately, and addressed in specific ways when they generate interferences, then appropriate interventions will be stalled.

One would predict that in the long term, communities as groups would be sensitized to a trauma experienced previously and would retain some continuing anxiety about that sort of trauma. Communities generally seem to be restored to pre-crisis functioning relatively well; however, just as in individuals we know that crisis often is the occasion for human growth, similarly, communities in crisis might be thought of as seeking a resolution level where new strengths are added rather than having the community return to the status quo. In this sense, it is particularly important to try to retain focus on what happens to the community initiatives which stall out after a crisis interval has passed.

LESSONS FROM THE CLEAR LAKE EXPERIENCE

In the immediate aftermath of the Clear Lake suicide cluster several research initiatives were taken. These have continued although at present none is complete. Within Houston, a task force was established which outlined a series of studies which were deemed desirable. Funding was obtained immediately from the Texas Department of Mental Health and Mental Retardation. Subsequently, a research contract was negotiated with the U.S. Public Health Service for studying the families both in Clear Lake and in Plano, Texas where adolescent suicide clusters occurred. A data tape covering 10 years of suicide experience throughout

the State of Texas was obtained and funding is being sought for its analysis, with particular interest in correlating media coverage with suicide clusters.

There is of course a high level of local interest in what has been learned about the specific situations in the Clear Lake suicides. General conclusions will be drawn from the analysis of data which we are editing. Preliminary observations indicate that the series of suicides seems to have occurred in individuals where the death was determined mainly on the basis of the individual story of the adolescent. A search for connecting links revealed some interconnections among the individuals but nothing with the strength to explain why so many deaths occurred in so short a time. Similarly there has not been any identification of social factors in the Clear Lake area which could be thought of as responsible for the suicide cluster. It seems unreasonable to identify this as a toxic community. Perhaps in the future, more detailed correlations between adolescent suicide clusters and the quality of community life will reveal important connections.

One thing learned in the Clear Lake experience is that in spite of the problems, a great deal of positive response was accomplished in a remarkably short time. One special point that was raised in two of the public meetings was of interest and occasioned some alarm. Several individuals in Clear Lake were concerned with the stigma of mental illness in the family, not in terms of its effect on social status, but in terms of its effect on employment. There was remarkable assent in the audience when one individual stated that having a suicidal adolescent might cost him his job. The perception in this group was that the employers, meaning government directly and government subcontractors, deal very unsympathetically with mental illness; families, therefore, are drawn into a system of denial when things are wrong.

Learning more about media impact on cluster suicides seems especially important because the search for influences on con-

tagion of suicide ideation focus naturally on the media. Cluster suicides are being studied as a recent phenomenon. In fact, they have been reported for many decades and a few have been reported over several centuries. From the existing reports, it is clear that not all cluster suicides are the same and it would be wrong to make generalizations about media involvement in reporting these suicides. The cluster of suicides in Clear Lake must have been a very different phenomenon from the cluster of suicides, for example, which surrounded the publication and popularization of *The Sorrows of Young Werther* by Goethe (7). This fictional account of a young man who died for love is said to have incited many young men to kill themselves. A related phenomenon is seen when there is extensive media coverage of the death by suicide, or presumed suicide, of very well known figures, such as those of Marilyn Monroe, Janis Joplin, Freddy Prinz, and John Belushi (8). Nothing of this sort was going on at the time of the Clear Lake suicides or at the time of the Plano suicides. In both instances, it is probably important to note that a well-loved member of the school population died a tragic accidental death. Since the media did not deal with the accidental death, the media may be exonerated from any involvement in a grief-related contagion phenomenon. (The Clear Lake accident received considerable media coverage after the suicide cluster and in connection with a campaign against drunk driving.) It remains an issue of concern that vulnerable, at-risk individuals may have their ideas about suicide made more concrete by the high level of attention paid to the deaths of school mates. Suggestion may play an important role in adolescent suicide, therefore, the media has a weighty responsibility both to report the news that needs to be reported, and if possible to guard against the phenomenon that that news can become suicidogenic. Since public awareness of the death may be a specific goal of a suicide, there is no avoiding the bind placed on the media. The best indirect solution is the conscientious effort on the part of reporters to deal

with the ambivalence felt by suicidal individuals, and to underscore alternatives available in the lives of people who are in emotional crisis.

RECOMMENDATIONS

A number of recommendations follow from the Clear Lake experience:

1. A pre-developed plan for community Response to adolescent suicide clusters is needed.
2. The crisis plan should cover much more than the mental health crisis of adolescent suicide. Every community would be wise to have such a plan for any crisis with mental health implications. Such a plan should be developed through existing community structures utilizing the available community leadership, with a part of the plan defining ways in which others from outside the community can be useful.
3. A great deal of attention can be appropriately devoted to public education. This education should prepare the public to expect difficult emotional tasks in the event of a crisis. Individuals should be prepared in advance to resist blaming and guilt and the whole range of problems associated with stigmatization associated with a crisis. Specifically, with respect to adolescent suicide and family stigmatization associated with mental illness, public education should extend to employers to ameliorate the fears of employees that getting help might jeopardize their jobs.
4. Media education is a major consideration. The importance of suggestion in cluster contagion is unknown; but many are concerned that the role of suggestion may be of major importance. Media personnel who, in the future, may cover issues of adolescent suicide, need to be trained in crisis psychology. They must recognize that when individuals are overwhelmed and may, indeed, be suicidal in the course of a crisis, there is potential not only for healing, but for growth in such experiences. This more positive aspect needs to be

stressed during reporting.

5. Adolescents need to be educated. The preparation of the population at risk is most critical. Adolescents are very responsive to preventive mental health initiatives. They are able to understand the importance of recognizing signs of trouble both in themselves and in their friends and they can be taught ways to seek and find help in the event of suicidal ideation.

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PREVENTION/INTERVENTION PROGRAMS FOR SUICIDAL ADOLESCENTS

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SUMMARY

This study describes current efforts in adolescent suicide prevention and intervention. Using mail questionnaires, a variety of programs that serve suicidal adolescents were surveyed: crisis telephone services, walk-in clinics, hospital-based emergency programs, mental health centers with crisis components, school-based suicide intervention programs, non-hospital-based crisis stabilization units, and others such as support groups for survivors of suicide, counseling agencies, and networks.

This paper describes the methodology and analyzes the findings from 396 programs. Topics investigated include: visibility of programs, reasons for program start and age of program, funding sources, services, availability and linkage to other community resources, client statistics, program problems and needs, community needs, and certification status.

Services for suicidal adolescents are not centralized, but are found in numerous community agencies with little networking among services. Many programs do not keep adequate records to assess service outcome and utilization by suicidal adolescents. Programs responding to the survey identified

community education, school programs, staff and funding, specialized training regarding adolescent issues, and residential facilities as the program and community features most needed to serve suicidal adolescents better. Other major problems were the low visibility of programs, lack of certification and lack of written standards for suicide-related services.

INTRODUCTION

The research subcommittee of the Houston Task Force on Adolescent Suicide was asked by the Secretary's Task Force on Youth Suicide to identify and describe programs throughout the country which provide suicide-related services for youth. Our goal was to describe what is currently available for suicidal adolescents and to delineate programming gaps and problems. It was immediately obvious that services to suicidal adolescents were not necessarily found in programs neatly labeled as "adolescent suicide programs." Rather, services to suicidal adolescents were available through a variety of crisis intervention programs such as crisis telephones, walk-in crisis clinics, and emergency programs administered through

community mental health agencies. Other kinds of programs addressed adolescent suicide through non-crisis services. These programs included school-based educational programs, grief support groups, and task forces that coordinated services for suicidal adolescents.

Adolescent suicide is not an isolated event. Rather, it occurs in a social-psychological environment in which elements that influence the environment, indirectly at least, affect suicidal behavior. Using this line of reasoning, programs that seek to improve the self-esteem or problem-solving skills of adolescents are in some way primary prevention services. For the purpose of this survey, however, we limited the kinds of programs to those that would directly intervene with suicidal adolescents or were school-based educational/intervention programs. In short, we sought programs in which the prevention of, or intervention with, suicidal adolescents was a direct service goal.

METHODOLOGY

The project was conducted in two phases. The first was to identify programs to be included in the survey and the second was the fielding and analysis of the survey.

Program Identification

To identify programs for the survey, we first asked the 42 State mental health associations (MHAs) to provide us with directories of local MHAs. The local MHAs were, in turn, sent a project identification form asking them to identify and furnish addresses of programs that served suicidal adolescents in their communities. Although directories identified many community mental health centers, hot-lines, and crisis services, they did not cover the full range of programs in which we were interested. We also asked local community-resource people to identify programs in their communities that provided services to suicidal adolescents. As such, we were able to identify the programs on which local communities currently rely.

We also sent the project identification form to 264 programs listed in the 1984 Directory of Information and Referral Services (I&R) in the U.S. and Canada. If two or more I&R services in a single community were found, one was randomly selected to receive the project identification form. In cases of community duplication between local MHA centers and I&R services, we sent the project identification form only to the I&R service; in large cities, we contacted both resources. One section of the project identification form asked respondents to identify others who could help us find the kinds of programs for which we were looking. These people, if in other communities, were sent the project identification form. A total of 523 forms were mailed. Five percent ($n=24$) were "returned to sender." Forty-six percent returned usable forms. Almost all listed at least one program; a few said their communities had no such services.

Survey questionnaires were then sent to identified programs. They were also sent to all programs listed in the 1982 Directory of Suicide Prevention and Crisis Intervention Agencies (The American Association of Suicidology). Finally, a systematic random sample was drawn from the 1981 Directory of Federally Funded Community Mental Health Centers (DHHS). In all, 1,181 questionnaires were mailed; 396 (34%) were returned in time to be included in this analysis.

Community Characteristics

A wide variety of communities were represented in the survey. Thirty-seven percent of the programs were located in cities with populations of 100,000 or more, 41 percent of them were in cities with populations of 15,000 to 100,000, and 16 percent were in cities with less than 25,000. Four percent were in the suburbs of large cities and 3 percent said they were located in two or more places throughout the county.

The size of program catchment areas ranged from 1,000 to 8 million. Half the programs had catchment area populations of 235,000

or less while 8 percent (n=31) had catchment areas of 1 million or more.

Half of the programs were serving populations with special characteristics. Twenty-four percent were in areas with unusual racial or ethnic distributions. Table 1, Distribution of Programs with Unusual Racial/Ethnic Distributions, summarizes the distribution. As shown, catchment areas that had heavy concentrations of whites, blacks, Hispanics, and multi-ethnicities were found in our sample.

Twenty-seven of the catchment areas had large populations of young people while another 27 areas had large aged or retiree populations. Those with young populations were usually college towns.

An unusual income distribution was the most often mentioned special characteristic of catchment populations. A full 14 percent (n=55) of the programs were in areas of high poverty and/or unemployment. On the other hand, 13 programs reported high concentrations of wealthy people. Another 13 programs said their populations had high concentrations of both wealthy and poor.

Twenty-seven programs were in counties with military bases and six were in areas where the State or Federal Government was a large employer. Many other programs were also in areas characterized by special occupations. Six areas had either a paper mill or other single factory. Ten were in high technology areas. Twenty-nine were in

predominantly mining, agricultural, gaming, lumber, or fishing areas, and 7 programs had to cope with high levels of tourism. Another 12 programs responded with other special occupational characteristics. Finally, 33 programs served rural or geographically isolated populations.

RESULTS

Age of Program

Suicide services were, for the most part, provided by well-established programs. Forty-one percent of the programs in the survey began between 1970 and 1975, the years of the greatest program development. Only 25 percent (n=98) began in the 1980s. Clearly, the recent resurgence of interest and concern in adolescent suicide has not sparked a rash of new programs. However, all of the programs specific for teen suicide began since 1980.

It is interesting to note that 41 percent of the 39 programs identified as having suicide components by their titles, began in 1970 or before. Even though many programs developed between 1970 and 1975, their titles did not reveal a suicide-specific component. After 1970, seven years passed before another program in our sample, had such a title. Then, in 1984 and 1985 the remaining 16 (41 percent of all programs with "suicide" in their titles) began. In short, during the 1970s when social programs were rapidly increas-

Distribution of Programs with Unusual Racial/Ethnic Distribution

Characteristic	Number of Programs	% of All Programs
Hispanic	20	5.0
Black	13	3.3
Native American/ Alaska native	7	1.8
Appalachian	3	.8
White	24	6.1
Multi-ethnic	18	4.5
Other	8	2.0
Total	93	23.5

Table 1.

ing, suicide-specific programs were not forthcoming. Instead, more general programs that included suicide related services along with other crisis and non-crisis services were beginning. These programs established in the 1970s, are still the major providers of suicide services to adolescents.

Program Visibility

To whom does a suicidal adolescent turn? As anyone who has tried to find a particular agency in the phone directory has experienced, the title of an agency is usually needed in order to contact it. Because we were curious about how helpful titles were for "finding" a program, we analyzed program titles in terms of their key words.

Incredibly few programs ($n=8$) had the words "teen," "youth," or "adolescent suicide" in their titles. Only 33 other programs (8%) had the word "teen" without the word "suicide." This is a critical shortcoming given that adolescents tend not to contact general services. Rather, as the child sexual abuse hotline in Knox County, Tennessee contended, adolescents are much more likely to contact a program that is advertised specifically for them. Thus, much needs to be done to make programs more attractive to teens to encourage them to use these programs more frequently.

Even titles containing the key word "suicide" were not common. Only 31 (8%) programs fell into this category. Instead, program titles reflected an orientation to general problems, as opposed to specific ones, and to broad populations rather than special groups.

A large number of programs had "crisis" or "emergency" in their title. Almost 1/4 ($n=88$) of the programs had "crisis" while 6 percent ($n=24$) had "emergency" in their titles. Another 39 programs (10%) were called Helpline, Hotline, or Hopeline.

A relatively large number of programs (19%, $n=75$) were titled "mental health" or "counseling" programs. At least one program commented that the term "mental health" was

seen as a stigma deterring teenage utilization.

Finally, 32 programs (8%) were called "CONTACT" and 66 programs (17 percent) had titles which did not convey crisis, emergency, suicide, or even helpline services. These programs had titles such as "Center for Human Services" and "Gateway."

The visibility of a program is largely dependent on its advertising and 46 percent of the programs in the sample did not advertise to reach adolescents specifically.

Reasons for Program Development

Almost 40 percent of the programs in the sample began because of a particular interest in suicide services; in 11 percent of the cases, a specific suicide incident was the impetus. A few programs (2%), mentioned a high suicide rate in their communities. For 29 percent of the programs, however, issues other than suicide were the reason for starting the program. These included: perceived need in community for general crisis services (22%), response to drug abuse (6%), and response to street youth (1%). The latter emerged not only to assist runaways, but also to address problems spawned by the deinstitutionalization of status offenders. (See Table 2, Distribution of Reasons for Program Development.)

Funding

Because of differences among organizations, we were not able to obtain budget information solely for suicide components for all programs. Only 75 programs (19%) reported the amount spent solely on suicide services, 174 (44%) provided the amount for all crisis and referral services, and 45 (11%) provided a total agency budget that included more than crisis services.

As shown in Table 3, Description of Program Funding by Budget Type, the average budget for a suicide component of an agency is \$63,667. On the average, the 1986 budgets were \$10,000 higher than for 1985. Between fiscal years 1984-85 and 1985-86, funding

devoted solely to suicide services increased proportionately higher than funding for both total crisis services and total agency services. The ratios of the average 1985-86 budget compared to the average 1984-85 budget was 1.22. The corresponding ratio for total crisis budgets was 1.12 and for total agency budgets it was 1.06.

Funding Sources

The majority of programs did not receive federal funding, nor did they receive funding only from one source. Rather, they obtained funds from the State (58%) and a variety of local sources such as fundraising, donations, and United Way. When programs seek funds outside government sources (n=174) they look to fundraising (34%), United Way (27%), a combination of United Way and

fundraising (16%), churches (4%), insurance and other third party payers (10%), and trainer/speaker fees (9%).

Services

The most prevalent service offered by programs was a crisis telephone, usually staffed 24-hours a day. Eighty-eight percent had this service component. Usually, even if an agency did not provide a crisis telephone service, another agency in the community did. Only 2 programs stated that a crisis telephone service was not provided in their communities. More than 6 percent of the programs also offered a walk-in crisis service while 6 percent said it was not available at all.

Education and public awareness were usually provided by programs; very few com-

Distribution of Reasons for Program Development

	N	%
1. Specific suicide incident	45	11.39
2. Federal mandate for community mental health emergency components	103	26.08
3. Professional interest in suicide services	146	36.96
4. Non-professional concern with suicide	8	2.02
5. Perceived need in community for crisis services in general	88	22.02
6. Expansion of existing agency services	20	5.05
7. Response to drug abuse	22	5.56
8. Response to street youth	5	1.26
9. High suicide	8	2.02

Table 2.

**Description of Program Funding by Budget Type, 1985-1986
(in dollars)**

	Number of Programs	Average Funding	Mean Change 84/85 to 85/86	Mean Change 83/84 to 84/85
Suicide Only	75	63,667	+10,033	+6,875
Total Crisis	174	132,374	+15,907	+10,221
Total Agency	37	1,150,817	+93,686	+99,294

Table 3.

munities had no such service. In spite of the high proportion (85%) of agencies participating in educational activities, half of them stated that their communities needed more education and awareness of suicide or better knowledge of resources.

Grief counseling, either face to face or via telephone, was available in most communities. Sixty-two percent of the programs offered the service, but only 12 programs specifically mentioned an SOS (Survivors of Suicide) group. Presumably, grief counseling is still provided through more traditional formats such as individual and other group counseling.

Followup therapy, including individual, group, or family was offered by less than half the programs in the survey sample. When crisis telephone programs were excluded from the data base, 70 percent of the remaining programs provided followup therapy. The rest reported that the service was available elsewhere in their community. Only 3 percent said it was not provided at all.

Nine percent of the programs claimed that school intervention, in any form, was not available in their communities. Neither they nor another agency provided the service. More than half of the programs furnished some form of school-based intervention, whether personnel training, crisis intervention, or student awareness training, and in the remaining cases, another agency provided at least one of these services. Crisis intervention was the most likely service to be offered, followed by student awareness training and training school personnel. School-based intervention was regarded as an important service for adolescents. Indeed, when asked what more their programs needed for adequate service to suicidal adolescents, a full third responded "school programs."

When another agency provided any of the above services, the program responding to the survey was unlikely to have any formal agreement with it. An agreement with a medical care facility was most common but only 21 percent of the programs had one.

Eleven percent had an agreement with an agency providing followup therapy and 8 percent had one with a walk-in crisis clinic. Clearly, there is little formal networking in communities among agencies providing services to suicidal adolescents.

Other Resources

Respondents were also asked about the availability of, and their relationship to, other resources typically involved in suicidal intervention: private therapists, mental health programs, police, ambulance services, medical emergency treatment, and psychiatric hospitalization. More than 25 percent of the programs reported that private therapists specifically interested in suicide were not available in their communities. Even when such therapists were available, only 6 percent of the programs had written transfer agreements with them and a few programs stated that it was program policy not to refer to private, for-profit, therapists. Linkage problems included: private therapists who would not accept clients who could not pay ($n=10$); insufficient number of private therapists ($n=10$); problematic client motivation and follow-through with such referrals ($n=3$); clients having to wait too long for an appointment ($n=1$); and inadequate communication or linkage between the program and the therapist ($n=5$). Three more programs mentioned other problems such as clients lacking transportation to get to a therapist's office.

Only 8 of the 396 programs claimed their communities had no mental health program. Twenty percent of the programs in the sample were, themselves, the mental health program. Of the remaining 316 programs, 41 percent had written transfer agreements with the mental health program in their community. The most frequent ($n=17$) complaint regarding linkage was the long waiting time before clients could be seen--up to six weeks in one case. Other problems included: clients unable to pay; a lack of after-hours crisis intervention care or outreach; communication problems between the mental

health program and the responding program regarding aftercare following crisis or hospitalization; and difficulty with client motivation and referral compliance. Several programs mentioned treatment barriers specific to adolescents, namely, the need to get parental consent or an agency policy not to serve anyone under 17 years old.

In a few communities ($n=7$) ambulance services were not available. For the vast majority of the remaining programs, getting to a helping resource was the client's responsibility, even when in crisis. Eighty-one percent of the programs had no formal agreement with an ambulance service. Four percent of the sample reported that clients in crisis also faced other problems with ambulance services. Ambulances were reluctant to transport if they were unsure of reimbursement, and in some communities, they responded only to medical needs. Thus, if a client was suicidal but had not yet attempted, ambulances would not transport that person to a crisis intervention facility.

The programs in our sample were unlikely to have formalized agreements with police--only 13 percent did. The programs were even more critical of police than they were of ambulance services. Seven programs mentioned that police lacked suicide-intervention training and/or were reluctant to accept such training. Nine programs complained about the lack of police response to crises situations. One program mentioned that police were disillusioned about crisis intervention because of the State's deinstitutionalization laws. Other programs referred to the failure of police to use appropriate community resources and to operational problems such as difficulty in tracing calls. Another 5 percent of the sample acknowledged problems but did not specify what they were.

Less than one quarter of the programs had written agreements with hospital emergency medical care resources. Among the 353 programs with valid data, 9 percent had linkage problems with these resources. The most frequent problems mentioned involved

the actual referral process: the lack of clear guidelines for referral; the lack of a centralized reporting mechanism; being able to refer only with police intervention; and the unwillingness of medical care resources to handle clients with psychiatric problems, even when there were medical problems. For several programs, the lack of appropriate psychiatric staff within the medical care facility was a referral barrier.

Hospital psychiatric admission was available to 92 percent of the programs in the sample. Moreover, it was the resource with which programs were most likely to have written transfer agreements (36% of the 342 programs who furnished complete data). It is with this resource, however, that the programs in the sample also experienced the most problems. The lack of beds was frequently mentioned ($n=18$). Other programs referred to problems with the admission process, such as delayed admission, disagreement as to the appropriateness of certain referrals, refused admission to those who could not pay, and refused admission to clients with medical problems. Distance to nearest facility and other transportation issues posed complications for twelve programs. For some communities, the nearest facility, while available, was 50 to 100 miles away. Getting a client to these facilities was a problem, particularly for indigent clients lacking personal transportation.

Program Outcome Data

One section of the questionnaire asked for program outcome data, specifically: number of clients directly served in the past fiscal year; number of suicide-related clients and how many of these were adolescent; number of suicide-related clients who return to crisis within a year; and the number of documented client deaths. In responding to the question on number of suicidal clients, programs included not just attempters but also clients with suicidal thoughts and ideation.

Five percent of the programs could not give the number of clients served last year. Some programs, particularly the crisis telephone

programs, did not have records on the number of individual clients; their data reflected the total number of contacts. Thus, the data for crisis telephone programs reflected the number of calls although some clients called repeatedly. Even among similar programs, there is wide variation in the number of clients or client contacts. One telephone crisis program reported more than 103,000 calls; another had less than 2,000. One school-based program intervened in 8 cases; another intervened in 50 cases. The extreme variation among programs and between program types made any further generalization regarding total number of clients inappropriate.

The most striking observation about other outcome data was that programs frequently did not gather this kind of information. Twenty-seven percent of the programs stated they were unable to give the number of suicide-related cases or simply left the question blank. Information on the number of adolescent suicide-related cases was even less frequently available. Forty-five percent

of the programs did not respond. Forty-two percent did not know how many suicidal clients returned in crisis within the year and another 22 percent left the question blank. Twenty-one percent of the programs did not know the number of documented client deaths from suicide last year while 18 percent did not answer at all.

Our analysis of outcome data included only those programs for which data were available. For a few, suicide-related cases occurred infrequently. Seven percent of the programs had ten or less such cases last year. Most programs (63%), however, handled 100 or more suicide-related clients. Among the 291 programs for which data was available, 12 percent had 1,500 or more suicidal contacts/clients. (See Table 4 for the distribution). Overall, 7 percent of all clients served were suicidal. The number of suicidal adolescents that programs served also varied widely not only between types of programs but also among similar programs. Some programs served no suicidal adolescents last year while others served more than 600.

Distribution of Number of Suicide-Related Cases		
Number of Suicide-Related Cases	Number of Programs	% of All Programs with Valid Data (n = 291)
1-99	120	41
100-199	27	9
200-299	36	12
300-399	14	5
400-499	15	5
500-599	14	5
600-699	7	2
700-799	4	1
800-899	1	1
900-999	4	1
1000-1999	23	8
2000-2999	11	4
3000 +	15	5
Don't know	43	N/A
Missing	62	N/A
Total	396	100%

Table 4.

Across all programs in the sample, 13 percent of the suicide-related clients were adolescents.

Table 5 presents the distribution of the number of documented suicides among clients. Very few of each program's clientele actually committed suicide. More than half (59%) of the programs that furnished data reported no client deaths from suicide last year. Thirteen percent had only 1 client suicide and 18 percent had two or three. The remaining 14 percent had four or more. Overall, there were 297 suicides per 100,000 suicide-related clients served.

Problems

Using a combination of closed and open-ended questions, we asked respondents to identify specific program problems, especially those that affected service delivery to suicidal adolescents. We also asked respondents what more their communities needed for adequate services to this special popula-

tion. Table 6 presents the distribution of the responses to close-ended questions.

Staffing and Professional Issues

Staff shortage was the major complaint of 54 percent of the programs. This problem was reiterated when respondents were asked what more their programs needed for adequate service. Twenty seven percent again replied "staff and money."

Not only the number but the quality of staff was of some concern. Of all persons employed by the programs in the sample, more than half (57%) were volunteers. When crisis telephone programs are excluded from the analysis, 33 percent of all employees are volunteers. Problems with troubled volunteers was not a major issue but 10 percent of respondents stated that their staff needed more training, particularly regarding adolescent issues.

More than a third of the respondents claimed

Distribution of Client Deaths From Suicide		
Number of Documented Client Deaths	Number of Programs	% of Programs with Valid Data (n = 239)
0	142	59.4
1	32	13.4
2	28	11.7
3	14	5.8
4	10	4.2
5	4	1.7
6	1	.4
7	1	.4
8	1	.4
10	1	.4
12	1	.4
13	1	.4
20+	3	1.2
Don't know	81	N/A
Missing	76	N/A
Total	396	100%

Table 5.

that various staff and professional issues hampered their ability to serve suicidal adolescents. In addition to more staff and training, they wanted more time to work with adolescents and better networking with other professionals. Similar concerns were stated regarding community needs: better networking and case followup, better trained professionals, more professional resources in general, and more professional commitment to the problem.

Community Education

Programs wanted to do more community education activities but were hampered by the lack of funds and staff. In fact, 20 percent of them said this was a major need in their communities. Their concern particularly centered around the need for greater recognition and awareness that teen suicide exists and is a viable problem.

School Programs

Respondents considered schools to be critical intervention arenas. Many programs were already doing some form of school intervention; 11 percent thought this was what their programs should be doing but were not, and 16 percent replied that this was a major community need. In many communities, school systems were reluctant to have suicide-specific educational programs. One

objection was the belief that talking about suicide would give teenagers "wrong ideas." Some programs also suggested that school personnel be trained regarding indices and intervention techniques. Not only the lack of qualified school personnel, but also the availability of school staff to teenagers, were problems. Often, school counselors were tied up with helping students schedule courses and had little time to talk with troubled students.

Specific Adolescent Programs

Sixteen percent of respondents listed specific adolescent services which they believed would enhance their program's effectiveness in serving suicidal adolescents. Those most often mentioned, in order of frequency, included: residential/in-patient treatment support groups for both attempters and survivors of victims, safe-houses and other non-hospital residential services, peer counseling, and family involvement in treatment.

Many of these services were listed again under additional services communities needed to serve suicidal adolescents adequately. Almost 25 percent of respondents listed services specially attuned to adolescent needs such as: in-patient beds and residential facilities, teen community centers and drop-in clinics, peer counseling, prevention programs, support groups, and long-term,

Distribution of Problems Encountered by Programs

	Responses to Questions					
	Yes		No		Missing	
	# of Programs	%	N	%	N	%
Inadequate physical facility	123	31.1	225	56.8	48	12.1
Staff shortage	215	54.3	134	33.8	47	11.9
Inadequate staff training	60	15.1	288	72.7	48	12.1
Funding instability	165	41.7	183	46.2	48	12.1
Funding deficiency	171	43.2	177	44.7	48	12.1
Troubled volunteers	27	6.8	321	81.1	48	12.1
Inadequate referral resources	73	18.4	274	69.2	49	12.4

Table 6.

family-oriented treatment. Another concern was the need for more leverage to work with adolescents when parents refused counseling or help for their adolescents or when adolescents needed to be separated from the parent.

Certification Standards and Qualifications

The certification of programs and qualifications of professionals is of some concern. Only 9 percent of the programs with valid data (n=367) were certified by the American Association of Suicidology and one quarter of the programs (26%) did not have written standards for suicide-related procedures.

Twenty nine percent of all professional staff working directly with clients (i.e., excluding volunteers, administrative, coordinative, and secretarial staff) had undergraduate degrees or less. The lack of advanced education coupled with programs' own requests for staff better trained in adolescent issues suggests that attention be given to the qualifications of persons who are working with suicidal adolescents.

A similar concern was repeated regarding "helping" individuals outside a program's auspices. Several respondents expressed dismay that self-proclaimed "experts" in suicide may do more harm than good. They gave specific examples of trainers and other persons who were obviously uninformed and unprepared to deal with suicide. Illinois is one State that is attempting to establish certification standards for individuals as well as for programs.

Suicide-Specific Programs: A Subanalysis

From the first 271 questionnaires returned, we analyzed separately 27 intervention/prevention programs exclusively or predominantly devoted to suicide, as determined by their titles. None were located in small towns of populations under 15,000, but neither were they solely a product of densely populated areas. They were as likely to be

found in cities of 15,000 to 100,000 as in larger ones. As reasons for program development, most listed professional interest in suicide (70%) followed by a specific suicide incident (37%). Only 11 percent listed "response to high suicide rate."

These programs were not overwhelmingly multi-service agencies. No more than 60 percent had a crisis telephone service and only 15 percent had a walk-in crisis service. The most common activity was education and public awareness (93%), followed by student awareness (67%), and direct crisis intervention in the school (63%). These agencies usually did not offer followup therapy--only 22 percent did--and when it was offered, it was most likely to be individual therapy, not family or group.

Even these specialized groups were not formally linked to (i.e., have written agreements with) other traditional resources in the community such as police, ambulance services, and private therapists. The resource most often linked with the suicide-related program was a mental health program. One quarter (26%) of the programs had written agreements with a mental health agency and reported no problems in working with this resource. On the other hand, while only 11 percent had written agreements with hospital psychiatric resources, almost a fourth reported problems, particularly, too few beds, and clients being refused admission for financial and other reasons.

Funding for these programs came primarily from the State, United Way, and donations/fundraising. Budgets were not large. Thirty percent of the programs operated on \$7,000 or less. Another third had budgets between \$29,000 and \$100,000. Only one program had a budget greater than \$250,000.

The programs varied greatly in the number of clients served. One reported 30, while several reported more than 25,000. It was not surprising that among these programs, suicidal clients comprised a larger proportion of all clients served than among other programs (13% vs. 7%).

On the other hand, suicide-specific programs did not attract adolescents as well as the other programs. Only 7 percent of all suicidal clients were adolescents compared to 12 percent for the entire sample. The client death-rate, however, is smaller--245 vs. 304 per 100,000 suicidal clients.

Twenty-two percent of these programs listed more community education and school programs as needed components to their services. More training, more funding, or more time to work with adolescents were program needs for more than half the sample. Very few ($n=3$) wished to add a specific adolescent service to their program, but 25 percent did want to have such services developed within their communities.

These programs were more likely than other programs to advertise specifically to adolescents (70% vs. 43%). Still, 22 percent of them did not. Also, more than 80 percent of them were not certified by the American Association of Suicidology and 22 percent did not have written standards for suicide-related procedures.

DISCUSSION

Suicide prevention/intervention services for adolescents are generally not provided by agencies established solely for that purpose. Specializing in suicidal adolescents is the exception rather than the rule. Services are usually available through general crisis programs, with suicide being just one type of crisis handled. Yet, there seems to be a growing recognition that working with adolescent suicide requires a level of staff expertise that is currently lacking. Many of the programs in the sample want more staff training and indicated a need for staff trained in adolescent development and issues. They see this as a need not only for their own programs but also for other programs in their communities. For example, a respondent for a crisis telephone program indicated the need for the mental health clinic in the community to have a specialist in adolescence.

Most communities included in our sample

have not addressed adolescent suicide as a separate issue. Agencies, or even programs within agencies, do not specialize in suicide. For many communities the lack of specialization is partly fostered by the belief that adolescent suicide is not a problem or does not exist and survey respondents often expressed dismay over the extent of community unawareness. Program personnel consider community education as a priority issue in improving service to suicidal adolescents.

Addressing adolescent suicide as a separate issue is difficult because it is often accompanied by a wide variety of other problems such as drug and alcohol abuse, depression, family conflict, running away, and even satanic worship. Clearly, for a community to develop a comprehensive service system for suicidal adolescents, it must be able to handle these other problems as well. In many communities it is not the lack of services for accompanying problems that lessens effective interaction but, rather, the lack of networking among programs in a community. The absence of networking was felt on two levels: case coordination and service delivery. We found instances of ambulances refusing to transport patients if there were no physical injury, psychiatric wards refusing to admit if there were physical injuries, and medical programs reluctant to treat if there were psychiatric/ psychological problems. Perhaps community coordination by someone trained in adolescent issues would encourage these programs to be receptive to adolescents in crisis.

To serve suicidal adolescents better, survey respondents recommend a combination of strengthening services already in operation through funding, staffing, training, and networking as well as the development of teen-specialized services such as teen community centers, peer counseling, and safehouses. Still, the existence of a service does not mean that teenagers will automatically use it. Several mental health agencies specifically mentioned that teenagers were unlikely to use their services. Current programs need to consider factors affecting service utilization

by teenagers and to make special efforts to advertise their programs directly to this population.

The issue of allowing suicide prevention/education programs in schools remains unsettled. Respondents felt that these programs are important for reaching adolescents adequately, yet many school systems oppose such efforts. Some programs have developed school intervention curricula, are training students and personnel, and are providing crisis intervention. Other programs and schools might benefit by observing the strategies in schools in which programs are already developed.

Parents, too, are sometimes obstacles to helping suicidal adolescents. Several programs have problems in obtaining parental permission to counsel adolescents. To strengthen the accessibility of services by adolescents, changes in consent laws must be addressed. The problem is compounded when parents themselves, are primary contributing factors to a troubled adolescent. Respondents to the survey urged communities not wishing to provide a comprehensive system of service, to provide for separation of parent and adolescent and to find alternative ways to involve parents in treatment.

Another dilemma that must be addressed in serving suicidal adolescents is the availability of residential treatment beds, when needed. In many communities, the need for such beds is relatively infrequent so that none are reserved for such emergencies. Thus, a suicidal adolescent may need inpatient treatment when a bed is not available. Survey respondents recommend that such beds be established and held in reserve, to be used when needed, regardless of frequency of use. The same concern was stated in a somewhat different form when one program director wrote that, on the basis of prevalence, other mental health problems such as schizophrenia took staffing and funding priority over adolescent suicide. In short, decision makers will have to examine priorities and prevalence issues when debat-

ing program development for adolescent suicide services at the community level.

The lack of certain services for adolescents, particularly in-patient/residential treatment space, must be addressed if a more effective system for serving suicidal adolescents is to be established. These developments will probably take money; certainly, they will require agency policy changes. Professionals in communities do not have to wait, however, for such major problems to be resolved. Many services are already available and their coordination would be a beginning of an improved delivery system for suicidal adolescents.

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CHARACTERISTICS OF SUICIDE PREVENTION/INTERVENTION PROGRAMS: ANALYSIS OF A SURVEY

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SUMMARY

This paper reports the results of a survey of 395 suicide prevention/ intervention programs in the United States. Included in the sample are 152 crisis telephone services, 9 walk-in clinics, 24 hospital-based emergency programs, 142 mental health centers with a crisis component, 17 school-based suicide intervention programs, 8 non-hospital-based crisis stabilization units, 22 combinations of two of the above, and 21 other programs such as survivors of suicide, counseling agencies, and networks. Crisis telephone services and mental health clinics make up 74 percent of the organizations that responded to the survey.

Each type of program is described in terms of location, special characteristics of the catchment population, services provided, number of clients served, number of suicide-related cases served, number of suicide-related adolescent cases served, number of documented suicides, available resources, budgets, funding sources, and problems encountered by the programs.

Most of the programs were developed in response to professional interest in suicide services. Although program labels were often misleading, a surprisingly large number of programs offered comprehensive services directed toward suicide prevention/intervention. The services most often offered were education and public awareness efforts, and crisis telephones. Medical care for suicide attempters was least likely to be provided.

Budgets ranged from under \$20,000 to well over \$1,000,000 and almost all programs reported multiple funding sources. Staff shortages, funding deficiencies and the instability of funding were problems encountered most often by the 395 programs in our survey. Other than more funds and more staff, most programs had the resources they need to serve suicidal adolescents in the community.

The average number of suicide-related adolescents served last year by programs in our survey was 76, ranging from 26 served by school-based intervention programs to 375

suicide-related adolescents served by mental health centers. The highest rate of suicide per 1,000 suicide-related clients was 38.2 in school-based intervention programs and the lowest was in non-hospital-based programs with .29.

INTRODUCTION

While the community response to the increasing rates of adolescent suicide is thought to be massive, very little is known about the actual programs that have developed, where they are located, why they began, what services they offer, what resources are available to them, what their actual budgets and funding sources are, how many clients they serve, and what their problems are.

To address these issues, we first asked the local programs of the Mental Health Association and the programs listed in the 1984 Directory of Information and Referral Programs in the United States and Canada to identify suicide prevention/intervention programs known to them. All programs listed in the Directory of the American Association of Suicidology and a random selection from the 1981 Directory of Community Mental Health Centers in the United States were added for a total of 1,181 programs. Methodological details of the survey are discussed elsewhere (Simmons, Comstock, and

Franklin). This paper describes the 395 programs which returned usable survey forms to us.

PROGRAM CHARACTERISTICS

Table 1 summarizes the types of suicide prevention/intervention programs responding to the survey. Of the 395 programs, 38 percent (152) describe themselves as crisis telephone services, 2 percent (9) as walk-in crisis clinics; 6 percent (24) as hospital-based emergency programs; 36 percent (142) as mental health centers with a crisis component which includes suicide intervention; 4 percent (17) as school-based suicide intervention programs; and 2 percent (8) as non-hospital-based crisis stabilization units, city-sponsored community crisis services, general intervention services or comprehensive general crisis agencies. Six percent (22) of the programs are combinations of two of the programs listed above and 5 percent (21) of the programs describe themselves as survivors of suicide, community mental health clinics with no emergency service, community-based education and support groups, counseling agencies and networks. For discussion purposes, these programs are labeled Other.

Population

Thirty-three percent of the 395 programs are

Types of Suicide Prevention/intervention Programs Responding to Survey		
Type of Program	Number	Percent of All Programs
1. Crisis telephone service (CTS)	152	38
2. Walk-in crisis clinic (WIC)	9	2
3. Hospital-based emergency service (HBES)	24	6
4. Mental health center with crisis component (MHC)	142	36
5. School-based intervention program (SBIP)	17	4
6. Non-hospital-based program (NHBP)	8	2
7. Combinations (Comb)	22	6
8. Other (Other)	21	5
Total	395	

Table 1.

located in central cities with populations of more than 100,000; 41 percent in cities with populations of 15,000 to 100,000; 16 percent are located in small towns with populations less than 15,000; and 7 percent are located in other areas. Table 2 summarizes the populations served by the programs surveyed.

Special Characteristics

Fifty-three percent of the 395 programs consider their catchment population "special." (Table 3) Twenty-four percent list unusual racial/ethnic distributions, 18 percent report unusual age distributions and 21 percent consider the distribution of income unusual.

Eight percent list sex distribution as unusual, 18 percent report that their catchment population has an unusual occupational distribution such as a single industry town, and 20 percent report other characteristics, such as geographic isolation, which make their catchment population unusual.

Walk-in clinics were the most likely to consider their population unusual (67%), closely followed by mental health centers (66%), hospital-based emergency services (63%), non-hospital-based programs (56%), combinations (50%), crisis telephone services (44%), school-based intervention programs (35%), and other programs (33%).

Populations Served by Various Types of Programs				
Type of Program	Over 100,000(%)	15,000-100,000(%)	15,000(%)	Other(%)
All Programs Combined	37	41	16	7
CTS	45	42	9	4
WIC	11	67	22	--
HBES	75	21	4	--
MHC	19	45	30	6
SBIP	36	24	24	16
NHBP	56	22	11	11
Comb	36	64	--	--
Other	62	24	5	10

Table 2.

Special Characteristics Reported by Programs Responding to Survey							
Percent Reporting Special Characteristics of Catchment Population							
Type of Program	%	Racial/ethnic	Age	Income	Sex	Occupation	Other
All Programs Combined	53	24	18	21	8	18	20
CTS	44	20	18	17	11	20	16
WIC	67	22	11	33	--	22	45
HBES	63	33	25	21	4	--	8
MHC	66	27	17	26	7	22	22
SBIP	35	17	11	29	--	11	17
NHBP	56	22	--	45	11	11	22
Comb	50	32	23	5	9	9	18
Other	33	9	24	19	--	5	9

Table 3.

Initiation of Program

Table 4 summarizes the reasons for establishing the service programs surveyed. Eleven percent of the 395 programs began in response to a specific suicide incident. But the most often listed reasons for developing programs were professional interest in suicide services with no specific incident (37%), federal mandate for community mental health center emergency component (26%), and perceived need in the community for general services (24%).

Services

Programs were asked to list their services in terms of those directly provided, those provided by another agency under formal agreement with the reporting agency, those provided by another agency in the community with no formal ties to the reporting agency, and those services not provided in the community.

A surprisingly large number of agencies provide a wide range of suicide prevention/intervention services. Community mental health centers are the most comprehensive: 90 percent provide crisis telephone services, 96 percent provide walk-in clinics, 90 percent provide grief counseling, and 96 percent provide family emergency therapy. They provide followup therapy for

individuals (93%), groups (83%), and families (92%). Eighty-eight percent provide education and public awareness services and 70 percent provide school intervention services, including personnel training (54%), crisis intervention (75%), and student awareness training (46%).

Crisis telephone services provide the client with a wider range of services than expected. Twenty-three percent of the 152 crisis telephone services provide walk-in crisis services, 2 percent provide medical care for suicide attempters, 40 percent provide grief counseling, 12 percent provide family emergency therapy and followup therapy, 83 percent provide education/public awareness services and 44 percent provide school intervention services, including training personnel for school intervention (45%), providing crisis intervention to schools (41%), and providing awareness training for students (53%).

All walk-in crisis clinics provide direct crisis telephone services and family emergency therapy. Most provide education/public awareness services (89%), intervention for schools (67%), and grief counseling (67%). Forty-four percent of the walk-in crisis clinics also provide direct training for school intervention and (33%) student awareness training.

Reasons for Initiating Programs				
Figures given in percent				
Type of Program	Suicide Incident	Federal Mandate	Professional Interest	Perceived Need in Community
All Programs Combined	11	26	37	24
CTS	13	6	39	39
WIC	17	44	22	11
HBES	--	38	33	12
MHC	5	53	32	8
SBIP	44	6	69	6
NHBP	--	11	11	33
Comb	14	5	50	14
Other	33	10	38	19

(Percentages do not add to 100 due to rounding and/or to missing data.)

Table 4.

Hospital-based emergency services tend to be comprehensive in that they provide crisis telephone services (79%); walk-in crisis services (79%); medical care for suicide attempters (42%); grief counseling (63%); family emergency therapy (96%); followup therapy (71%) to individuals (67%), groups (54%), and families (67%); education/public awareness services (75%); and school intervention services (63%), including personnel training (50%), crisis intervention (50%), and student awareness training (46%).

Only 2 (12%) of the school-based intervention programs provide crisis telephone services and none provide medical care for the suicide attempters. But they do provide walk-in crisis services (47%); grief counseling (53%); family emergency therapy (29%); followup therapy (29%) to individuals (47%), groups (29%), and families (24%); education/public awareness services (94%); and school intervention services (88%) including training (88%), crisis intervention (76%), and student awareness training (100%).

The non-hospital-based programs provide crisis telephone services (100%); walk-in crisis services (89%); grief counseling (44%); family emergency services (78%); followup therapy (33%) for individuals (33%), group (22%), and families (44%); education/public awareness services (78%) and school intervention services (67%) which includes personnel training (56%), crisis intervention (67%), and student awareness training (44%).

All combination programs provide crisis telephone services (100%); and some provide walk-in crisis services (82%); grief counseling (59%); family emergency therapy (41%); followup therapy (36%) to individuals (32%), groups (23%), and families (23%); education/public awareness services (91%); and school intervention (73%) which includes personnel training (68%), crisis intervention (68%), and student awareness training (86%).

Programs in the "other" category provide crisis telephone services (43%); walk-in

clinic services (52%); medical care for suicide attempts (5%); grief counseling (48%); family emergency therapy (41%); followup therapy (52%) to individuals (52%), groups (43%), and families (52%); education/public awareness services (81%); and school intervention (62%) which includes personnel training (67%), crisis intervention (52%), and student awareness training (57%).

As indicated by these statistics, programs do not differ greatly in terms of services that they provide directly to clients.

Of the services provided by the 395 programs, medical care for suicide attempters is the least likely, provided by only 7 percent of the programs (2% of the crisis telephone services, 42% of the hospital-based emergency clinics, 10% of the community mental health centers, and 5% of the programs in the "other" category). However, an additional 21 percent provide medical care for suicide attempters by formal agreement with another agency and more than half (54%) report that these services are provided by another agency which has no formal ties to the reporting program.

Community Resources

Programs report very few deficiencies with community resources. Private therapists who are interested in suicide are available to 69 percent of the programs; only 7 percent have written agreements with private therapists and only 9 percent report problems making referrals. Some of the problems associated with referrals include the client's inability to pay and therapists not being available at off hours.

Mental health services are available to 96 percent of the programs and 33 percent have written agreements which allow clients to be transferred between the reporting program and the mental health service. Eleven percent report problems linking clients with mental health services; the most often cited problems are long waiting lists and lack of staff at the mental health facility.

Almost all (96%) of the programs have an

ambulance service available to them. Only 9 percent have written agreements with ambulance services and only 4 percent report problems. Police are also available to most (97%) programs; 13 percent have written agreements with police and 10 percent report problems working with police, mostly due to lack of police training in the area of suicide.

Hospital emergency medical care is available to 97 percent of the 395 programs, 23 percent have written agreements and only 8 percent report problems linking clients to this resource. Ninety-two percent of the programs have psychiatric hospital services as an available resource and 36 percent have written agreements with a psychiatric facility. However, 19 percent of the programs report problems linking clients with a psychiatric facility such as insufficient number of beds, delays in admission, and reimbursement issues.

Availability of community resources is not related to program type and other than a general shortage of private therapists who are interested in suicide and who are available to the program, few programs report problems with the availability of resources.

Costs

Budget Breakdown

Ninety (23%) of the programs did not report budgets. Of the 305 that reported budgets, 21 percent have annual budgets of \$20,000 or less, while 8 percent report budgets of more than 1 million dollars for fiscal years 1985-1986.

Crisis telephone services reported annual budgets of \$20,000 or less (21%); \$21,000 to \$50,000 (29%); \$51,000 to \$75,000 (15%); \$76,000 to \$100,000 (10%); and \$101,000 to \$500,000 (24%). One program reported a budget of \$501,000 to \$1,000,000 and 11 percent of the crisis telephone service programs did not report budget information for fiscal year 1985-86.

Walk-in crisis clinics report annual budgets

of \$21,000 to \$50,000 (38%); \$51,000 to \$75,000 (13%); \$76,000 to \$100,000 (25%); \$101,000 to \$500,000 (13%); and \$501,000 to \$1,000,000 (13%). Eleven percent did not report budgets. One hospital-based emergency services program has a budget of \$79,000, two have budgets of \$200,000 and \$335,000, one reports \$523,000 and another reports \$600,000. Seven percent have budgets of \$501,000 to \$1,000,000 and 21 percent report budgets in excess of 1 million dollars. Four (21%) programs did not report budget data.

Mental health centers report budgets in each of the seven categories: \$20,000 or less (17%); \$21,000 to \$50,000 (9%); \$51,000 to \$75,000 (6%); \$76,000 to \$100,000 (4%); \$101,000 to \$500,000 (35%); \$501,000 to \$1,000,000 (7%); and more than \$1,000,000 (18%). Thirty percent did not report budget data.

The school-based intervention programs are small--all but one (with a \$220,000 budget) report annual budgets of \$20,000 or less (41% did not report). Non-hospital-based emergency programs range from \$76,000 to \$100,000 (20%); \$101,000 to \$500,000 (60%); and \$501,000 to \$1,000,000 (20%) (56% did not report). Combination programs report budgets of \$20,000 or less (11%); \$21,000 to \$50,000 (17%); \$51,000 to \$75,000 (6%); \$76,000 to \$100,000 (17%); \$101,000 to \$500,000 (44%); and over \$1,000,000 (6%). Eight percent did not report budget data. Annual budgets of "other" programs include \$20,000 or less (35%); \$21,000 to \$50,000 (18%); \$51,000 to \$75,000 (18%); \$101,000 to \$500,000 (6%); \$501,000 to \$1,000,000 (12%); and over \$1,000,000 (12%). Nineteen percent did not report.

Funding Sources

Multiple funding sources characterize the 395 programs. The most often mentioned funding source was from local sources (66%), followed by State (58%), client fees (35%), federal (25%), and foundations (17%).

Crisis telephone services receive funding

from the following sources: local (66%), State (34%), foundations (28%), federal (17%), and client fees (5%). Walk-in clinics report funding from local sources (89%), State (89%), client fees (66%), federal (56%), and foundations (11%). Non-hospital-based crisis units receive funding from local sources (89%), State (67%), federal (44%), foundations (22%), and client fees (11%). Combination programs report funding from local sources (82%), State (68%), federal (32%), foundations (31%), and client fees (14%). "Other" programs include funding from local (38%), State (38%), client fees (19%), federal (14%), and foundation (14%) sources.

Whereas local funding was the most often mentioned source of funds for the programs listed above, State funding was cited most often by mental health centers. Funding sources of mental health centers include State (82%), local (71%), client fees (69%), federal (34%), and foundations (6%).

School-based intervention programs report funding from State (63%), local (63%), foundation (6%), federal (19%), and client fees (13%).

Hospital-based emergency programs receive funds from client fees (71%) and from State (58%), local (38%), federal (21%), and foundations (4%).

SERVICE DATA

In this section each program type is described in terms of:

- Number of clients served in the last fiscal year.
- Number of clients who were suicide-related.
- Number of the suicide-related cases who were adolescents.
- Number of suicide-related clients who returned in crisis within a year.
- Number of documented client deaths from suicide.

- Suicide rate per 1,000 suicide-related cases.

Although 395 programs returned usable surveys, only 287 reported both the number of clients served and the number of suicide-related clients served in the past fiscal year. Only 215 programs reported both the number of suicide-related clients and the number of adolescent suicide-related clients; and 147 programs reported both the number of suicide-related clients and the number of suicide-related clients that returned within a year. More than half--211 programs--reported both the number of suicide-related cases served last fiscal year and the number of documented client deaths from suicide last year. The percentages and rates in the following discussion are conservative and, in all cases would be the same or larger if we included only programs that reported all data elements. Table 5 summarizes the data presented in the following section.

Crisis telephone services report serving 1,682,703 contacts during the past fiscal year. Six percent of the clients were suicide-related and 8 percent of the suicide-related contacts were adolescents. Only 5 percent of the suicide-related clients returned in crisis within a year and 137 deaths from suicide were documented during the last year. The rate of documented suicides was 1.3 per 1,000 suicide-related contact.

Walk-in clinics reported serving 18,059 clients during the last fiscal year. Eleven percent were suicide-related and 8 percent of the suicide-related cases were adolescents. About 20 percent of the suicide-related clients returned in crisis within a year and 9 of the suicide-related clients died from suicide last year. The rate of documented suicide was 4.7 per 1,000 suicide-related clients served.

Hospital-based emergency programs reported serving 81,372 clients in the past fiscal year. About 19 percent were suicide-related and 13 percent of the suicide-related cases were adolescents. Two percent of the suicide-related cases returned in crisis within

a year. Thirty-three deaths from suicide were documented during the year for a rate of 2.1 suicides per 1,000 suicide-related clients served.

Mental health centers reported serving 306,596 clients during the past fiscal year. Eight percent of the clients were suicide-related cases and 2 percent of the suicide-related cases were adolescents. About 12 percent of the suicide-related cases returned in crisis within a year and 143 suicides were recorded during the past year. The suicide rate was 5.9 per 1,000 suicide-related clients served.

School-based intervention programs reported serving 11,152 clients during the past fiscal year. One percent of those served were suicide-related and all of the suicide-related cases were adolescents, as expected. Eighteen percent of the suicide-related cases returned in crisis within a year and six suicides were recorded last year. The suicide rate was 38.2 per 1,000 suicide-related clients served during the year.

Non-hospital-based crisis programs served 138,300 clients during the past fiscal year. Three percent of the caseload were suicide-related clients and about 3 percent of the suicide-related clients were adolescents. Six

percent of the suicide-related clients returned in crisis within a year. Only 1 death from suicide was documented last year and the rate of suicide was .22 per 1,000 suicide-related clients served.

Combination programs served 135,169 clients last fiscal year. About 10 percent were suicide-related and 8 percent of the suicide-related clients were adolescents. Ten percent of the suicide-related cases returned in crisis within a year. Twenty-six suicides were recorded last year for a rate of 1.9 suicides per 1,000 suicide-related clients served.

Other programs reported 49,804 clients served during the past fiscal year. About 19 percent were suicide-related clients; 9 percent of the suicide-related clients returned in crisis within a year. Fourteen suicides were documented last year resulting in a rate of 1.5 suicides per 1,000 suicide-related clients served.

The 287 programs that reported data in this section of the survey served 2,423,155 clients during the past year. Seven percent were suicide-related cases and 9 percent of the suicide-related cases were adolescents. Six percent of the suicide-related clients returned in crisis within a year. The number

Service Data Provided by Survey Respondents						
Numbers reported by programs for past fiscal year						
	Clients Served	Suicide- Related Clients (S.R.C.)	Suicide Related Adol.	Suicide- Related Return	Suicide Deaths	Suicide Rate/ 1000 S.R.C.
CTS	1,682,703	106,116	8,891	4,732	137	1.29
WIC	18,059	1,903	159	383	9	4.73
HBES	81,372	15,392	2,017	296	33	2.14
MHC	306,596	24,340	2,999	2,887	143	5.88
SBIP	11,152	157	157	28	6	38.22
NHBP	138,300	4,608	141	271	1	.22
Comb	135,169	13,883	1,117	1,342	26	1.87
Other	49,804	9,275	852	120	14	1.51
Total	2,423,155	175,674	16,333	10,059	369	2.10

Table 5.

of documented suicides, 369, yields a rate of 2.1 suicides per 1,000 suicide-related cases served during the year.

Special Problem Areas

When asked to select all problems experienced by their program from a list of problems in the survey instrument, staff shortage was selected most frequently (54%), followed by funding deficiencies (43%), funding instability (42%), inadequate physical facilities (31%), inadequate referral sources (18%), inadequate staff training (15%), and troubled volunteers (7%).

Crisis telephone services selected staff shortages as the problem encountered most often, followed by funding instability, funding deficiency, inadequate physical facilities, inadequate referral resources, troubled volunteers, and inadequate staff training.

Walk-in crisis clinics selected problems of inadequate physical facility, funding instability and funding deficiency as most often encountered; followed by staff shortages and inadequate staff training, troubled volunteers and inadequate referral resources.

Hospital-based emergency services listed inadequate physical facility as the most frequently encountered problem, followed by inadequate referral resources, staff shortages, funding deficiency, inadequate staff training, funding instability and troubled volunteers.

Mental health centers face problems of staff shortages most often. Other problems in order of most frequently encountered include funding deficiency, funding instability, inadequate physical facility, inadequate staff training, inadequate referral resources, and troubled volunteers.

School-based intervention programs encountered funding instability most often, followed by staff shortages, funding deficiency, inadequate physical facility, inadequate staff training and inadequate referral resources.

Non-hospital-based services encountered funding instability most often, followed by

funding deficiency, inadequate referral resources, staff shortages, inadequate staff training, and inadequate physical facility.

Combination programs listed the following problems in order of frequency: staff shortages, funding deficiency, funding instability, inadequate physical facility, inadequate referral resources, inadequate staff training, and troubled volunteers.

Programs in the "Other" category listed funding deficiency as the problem encountered most often, followed by staff shortages, funding instability, inadequate physical facility, short training, inadequate referral resources, and troubled volunteers.

Several programs (35) mentioned that they were unable to reach populations at risk due to inadequate funding, lack of outreach resources, successful suicides not as likely to use services as attempters, stigma of mental illness, and problems of getting parents involved.

Program Needs

When asked what more they needed to provide adequate services to suicidal adolescents, relatively few needs were identified by the 395 programs other than more funds and more staff. In the area of community/school-related needs, programs mentioned the need to provide programs in schools, more outreach programs, greater community awareness, more publicity for programs, and more advertisements directed toward adolescents.

The needs most often stated relating to professional issues were for more staff and more funds. Training of staff, networking, more space, and more staff time were also listed in that order, as problems.

Needs that are associated with specific services to adolescents include residential treatment facilities, support groups, safe houses, peer intervention services, and walk-in clinics, in that order.

Many more problems were identified by the 395 programs in response to the question, "What more does your community need for

adequate service to suicidal adolescents?" Leading the list was community education followed by more school programs, greater recognition of the problem, better cooperation of schools, more awareness in schools, better knowledge of available resources, and financial help.

Professional issues included more resources, better networking and better trained personnel. Specific services for adolescents that were mentioned as community needs were more beds and more services such as outpatient services, alternative methods of dealing with families when parents are problems, peer counseling, long-term family-oriented treatment, and support groups.

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PSYCHOLOGICAL AUTOPSIES OF YOUTH SUICIDES

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SUMMARY

Psychological autopsies of youth suicides indicate that about half of them had a relatively recent contact with the mental health system viewed broadly to include various therapists and counselors. Mostly, the interactions were focused on evaluation and brief support. Families and therapists both tended to ignore and deny clues to suicide. Since the teenage subjects also use denial extensively, it takes special efforts to bring suicidal youngsters into the helping system and hold them there. Continuity of care is recommended. A team approach (as contrasted with one-on-one psychotherapy) might ease the therapeutic load of contending with complex and multi-dimensional pre-suicidal states.

Other features noted from psychological autopsies include:

- Adolescent drug abuse seems to be closely associated with adolescent suicide, especially in older (17-19) males.
- A suicide in the family is a major stress event, leaving survivors at risk for suicide themselves.
- Bereavement counseling is important in preventing further suicides.
- School problems and conduct disorders are common in pre-suicidal adolescents.
- School counseling was important in helping some control cases avoid self-destructive acts.

My task is to review reports of psychological autopsies of suicides among young people in order to clarify the possible role of prevention and/or treatment activities in these cases. Psychological autopsies are retrospective biographies of deceased persons based on interviews with family members, friends, teachers and physicians. The lifestyles, symptoms and behaviors, personal and occupational histories, and medical records are reviewed by a death investigation team.

As we reconstruct the lives of persons who are now deceased, we think of the subjects as having been in "pre-suicidal" states. The investigations reveal that these "pre-suicidal" subjects do not make up a homogeneous population. Instead, they tend to differ in various characteristics and behaviors, they represent different psychological and psychiatric diagnoses, and they have encountered different types of environmental stresses. A majority had communicated something about their discomfort to someone else, a peer, family member or professional person. Many of the subjects might have revealed further clues to suicide if they had been questioned specifically about suicidal thoughts.

Some of the pre-suicidal adolescents were diagnosed as "depressed." Others were described as having "conduct disorders." Some were high achievers and some were low achievers. Some were physically impaired, others were successful athletes. What all of them had in common were periods of hope-

lessness and thoughts of death as a solution to their problems.

I think of such "pre-suicidal" individuals as having existed in a psycho-social "suicide zone" which is populated by many people, of whom only a minority kill themselves. In a given period of time, say a year, only 1 percent of the people in the "suicide zone" actually commit suicide. That does not mean that the other 99 percent are "false positives" in the sense that treating them is unnecessary or a waste of resources. Probably, all of the pre-suicidal persons are in need of some preventive therapy, and, of course, some need more intense treatment efforts than others.

If we define "treatments" as human interactions in which there are some formal aspects or rules by which one set of persons (therapists) expend efforts to be helpful to other persons (the clients or subjects), it is apparent that treatment has a number of forms. For example, treatment may consist of an initial consultation or evaluation or a brief contact during a crisis giving immediate support. Depending on the needs of the subject, appropriate treatment might involve the family, a peer group, a prolonged drug rehabilitation program, hospitalization--with or without various medical drugs--or long-term out-patient psychotherapy. I have surveyed the major psychological autopsy studies for what they reveal about youthful suicides and the treatment that was available, offered and/or accepted.

Studies of adult suicides, using the psychological autopsy methodology, have clarified a number of suicide-related variables. For example, intention, communication of suicidal clues, stress factors, and the specific medical and psychiatric diagnoses. Studies of youth suicide based on reviews of records have been reported by Sanborn (1), Shaffer (2), Cosand, Bourque, and Kraus, (3) and others. All note that adolescent suicides are preceded by recognizable psychological maladjustment. In Shaffer's 1974 sample of children's suicide, (n=30), 30 percent were in treatment or were waiting to get into treat-

ment. Social withdrawal and friendlessness were common. Many children were recognized as having conduct disorders or emotional problems at school.

Sanborn reviewed the lives of ten adolescent suicides in New Hampshire. Five had some difficulty in school adjustment. Four had threatened suicide previously. All the families were intact, but only two families described themselves as being "happy" families. Most of the youth suicides appeared to be impulsive rather than planned.

Cosand and associates reviewed Sacramento coroner's data. They concluded that important stresses on youth who commit suicide were loss of love, family conflicts, and psychiatric disorders which impeded adjustment to adult roles. They found multiple predictors of suicide and recommended improved training for physicians, police, families, employers, and school personnel in recognizing pre-suicidal symptoms and in improving communication with young persons.

Only recently have investigators studied youth suicides in more adequate numbers using comparison or control groups. The largest research program has been under way for several years, directed by Dr. David Shaffer (4,5) in New York. In a project conducted by Dr. Mohammad Shafii (6,7) and his colleagues in Louisville, peers of the victim were used as controls. A third notable source of data are the reports beginning to come from the "San Diego Suicide Study" by Drs. Rich, Young, and Fowler (8). They compared suicides among persons under and over age 30. My own group in Los Angeles (9) published some pilot studies quite similar to Shafii's, and we are now engaged in investigating all youth suicides in California during a set study period. Finally, the Centers for Disease Control in Atlanta has been assembling information on youth suicide through psychological autopsies conducted in several different locations. All of the investigations have obtained a good deal of information about treatment and prevention, but these factors have not been consistently or carefully analyzed and interpreted, and at present

are considered to be quite obscure.

Shafii and associates investigated 25 cases of youth suicide occurring between January 1980 and June 1983. Their subjects were 95 percent white and 90 percent males. The same standardized interview form was used to secure information about a matched control, often the victim's closest friend. No statistically significant difference was found between the victims and the control subjects regarding such variables as "broken home", separation from parents, or birth order.

There were significant differences in exposure to suicide through suicidal siblings, friends, parents, or other relatives and differences in previous expressions of suicidal ideation, suicide threats, or suicide attempts. The frequent use of non-prescribed drugs or alcohol was associated with suicide, as was anti-social behavior, and "inhibited personality." There had been previous psychiatric treatment for 9 of 20 suicide victims and 4 of 17 control subjects. These investigators agree with Cosand, et al. that a close relationship exists between suicidal wishes, threats, attempts, and completed suicide. Successful prevention involves reducing exposure to suicidal images and thoughts and replacing these with more positive concepts.

Three cases were presented by Shafii in considerable detail. A 17-year old white male shot himself in his bedroom. A week before his death, his mother called the pediatrician's office and asked for help. "My son is depressed and moody", she said. "He has a hard time going to sleep. His personality has changed." A week later, the boy's father called the pediatrician and expressed fear for his son who seems to be incoherent and belligerent. "We are worried that he is taking drugs." There was a confrontation between son and father over this issue after which the son said, "You'll be sorry." The pediatrician suggested a psychiatric consultation, but the family felt it was not that serious, yet.

A second case involved an 18-year old male who was having school problems and injuries

which took him out of athletics. He began to make suicide threats to his girl friend and other people and to search for his biological father who had long since dropped out of sight. Said the boy, "I'm like my real dad. I'm just crazy." The clinical course was one of progressive dissatisfaction. He was having problems with his friends. A few days before his death, his mother tried to make an appointment for him to see someone at a mental health clinic because of his withdrawal and his appearance of being spaced out with no plans for his life, but the victim expressed resentment and said he did not need help.

The emphasis for Shafii is on the failure to get these suicide victims into treatment and keep them there. His group strongly stresses the grief and guilt reactions in surviving family persons and believes that the postvention efforts of their suicide research team may have been effective suicide prevention for the survivors that they interviewed. It would be instructive to review the cases of the non-suicides for factors which were associated with survival.

By far the largest and most sophisticated study of youth suicide is being conducted by a group at the New York Psychiatric Institute led by David Shaffer. In a preliminary report, Shaffer stated that approximately half of the completed youth suicides had been in touch with the mental health system at some time. His findings indicate that slightly less than half of the victims were depressed and about the same number had a family history of suicide attempts. At least half of the male suicide victims had been in trouble because of impulsive behavior, learning difficulties and aggressive outbursts. Approximately half of the suicide victims had been using excessive amounts of drugs or alcohol. About a third had made a serious suicide attempt. These investigators believe, that in all likelihood, other, better defined high risk groups will emerge from the study once the data have been fully analyzed. According to Shaffer, he has not considered the role of treatment, but in personal communications, indicated that a major problem has been

keeping young people involved in a therapeutic contact.

In his preliminary report, Shaffer indicates that it may be premature to attempt to evaluate prevention or treatment programs. However, I interpret these findings to indicate a need for effective anti-depressant treatment of these adolescents who are depressed. The prevention and treatment of early delinquency and early drug abuse remain as key unsolved issues. One program has stressed serial interviews with young women who had made suicide attempts. These women are often deprecated by their families, have rather poor personal relationships, and suffer from low self esteem. The program's goal is to rebuild self esteem and self confidence through increased coping skills.

On the basis of his experience to date, Dr. Shaffer recommends improved mental health courses such as seminars or workshops to help students and parents identify significant psychiatric problems. In particular, they should have information about the major psychiatric illnesses, eating disorders, and should be able to identify for themselves abnormal degrees of anxiety and depression. As Dr. Shaffer points out, suicide is only one possible bad outcome from adolescent psychiatric disorders; identification and treatment of other aspects would prevent a good deal of misery and disability in general. Dr. Shaffer believes that routine school-based screening and treatment referral for teenagers with depressive symptoms, especially those who have fallen behind in school or who are getting into trouble, would be effective prevention. He stresses teaching psychological strategies, for example, coping and problem solving skills to troubled teenagers. First courses would dramatize how to say "no" when offered drugs, or how to communicate and negotiate with family members and peers.

Shaffer believes that better training for pediatric and psychiatric emergency room staffs is necessary to identify suicide attempters who are at especially high risk. It

would be good to have more well-publicized hotlines and drop-in clinics so teenagers would know about them and use them.

Finally, Dr. Shaffer would like to see expanded insurance coverage for crisis situations which may be life-threatening through self-destructive behaviors.

Charles L. Rich, M.D. and his associates, Dr. Young and Dr. Fowler, have reported some of their investigations under the title "San Diego Suicide Study." They noted that when they compared completed suicides in people under 30 with completed suicides of people over age 30, there were many similarities and a few differences. In terms of psychiatric diagnoses, the younger group had significantly more drug abuse and anti-social personalities, significantly less alcohol abuse, fewer affective disorders and fewer organic syndromes. Often, in the younger group, a drug or alcohol use disorder was combined with some other psychiatric diagnosis.

Rich and his colleagues also noted that suicide is a particular problem of white males. They performed structured interviews on suicide cases in San Diego starting in 1981. They placed special emphasis on obtaining as complete a toxicology screening as possible. They tried to arrive at a consensus diagnosis based on DSM III criteria. They were surprised to discover that most of the people in the younger age group were not living alone. About half of their cases had some prior treatment and about a quarter appeared to be in treatment at the time of death. They remarked that these figures showed no change in rate in the past 25 years. "One might think that a quarter century of heightened awareness to the relationship between psychiatric illness and suicide would have led to a higher treatment rate in such an obviously ill population." Significantly, more young people than older people hang themselves, but as in previous U.S. studies, the use of firearms predominated. Rich emphasizes the frequency of alcohol and drug use disorder particularly in the younger group, and he concludes that drug use may be the most important single factor in the suicide rate in-

crease in youth in the United States.

Considering stressors, they found the younger group had more separations and rejections compared to the older group, where the subjects had more mental illnesses. Overall, they found that there was an extremely complex interplay of diagnostic categories.

My colleagues and I are now (Spring, 1986) investigating youth suicides in California. We have noted in our early cases that although almost half of the subjects were known to mental health personnel, the deaths came as a surprise and a shock to almost all of the involved counselor-therapists. The most conspicuous aspect of treatment failure revealed by psychological autopsies was that the adolescent was referred to therapy but did not make or keep the referral appointment. Or, the family did not cooperate.

The psychological autopsies underlined the warning of school problems and failures. We suggest exit counseling when students drop out. On a positive note, we feel that survival in our peer control group is related to the young person having at least one positive "role model", or stable older person who can be idealized.

In twelve cases described by Litman and Diller (9), there were four therapy contacts, two in the suicide cases and two in the controls. Our tentative interpretation is that crisis interviews were insufficient for the chronic and multiple problems of the suicide cases. One of the controls benefited greatly from school counseling that eventually became long term. The counseling, originally for learning and behavior problems, helped him academically and also helped him cope better in his personal life.

The cases dramatized the problems with confiding in a peer. While one person was led into effective counseling, another student confided to a friend that he was going to kill himself, but forbade the friend to tell anyone. After the suicide, the friend became suicidal himself, but was helped by the school coun-

selor and a psychiatrist. In the older teenagers, alcohol and drug abuse contribute to the feeling of uselessness, failure, and confusion. "I just can't get it together."

Experience with suicidal alcoholics, especially the failure of a one-on-one volunteer counseling program (10), convinced me of the importance of a team approach to suicidal substance abusers. To get the young person into therapy and hold him, we need to involve family, friends, and peers--a group process.

The treatment experiences of most of the young persons who committed suicide could best be characterized as brief episodes of evaluative or supportive therapy. Both the families and the professional health workers tended to ignore and deny clues to suicide. Beyond that, the cases illustrate the diversity and multiplicity of the people and the problems.

Case Illustration 1.

J, age 19, was hospitalized at County Hospital for short periods, once for a PCP psychosis and once for alcohol abuse. He was unemployed, from a broken family, had no goals, just existed. The final stressor event occurred when his girl friend left to join the army telling J, "You'll never amount to anything." His out-patient therapist was shocked when J shot himself. "J often told me he wished he were dead, but he said suicide was a sin, and he would never do it." In retrospect, the doctor felt that the problems were too many and too overwhelming and the therapy too little and too late. What might have made more of a difference would have been a placement off the streets into a structured environment, such as a work camp, an in-house drug rehabilitation program, or even possibly, the armed forces.

Case Illustration 2.

Institutions don't always guarantee security. B was a 15-year old male who hanged himself

in his room at the juvenile detention facility. He had been in trouble in school, had stolen a bicycle, taken money from his mother's purse, smoked marijuana and was sent to detention (rather than bailed out) in order to "teach him a lesson." Three weeks earlier, he overdosed on aspirin. Two days before, he cut his wrist, causing a noticeable lesion although no important structures were severed. The admitting social worker asked B if he was suicidal. B said no, not now. Later, staff persons, noting the cut wrist and negative attitude of B, asked about suicide precautions and were told by the social worker not to worry. In retrospect, the evaluator said that he now understands that suicidal teenagers do not necessarily present themselves as "depressed."

Case Illustration 3.

C, an age 16 1/2 female, was seeing a counselor once a week at an anti-drug abuse oriented community center. C was hard looking, dressed punk, acted tough. She was also a talented musician and poet, struggling with a chaotic home life and her own confusing bisexuality. When she hanged herself, she left a three page note beginning, "to let you know I didn't want it to happen. Sorry. I just wanted to be accepted. Love you. So young, so brave, and yet so weak." The therapist was puzzled over the suicide. With some guilt, he admitted he had been seeing both C and her father separately and individually in treatment, and maybe this arrangement had been detrimental for C, since the therapist had considered the father to have the more important impairment.

Case Illustration 4.

The death of M, female, age 17, should have been prevented. She took an overdose of imipramine, a tricyclic anti-depressant, after being rejected by her boy friend. Her family took her to the hospital where she was observed briefly and discharged prematurely. At home, several hours later, she had a series of convulsive seizures and died.

M had been seen several times by a male social worker who thought the therapeutic interaction was excellent. She came from an intact and supportive family, was a high achiever, and had been admitted to Harvard University. The psychiatric consultant who prescribed the imipramine was also surprised. In retrospect, they recalled that although M was talented and artistic, she had a poor self image and was overly dependent on her boy friend. There had been a previous overdose with tylenol. This case raises the problem of how much anti-depressant to prescribe as take-home medication for persons who have recently taken an overdose of other less toxic medicines.

Other noted features include the following: Adolescent drug abuse seems to be closely associated with adolescent suicide, especially in older (17-19) males. A suicide in the family is a major stress event, leaving survivors at risk for suicide themselves; bereavement counseling is important in preventing further suicides. School problems and conduct disorders are common in pre-suicidal adolescents. School counseling was important in helping some control cases avoid self-destructive acts.

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GAY MALE AND LESBIAN YOUTH SUICIDE

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SUMMARY

Gay and lesbian youth belong to two groups at high risk of suicide: youth and homosexuals. A majority of suicide attempts by homosexuals occur during their youth, and gay youth are 2 to 3 times more likely to attempt suicide than other young people. They may comprise up to 30 percent of completed youth suicides annually. The earlier youth are aware of their orientation and identify themselves as gay, the greater the conflicts they have. Gay youth face problems in accepting themselves due to internalization of a negative self image and the lack of accurate information about homosexuality during adolescence. Gay youth face extreme physical and verbal abuse, rejection and isolation from family and peers. They often feel totally alone and socially withdrawn out of fear of adverse consequences. As a result of these pressures, lesbian and gay youth are more vulnerable than other youth to psychosocial problems including substance abuse, chronic depression, school failure, early relationship conflicts, being forced to leave their families, and having to survive on their own prematurely. Each of these problems presents a risk factor for suicidal feelings and behavior among gay, lesbian, bisexual and transsexual youth.

The root of the problem of gay youth suicide is a society that discriminates against and stigmatizes homosexuals while failing to recognize that a substantial number of its youth has a gay or lesbian orientation. Legislation should to guarantee homosexuals equal rights in our society. We need to make a con-

scious effort to promote a positive image of homosexuals at all levels of society that provides gay youth with a diversity of lesbian and gay male adult role models. We each need to take personal responsibility for revising homophobic attitudes and conduct. Families should be educated about the development and positive nature of homosexuality. They must be able to accept their child as gay or lesbian. Schools need to include information about homosexuality in their curriculum and protect gay youth from abuse by peers to ensure they receive an equal education. Helping professionals need to accept and support a homosexual orientation in youth. Social services need to be developed that are sensitive to and reflective of the needs of gay and lesbian youth.

INTRODUCTION

Suicide is the leading cause of death among gay male, lesbian, bisexual and transsexual youth.* They are part of two populations at serious risk of suicide: sexual minorities and the young. Agency statistics and coroner reports seldom reflect how suicidal behavior is related to sexual orientation or identity issues. The literature on youth suicide has virtually ignored the subject. Research in recent years, however, with homosexual young people and adults has revealed a serious problem with cause for alarm.

*The terms "gay youth" and "gay and lesbian youth" will frequently be used to describe this population in the paper. Transsexual youth are included here because their problems are similar to those experienced by youth who have a minority sexual orientation.

Statistical Profile

There is a high rate of suicidality among lesbians and gay men. Jay and Young found that 40 percent of gay males and 39 percent of lesbians surveyed had either attempted or seriously contemplated suicide (1). Bell and Weinberg similarly found that 35 percent of gay males and 38 percent of lesbians in their study had either seriously considered or attempted suicide (2). Homosexuals are far more likely to attempt suicide than are heterosexuals. A majority of these attempts take place in their youth. Bell and Weinberg found that 25 percent of lesbians and 20 percent of gay men had actually attempted suicide. Gay males were 6 times more likely to make an attempt than heterosexual males. Lesbians were more than twice as likely to try committing suicide than the heterosexual women in the study. A majority of the suicide attempts by homosexuals took place at age 20 or younger with nearly one-third occurring before age 17.

Suicidal behavior by gay and lesbian youth, however, occurs today within the broader context of an epidemic increase in suicide among all young people in our society. Between 1950 and 1980, there was an increase of more than 170 percent in suicides by youth between the ages of 15 and 24 (3). The suicide rate for all age groups rose only 20 percent during that time. At least 5,000 youth now take their lives each year with the number believed to be significantly higher if deliberate auto accidents, victim precipitated homicides, and inconclusive coroner reports are taken into account. The rate of suicide attempts to completions is much higher among young people than any other age group with as many as 500,000 attempts annually. This leads us to believe that many times a suicide attempt by a young person is really a cry for help.

Gay and lesbian youth have been a hidden population within the adolescent and young adult age group. Those programs and studies able to document suicidality in gay youth have found they have a high rate of suicidal feelings and behavior that places them at sub-

stantially greater risk of taking their own lives compared to other youth (See Appendix A). Statistics from the Institute for the Protection of Gay and Lesbian Youth in New York, the University of Minnesota Adolescent Health Program in Minneapolis, Roesler and Deisher in Seattle, and the Los Angeles Suicide Prevention Center consistently show that 20-35 percent of gay youth interviewed have made suicide attempts (4,5,6,7). Statistics from Minneapolis, Los Angeles and San Francisco find that more than 50 percent of gay youth experience suicidality including serious depression and suicidal feelings (5,7,8). The Larkin Street Youth Center in San Francisco found that among their client population of homeless youth, 65 percent of homosexual/bisexual youth compared to 19 percent of heterosexual youth reported ever being suicidal, and that gay youth had a rate of suicidality nearly 3.5 times greater than other youth (8). The Los Angeles Suicide Prevention Center in preliminary data from an unpublished study, found that the suicide attempt rate for gay youth is more than 3 times higher than that of heterosexual youth; their rate of suicidality is more than twice that of other youth (7).

Why are feelings of self-destructiveness and suicidal behavior so prevalent among gay and lesbian youth? How can we learn to recognize these youth better and help them more effectively in coping with the problems that often lead them to want to take their own lives? The rest of this paper attempts to address these issues by providing an overview of the tasks and problems facing gay youth, an understanding of who they are, factors that place gay youth at risk of suicide, and an approach for society as a whole and the individual helping professional in effectively helping these youth and preventing them from taking their lives.

Tasks of the Gay Adolescent

Gay youth face the double jeopardy of surviving adolescence and developing a positive identity as a lesbian, gay male, bisexual, or transsexual in what is frequently a hostile and

condemning environment. Contrary to popular belief, adolescence is not the time of our lives. It is a difficult and complex period of development filled with anxiety and few clear guidelines for helping youth resolve the problems they face, often for the first time, and making the transition to adulthood. Youth are going through physical changes, emotional changes, intellectual changes and sexual development all within the context of their particular culture, family, peer group, and capacity as individuals. They must accomplish several formidable tasks including separating from their families while retaining a core sense of belonging (individuation), learning to form relationships with other people while fitting in with a social structure (socialization), establishing an integrated, positive, individual identity (identity formation) and preparing themselves for the future in an increasingly complex and uncertain world (future orientation).

Problems in accomplishing these tasks play a critical role in the suicidal feelings of any youth but present special hardships for those who are gay or lesbian. First they must come to understand and accept themselves in a society that provides them with little positive information about who they are and negative reactions to their inquiries. Second, they must find support among significant others who frequently reject them. Finally, they must make a social adaptation to their gay or lesbian identity. They must find where they belong and how they fit in with a social structure that either offers no guidelines for doing so or tells them that they have no place.

With the advent of the sexual revolution and gay liberation movement of the past two decades, gay and lesbian youth have been increasingly aware of their feelings and coming to terms with their orientation at an earlier age than ever before. This has placed them into direct conflict with all of the traditional childrearing institutions and support systems of our society. Increasingly, this occurs while the youngsters are still living at home with their family, attending public school and developing a sense of their own self worth in

comparison with their peers and the expectations of society as a whole.

Problems Facing Gay Youth

Lesbian and gay youth are the most invisible and outcast group of young people with whom you will come into contact. If open about who they are, they may feel some sense of security within themselves but face tremendous external conflicts with family and peers. If closed about who they are, they may be able to "pass" as "straight" in their communities while facing a tremendous internal struggle to understand and accept themselves. Many gay youth choose to maintain a facade and hide their true feelings and identity, leading a double life, rather than confront situations too painful for them. They live in constant fear of being found out and recognized as gay. The reasons for their silence are good ones.

Gay youth are the only group of adolescents that face total rejection from their family unit with the prospect of no ongoing support. Many families are unable to reconcile their child's sexual identity with moral and religious values. Huckleberry House in San Francisco, a runaway shelter for adolescents, found that gay and lesbian youth reported a higher incidence of verbal and physical abuse from parents and siblings than other youth (9). They were more often forced to leave their homes as "pushaways" or "throwaways" rather than running away on their own. In a study of young gay males, Remafedi found that half had experienced negative parental response to their sexual orientation with 26 percent forced to leave home because of conflicts over their sexual identity (5).

Openly gay and lesbian youth or those "suspected" of being so can expect harassment and abuse in junior high and high schools. The National Gay Task Force, in a nationwide survey, found that 45 percent of gay males and nearly 20 percent of lesbians had experienced verbal or physical assault in secondary schools (10). The shame of ridicule and fear of attack makes school a fearful place to go resulting in frequent ab-

sences and sometimes academic failure. Remafedi reports 28 percent of his subjects were forced to drop out because of conflicts about their sexual orientation (5). Gay youth are the only group of adolescents with no peer group to identify with or receive support from. Many report extreme isolation and the loss of close friends.

Gay youth also face discrimination in contacts with the juvenile justice system and foster and group home placements.* Many families and group homes refuse to accept or keep an adolescent if they know he or she is gay. A report by the San Francisco Juvenile Justice Commission found that gay youth stay in detention longer than other youth awaiting placement because of a lack of appropriate program resources (11). Many programs are unable to address the concerns or affirm the identity of a gay adolescent. They can be subjected to verbal, physical, and even sexual abuse with little recourse. Even sympathetic staff often don't know how to relate to a gay youth or support them in conflicts with other residents. They frequently become isolated, ignored by youth and staff who feel uncomfortable with them. They are easy targets for being blamed and scapegoated as the "source" of the problem in efforts to force them to leave.

The result of this rejection and abuse in all areas of their lives is devastating for lesbian and gay youth and perhaps the most serious problems they face are emotional ones. When you have been told that you are sick, bad, and wrong for being who you are, you begin to believe it. Gay youth have frequently internalized a negative image of themselves. Those who hide their identity are surrounded by homophobic attitudes and remarks, often by unknowing family members and peers, that have a profound impact on them. Hank Wilson, founder of the Gay and Lesbian Teachers Coalition in San Fran-

*It is my observation that youth are experiencing more frequent contact with the juvenile court due to 1) increased conflicts in their home communities because of their sexual orientation which require intervention and removal from the home and 2) being open about their sexual identity at an earlier age than before.

cisco, believes these youth constitute a large group who are silently scapegoated, especially vulnerable to being stigmatized, and who develop poor self esteem (12). Gay youth become fearful and withdrawn. More than other adolescents, they feel totally alone often suffering from chronic depression, despairing of life that will always be as painful and hard as the present one.

In response to these overwhelming pressures, gay youth will often use two coping mechanisms which only tend to make their situation worse: substance use and professional help. Lesbian and gay male youth belong to two groups at high risk for substance abuse: homosexuals and adolescents. Rofes found, in a review of the literature, that:

Lesbians and gay men are at much higher risk than the heterosexual population for alcohol abuse. Approximately 30 percent of both the lesbian and gay male populations have problems with alcoholism (13).

Substance use often begins in early adolescence when youth first experience conflicts around their sexual orientation. It initially serves the functional purposes of (1) reducing the pain and anxiety of external conflicts and (2) reducing the internal inhibitions of homosexual feelings and behavior. Prolonged substance abuse, however, only contributes to the youth's problems and magnifies suicidal feelings.

Several studies have found that a majority of gay youth received professional help for conflicts usually related to their sexual identity (5,6). These interventions often worsen conditions for these youth because the therapist or social worker is unwilling to acknowledge or support an adolescent's homosexual identity. Many gay and lesbian youth are still encouraged to "change" their identities while being forced into therapy and mental hospitals under the guise of "treatment."

Those who seek help while hiding their identity often find the source of their conflicts is never resolved because the therapist is un-

able to approach the subject. This silence is taken as further repudiation of an "illness" that dare not speak its name.

A suicide attempt can be a final cry for help by gay youth in their home community. If the response is hostile or indifferent, they prepare to leave. Alone and frightened, they go to larger cities--hoping to find families and friends to replace the ones that did not want them or could not accept them. The English group "The Bronski Beat" describes the plight of the gay adolescent in their song "Smalltown Boy":

Pushed around and kicked around,
always the lonely boy
You were the one they talked about
Around town as they put you down
But as hard as they would try
just to make you cry
You would never cry to them
—just to your soul
Runaway, turnaway, runaway,
turnaway, runaway (14).

Gay male, lesbian, bisexual, and transsexual youth comprise as many as 25 percent of all youth living on the streets in this country. Here, they enter a further outcast status that presents serious dangers and an even greater risk of suicide. Without an adequate education or vocational training, many are forced to become involved in prostitution in order to survive. They face physical and sexual assaults on a daily basis and constant exposure to sexually transmitted diseases including AIDS. They often become involved with a small and unstable element of the gay community that offers them little hope for a better life. Their relationships are transitory and untrustworthy. For many street youth, their struggle for survival becomes the fulfillment of a "suicidal script" which sees them engaging in increasingly self-destructive behaviors including unsafe sexual activity and intravenous drug use. Overwhelmed by the complexities of street life and feeling they have reached the "wrong end of the rainbow" a suicide attempt may result.

While it has become easier in recent years to

be a gay male or lesbian adult it may be harder than ever to be a gay youth. With all of the conflicts they face in accepting themselves, coming out to families and peers, establishing themselves prematurely in independent living and, for young gay males, confronting the haunting specter of AIDS, there is a growing danger that their lives are becoming a tragic nightmare with living only a small part of dying.

UNDERSTANDING GAY AND LESBIAN YOUTH

Lesbian and gay male youth are young people with a primary attraction to members of the same sex for sexual and intimate relationships. Bisexual youth have an attraction to members of both sexes for sexual and intimate relationships. We use the term orientation rather than preference to describe this attraction because we still do not know how it originates. We are not certain to what extent genetics, socialization factors or individual choice determines either a homosexual or heterosexual orientation. Transsexual youth are young people who believe they have a gender identity that is different from the sex they were born with. This includes young males who believe they are really females mistakenly born in a male body and young females who believe they are really males mistakenly born in a female body. Sexual orientation and gender identity are separate issues for each individual. Transsexuals may have a heterosexual, homosexual, or bisexual orientation. Homosexuals are rarely confused about their gender identity with lesbians believing they are women and gay males believing they are men.

There are indications that individuals may be predisposed to their sexual orientation from an early age. A gay or lesbian orientation in adolescence is not just a phase the youth is going through. Bell, Weinberg, and Hamersmith found that sexual orientation is likely to be formed by adolescence—even if the youth is not yet sexually active (15).

Childhood and adolescent homosexuality, especially pronounced homosexual feelings, can not be regarded as just a passing fancy...[it] seems to be relatively enduring and so deeply rooted that it is likely to continue as a lasting homosexual orientation in adult life.

Huckleberry House found that, when given a choice, adolescents demonstrate a greater degree of conviction than confusion in identifying their sexual orientation, with 75 percent self-reporting as heterosexual, 15 percent homosexual, 5 percent bisexual, and only 5 percent confused or undecided (9). Most youth who identify as heterosexuals and homosexuals will continue to do so as adults. Youth are more likely to underreport a homosexual orientation because of difficulties in accepting themselves and the fear of a hostile response. Jay and Young found that 56 percent of the lesbian respondents in their survey had previously identified as bisexual while only 16 percent currently did so (1). Forty-six percent of the gay males had previously identified as bisexual while only 20 percent currently did so.

Homosexuality is not a mental illness or disease. It is a natural and healthy expression of human sexuality. In 1935, Sigmund Freud wrote that "Homosexuality...is nothing to be ashamed of, no vice, no degradation, it can not be classified as an illness" (16). In 1973, the American Psychiatric Association removed homosexuality from the list of psychiatric disorders and, in 1975, the American Psychological Association urged all mental health professionals to remove the stigma of mental illness long associated with a homosexual orientation. In 1983, the American Academy of Pediatrics encouraged physicians to become involved in the care of homosexuals and other young people struggling with the problem of sexual expression (5). If homosexuality is not an illness or a disorder, it can not be regarded as such to the extent that it occurs in the young.

Gay and lesbian youth come from all ethnic backgrounds. The ethnicity of gay youth will

reflect the ethnicity of youth in your community or seen by your agency. The Institute for the Protection of Gay and Lesbian Youth reports the ethnic breakdown of youth it served, matched the population of New York's public school system with 40 percent black, 35 percent white, 20 percent Hispanic, 2 percent Asian and 3 percent other (4). Huckleberry House in San Francisco found that more than half of their overall client population and gay youth seen by the program were ethnic minorities (9).

There are far more gay youth than you are presently aware of. Kinsey found a significant amount of homosexual behavior among adolescents surveyed with 28 percent of the males and 17 percent of the females reporting at least one homosexual experience (17,18). He also found that approximately 13 percent of adult males and 7 percent of adult females had engaged in predominantly homosexual behavior for at least three years prior to his survey. This is where the figure that 10 percent of the population is homosexual comes from. It is difficult to assess the prevalence of a homosexual orientation given our knowledge that sexual behavior actually occurs along a continuum of feelings and experiences. Prevalence is even more difficult to estimate among adolescents because of the complex identity issues with which they are struggling and the scarcity of research on the subject. It is apparent, however, that a substantial minority of youth--perhaps "One in Ten" as one book suggests--have a primary gay male, lesbian, or bisexual orientation. Given the higher rates of suicidal feelings and behavior among gay youth in comparison with other young people, this means that 20-30 percent of all youth suicides may involve gay youth. Parris believes that as many as 3000 gay and lesbian young people may be taking their lives each year (19).

Coming Out: The Early Stages

Coming out is the process through which a person comes to understand and accept his/her sexual identity and shares it with

others. This is seldom a conscious undertaking for heterosexual youth who find that being "straight" is a given status in our society. It is as automatic as attending school or getting a driver's license. However, identifying oneself as gay or lesbian is a long and painful process that only occurs gradually over an extended period of time. Stages in the coming out process are identified in Appendix B with the ages reflecting those of gay and lesbian youth whom I worked with at Huckleberry House (20,21). This population represents the bias of self-identified gay youth seeking services at a runaway program. It is important to recognize, however, that this process begins for many lesbian and gay youth at an early age with an awareness of their orientation often developing by adolescence. It is then that they experience significant conflicts involving understanding of whom they are, handling negative reactions from others and making a social adaptation which can lead to suicidal feelings and behavior. These conflicts must be resolved before the youth can develop a positive identity as a gay male or lesbian.

The first stage in the development of a lesbian or gay identity is an awareness of being different. This often occurs several years prior to puberty with the youth seldom aware of what this feeling means or how it relates to their sexuality. Lewis, in describing this stage for young lesbians, notes that:

Because our society and its process of socialization do not include a positive vocabulary for same-sex attractions (whether emotional or erotic), many girls experience only vague, undefinable feelings of "not fitting in" (22).

Bell, Weinberg, and Hammersmith looked at numerous factors (i.e., family relationships) in attempting to determine how individuals develop a homosexual or heterosexual orientation (15). They provide evidence that this awareness of being different is related to the social roles of the child. During latency age years, the family often reinforces those roles, behaviors, attributes, and interests that are

stereotypically associated with being a male or a female in our society. For example, boys are expected to play outside more than girls and girls are expected to stay close to the house more than boys. Bell, et al. found that gay males and lesbians in their study tended to have atypical social roles in childhood that did not conform to gender expectations while heterosexuals tended to have typical social roles.

Far fewer homosexual (11%) than heterosexual (70%) men reported having enjoyed boys' activities (e.g., baseball, football) very much.

Fewer of the homosexual (13%) than heterosexual (55%) women said they enjoyed typical girls' activities (e.g., playing house, hopscotch) very much.

This finding held true for a range of variables involving stereotyped male and female roles with gender nonconformity being the single most accurate indicator in childhood of a future homosexual orientation (15). However, they add a strong point of clarification for those who would force gender conformity on a child in an effort to "prevent" homosexuality.

Homosexuality is as deeply ingrained as heterosexuality, so that differences in behaviors or social experiences of pre-homosexual boys and girls and their pre-heterosexual counterparts reflect or express, rather than cause, their eventual homosexual (orientation).

This finding does not account for the substantial percentage of respondents giving answers that were atypical for their sexual orientation. Many children, however, who later identify as gay or lesbian begin to realize at this early age that they do not meet the social expectations of their families and other children.

The second stage of the coming out process is an awareness of being attracted to members of the same sex. This also commonly oc-

curs prior to puberty with many gay and lesbian youth reporting childhood crushes on other children and adults. Bell, et al. found these sexual feelings typically occurred three years or so before any homosexual experiences and appear to be the most crucial stage in the development of adult homosexuality (15). Most children are unaware of the meaning and implications of these attractions. However, for those who are able to make a connection between their "difference"--homosexual feelings and gay or lesbian identity--depression and suicidal feelings may already be present.

I always knew that I was gay. When I was 8 or 9 I would steal my mother's Playgirl magazines and look at the pictures of men. I also remember seeing heterosexual couples and knowing I wasn't like that. I would get very depressed about not being like other kids. Many times I would take a kitchen knife and press it against my chest, wondering if I should push it all the way in (23).

Many adolescents experiencing conflicts related to their sexual orientation report having their first homosexual experience around puberty. Some youth, however, first act on their feelings during adolescence. Young lesbians tend to have their first experience at a later age than young gay males (1). Same-sex play and experimentation is relatively common prior to puberty with Kinsey reporting that 60 percent of preadolescent boys and 33 percent of preadolescent girls described homosexual play at the time they contributed to the study (16,17). Pre-homosexual boys and girls often do not have a context in which to put their feelings and experiences. They have learned to hide sexual behavior from adults but have not developed an understanding of the stigma attached to homosexuality. Their initial experiences tend to confirm homosexual feelings. It is now, however, that a terrible thing happens to young people who will have a gay or lesbian orientation-- adolescence. Gay and lesbian youth will become distin-

guished from other youth involved in preadolescent same-sex play by their progress through the developmental stages here identified and the persistence of homosexual feelings and experiences in spite of negative consequences.

Adolescence

With adolescence, many gay and lesbian youth have their first contact with homosexuality and it is all bad. They are told it is no longer acceptable to engage in sexual behavior with members of the same sex and that those who do are sick. The only images of homosexuals that society provides them with are derisive stereotypes of lesbians who are like men and gay men who are like women. Many experience their first pervasive contact with the fear and hatred of homosexuality--homophobia.

Nowhere are these harshly negative attitudes towards homosexuality more pronounced than in junior high and high school. These institutions are the brutal training grounds where traditional social roles are rigidly reinforced. Boys are going to play sports and drink beer with the guys. Girls are going to start paying more attention to their physical appearance in the hopes of attracting boys. Adolescence will be the last stronghold of these stereotyped roles and behaviors because young people are looking for identity. Homosexuality and gender nonconformity are threats to many youth and an easy target for their fears and anxieties about being "normal."

Youth who have a growing awareness of a gay or lesbian orientation become painfully aware that they do not fit the "social script." They see the hostility directed towards homosexuals by others and hear taunts of "dyke" and "faggot" used indiscriminately by peers. They become alarmed and realize that they must make some social adaptation to the situation. Martin describes their predicament:

In adolescence, young homosexually oriented persons are faced with the

growing awareness that they may be among the most despised...As this realization becomes more pressing, they are faced with three possible choices: they can hide, they can attempt to change the stigma, or they can accept it (24).

These three adaptations are not mutually exclusive and are often present in the same individual over time. Many youth initially try to deny a gay or lesbian orientation to both themselves and others. Those adolescents who understand and recognize they have a gay orientation will continue to hide their identity from family and peers for fear of adverse consequences. Finally, those who become open about their identity, confront those adverse consequences in an effort to win acceptance and support. Each adaptation contains specific problems which contribute to suicidal feelings and behavior.

Self Denial

All young people face tremendous pressures to desist from any homosexual behavior and develop a heterosexual orientation. It is easy to see why adolescents with predominantly homosexual feelings and experiences would try to deny a lesbian or gay identity. They have internalized an image of being a homosexual as wrong and dangerous to their physical and mental health. They have seen the stereotypes of lesbians and gay men and they don't like them. These youth who don't want to live like that decide they are going to conform to the social roles and start dating members of the opposite sex and become heterosexuals.

Many youth engage in heterosexual sexual behavior in an effort to change their orientation. This often turns out to be a losing battle. Jay and Young found that 83 percent of the lesbians and 66 percent of the gay men in their survey had previously engaged in heterosexual sex (1). Bell and Weinberg similarly found that 87 percent of lesbians and 68 percent of gay males interviewed had prior heterosexual experiences (2). Two studies with gay male youth found that at

least 50 percent had prior heterosexual experiences (5,6). Jay and Young add that 55 percent of the lesbians and 46 percent of the gay males reported feeling negative about these experiences. Bell, et al. in their study on the development of sexual orientation conclude that:

The homosexual men and women in our study were not particularly lacking in heterosexual experiences during their...adolescent years. They are distinguished from their heterosexual counterparts, however, in finding such experiences ungratifying (15).

The American Psychiatric Association notes in the 1980 edition of the Diagnostic and Statistical Manual of Mental disorders (DSM III) that "there is a general consensus that spontaneous development of a satisfactory heterosexual adjustment in individuals who previously had a sustained pattern of exclusively homosexual arousal is rare" (25). One potentially serious consequence of this heterosexual experimentation is pregnancy involving young lesbians or gay males that either occurs accidentally or in an effort to "prove" a heterosexual orientation.

Youth who try to change a homosexual orientation and are unable to do so are at high risk of emotional and behavioral problems. They often develop feelings of hatred and rage that can be turned against themselves or others. They may engage in self-destructive behaviors such as substance abuse as an unconscious expression of feelings too painful to face. Others become involved in verbal and physical attacks against other homosexuals as a way of defending against their own fears. Finally, when the youth comes to recognize for the first time that he/she have a primary homosexual orientation, overt suicidal behavior may result.

The DSM III includes a new disorder called "Ego-Dystonic Homosexuality" which describes many of the conflicts faced by youth engaged in denial of homosexual feelings

(25). It is characterized by "a desire to acquire or increase heterosexual arousal...and a sustained pattern of overt homosexual arousal...(that is) unwanted and a persistent source of distress." Associated features include guilt, loneliness, shame, anxiety and depression. Age of onset occurs in "early adolescence when the individual becomes aware that he or she is homosexually aroused and has already internalized negative feelings about homosexuality." The course of the illness indicates that "in time, many individuals...give up the yearning to become heterosexual and accept themselves as homosexuals...(with the help) of a supportive homosexual subculture." Remafedi notes that the usefulness of this term is still not known since distress is so prevalent among youth first recognizing a homosexual identity (5). However, it clearly identifies a phenomena in many young homosexuals that places them at a greater risk of taking their own lives.

Those Who Hide

Many youth are aware of their gay or lesbian identity but decide not to be open about it and try to pass as "straight" with their families and peers. They have seen the negative response to homosexuality from society and the brutal treatment of gays by their peers. Sometimes they have been the recipients of verbal or physical abuse as "suspected" homosexuals. Martin believes that hiding is the primary adaptation for gay and lesbian youth (24). He observes that many realize that their lives are based on a lie with "the socialization of the gay adolescent becoming a process of deception at all levels, with the ability to play a role." While remaining invisible to others, the pain and loneliness of hiding often causes these youth serious harm to their mental health and social development.

A serious consequence of this adaptation is that these youth suffer their fears and low self esteem in silence. They are unknown victims of scapegoating with every homophobic assault or remark they witness. They live in

perpetual fear that their secret will be discovered. Gay youth become increasingly afraid to associate with others and withdraw socially in an effort to avoid what they perceive as a growing number of dangerous situations. They spend more and more time alone. Aaron Fricke relates the problems of hiding a gay identity in his book *Reflections of a Rock Lobster: A Story About Growing Up Gay* (26). He describes his response to being victimized by a homophobic assault as he was about to begin high school.

I began to believe that everyone looked down on me and when anyone looked at me I thought I saw their seething hatred of me coming through. When I entered high school I was completely isolated from the world. I had lost all concept of humanity; I had given up all hopes of ever finding love, warmth or tenderness. I did not lie to myself, but I did keep others from thinking I was homosexual. I could refuse to ever mention my real feelings. That way, I would never again suffer the consequences of being the individual I was. I retreated into my own world.

The only goal left to me in life was to hide anything that could identify me as gay. I became neurotic about this. I once heard that gay people talked with a lisp. I was horrified when I discovered that I had a slight lisp, and it made me self-conscious about how I sounded every time I spoke. Self-doubt set in. I thought that anything I did might somehow reveal my homosexuality, and my morale sank even deeper. The more I tried to safeguard myself from the outside world, the more vulnerable I felt. I withdrew from everyone and slowly formed a shell around myself. Everyone could be a potential threat to me. I resembled a crustacean with no claws; I had my shell for protection yet I would never do anything to hurt someone else. Sitting on a rock

under thousands of pounds of pressure, surrounded by my enemies, the most I could hope for was that no one would cause me more harm than my shell could endure.

These youth suffer from chronic depression and are at high risk of attempting suicide when the pressure becomes too much to bear. They may run away from home with no one understanding why. A suicidal crisis may be precipitated by a minor event which serves as a "last straw" to the youth. A low grade may confirm for the youth that life is a failure. An unwitting homophobic remark by parents may be taken to mean that the youth is no longer loved by them.

Martin also believes this adaptation hinders the social development of gay and lesbian youth (24). There is an absence of social outlets for gay youth that makes it very difficult for them to meet others like themselves. They shy away from attachments to friends for fear of getting too involved or experiencing rejection. Open relationships or displays of affection with others of the same sex is not tolerated in the gay youth's home and social environment, making extreme secrecy a requirement in developing romantic attachments. (Indeed, these issues form the essence of discrimination against homosexuals in our society.) Consequently, lesbian and gay youth do not learn how to establish and maintain intimate relationships in the way heterosexual youth do.

Young gay males often experience their same-sex relationships as casual sexual contacts with strangers. Because of their age, many of these encounters occur in clandestine meeting places where gay males congregate. Roesler and Deisher found that 76 percent of their subjects had met sexual partners in parks, 62 percent in theaters, and 32 percent in restrooms (6). Remafedi found that 63 percent of young gay males he surveyed had met other males in gay bars; only 28 percent said they had known their partner for a week prior to having sex (5). Martin expresses concern that these encounters condition the young gay male to respond to other

gay males on a sexual level only.

He often has not had the opportunity to develop courting behaviors other than direct sexual contact. Heterosexual adolescents learn to date and go through a series of socially ordained procedures with sexual contact as a possible end result. The young gay male often learns to start with the end result, sexual behavior, and then attempts to develop the relationship (24).

Young gay males face the risk of mistaking sexual feelings for deeper bonds of love. They may despair of the difficulties in forming lasting relationships on the basis of fleeting sexual encounters. Suicidal feelings may follow the failure of casual sex to meet the youth's needs of intimacy and belonging.

Young lesbians are even more isolated than young gay males in their efforts to form intimate relationships. There are few meeting places for lesbians in our society and casual sexual contacts are a less frequent part of their development. Lewis writes that:

Because women are socialized to have and maintain relationships, sexual exploration and experimentation often takes place within the context of a relationship (22).

With fewer social opportunities, however, young lesbians are often not able to form initial relationships with lovers until later adolescence or young adulthood. Suicidal feelings among young lesbians may be due to the extreme isolation they experience and the despair of being unable to meet others like themselves.

Openly Gay and Lesbian Youth

Those who accept their orientation and are open about it with others form a smaller but visible segment of the lesbian and gay male youth population. They learn that only part of developing an identity as a gay male or lesbian is coming to understand and accept your sexual orientation. Now they must find out

what their place is and where they belong within the confines of the traditional social structure available to them. There are few role models to emulate and society offers them little support in this process. Gay youth usually don't begin to be open about their orientation until middle to late adolescence.

Many of these youth will have an atypical social role that includes gender nonconformity. Bell, et al. found that 62 percent of lesbians surveyed described themselves as "very masculine" while growing up (15). Remafedi found more than half of young gay males interviewed saw themselves as "less masculine" than their peers (5). Gender nonconformity may be more pronounced in youth first openly identifying themselves as gay. Sometimes it is a natural and permanent expression of who they are and sometimes it is a transitional process youth go through in learning that they don't have to behave in any particular way to be gay. Weinberg and Williams found that younger gay males identified themselves as effeminate three times more frequently than did older gay males (27).

Gender nonconformity in gay youth may reflect natural qualities that do not fit cultural stereotypes (e.g., men who are gentle, women who are strong). Youth may have expressed these attributes since childhood and will continue to do so as adults. Gender nonconformity may also fit the expectations that society sets for gay and lesbian youth. Gay youth are especially susceptible to cultural stereotypes while struggling to find an appropriate identity. One young gay male told me that he literally thought that he had to be "like a girl" because he was gay. There is not a diversity of gay male and lesbian adult role models for gay youth to pattern themselves after. For many young lesbians and gay men, the earliest images of adults they thought were homosexuals were people who fit the traditional stereotypes.

One young lesbian recalled when she was a child there was a "tough looking" woman with a slight moustache who drove a pick-up truck and lived on the edge of town by herself. This

woman was ostracized by the rest of the town and rumored to be a lesbian. The little girl both wondered and feared if she would grow up to be like her.

Martin maintains that discrimination prevents adults from being more open about their homosexuality thus denying "suitable role models to gay adolescents who could demonstrate by example, sharing, and teaching that existing prejudices are false" (24). This is especially true for gay adults who work with children and adolescents.

Gender nonconformity may finally be a conscious effort to reject traditional roles and establish a separate and viable identity. One young lesbian told me she threw away her dolls in disgust when she was a child. It is not unusual for individuals sharing a common identity to separate themselves from others by establishing particular behaviors, appearances, terminology and interests. Effeminacy in young gay males and masculinity in young lesbians is often a way for them to affirm a homosexual identity and assist them in finding each other. According to Wolf, culturally defined masculine attire is "more strongly assumed by young women who are newly aware of their lesbianism and looking for a community" (22).

Gay and lesbian youth take tremendous risks by being open about who they are. You have to respect their courage. They remain at high risk to suicidal feelings and behavior because of the pressures they face in conflicts with others about their homosexual orientation and the disappointments they experience at the initial hardships of an openly gay and lesbian lifestyle. Rofes warns that no myth is more dangerous to gay adolescents than the notion that "coming out" will insure them against feelings of self-destructiveness (19).

The immediate conflicts that openly gay youth face are with their peers and family. Openly homosexual youth are an affront to a society that would like to believe they don't exist. Our culture seems to have particular disdain for those gay youth who do not con-

form to gender expectations. Rejection or abuse can become so intense that suicidal feelings and behavior result. Openly gay youth are more likely to be forced to leave their schools and families and survive on their own.

Those gay youth forced to become self-sufficient prematurely find that they face the discrimination of society against both youth and homosexuals in trying to do so. Often these youth have not had vocational training and some have not completed their secondary education. They are discriminated against in finding housing and employment because of their sexual orientation. Perhaps most disappointing, gay youth find they often cannot depend on help from adult gay males and lesbians in getting established because of the fears adult homosexuals have of being seen as "recruiting" young people. Gay youth often become involved with a small and unstable population of gay males and lesbians living on the streets. Here, they are at high risk at substance abuse, sexually transmitted diseases, and unstable relationships. The hardships of this lifestyle combined with the early rejection by family and peers may result in a suicide attempt.

One young gay male involved in prostitution attempted suicide after receiving a "hate" letter from his parents. In it his mother said she was sorry she had not gotten an abortion before he was born and his father said that he only had half of a son. The young man completed suicide two years later.

A final area of difficulty for openly lesbian and gay male youth is in the forming and maintenance of intimate relationships with others. Having a lover is frequently a new experience for gay youth. Lewis writes:

The lesbian's exploration of intimate experiences with other women is an emotionally turbulent process. It is, essentially, a second adolescence, complete with many of the symptoms common to the mainstream

heterosexual adolescent period (22).

The lack of experience that youth bring to these relationships is compounded by the need for secrecy and lack of social supports for dealing with conflicts so common in homosexual relationships. These first romantic involvements often assume a disproportionate importance in the youth's life. They serve to both affirm a lesbian or gay orientation and also fill unmet needs for love, caring, and friendship that have often been missing in the youth's life. When the relationship ends, gay youth sometimes feel no one cares and nothing is left to live for.

Ethnic Minority Gay Youth

Ethnic minority youth (i.e., Black, Hispanic, Asian, and American Indian) comprise a substantial number of youth who are gay, lesbian, bisexual, or transsexual. Ruth Hughes, Coordinator of Gay Youth Services at the Center for Special Problems in San Francisco, reports that these youth face more severe social and cultural oppression than other gay youth and far more serious problems than other adolescents (29). Bell and Weinberg found that black gay males and lesbians attempted or seriously considered suicide at a rate less than white homosexuals but greater than black heterosexuals (2). However, they found that a higher percentage of suicide attempts by black homosexuals took place during their youth. 36 percent of black lesbians compared to 21 percent of white lesbians and 32 percent of black gay males compared to 27 percent of white gay males attempted suicide before age 18. This indicates that black gay youth may face particular hardships during adolescence.

Ethnic minority gay youth face all of the problems that other gay and lesbian youth face growing up in a hostile and condemning society. They also face the same economic discrimination and prejudice confronted by other ethnic minority youth because of racism. Davis notes a dramatic increase in suicides among young blacks over the past two decades that has brought their suicide rate nearly equal to that of white youths (30).

Hendin, in his book, *Black Suicide*, offers an explanation:

It does not seem surprising that suicide becomes a problem at such a relatively early age for the black person. A sense of despair, a feeling that life will never be satisfying, confronts many blacks at a far younger age than it does most whites (31).

Ethnic minority gay youth additionally face racial discrimination from white homosexuals that is a reflection of their treatment by the majority culture. Dutton writes that the gay liberation movement has often failed to consider the needs of ethnic minorities while ignoring their issues and concerns (32). Jones adds that:

Little has been written about Third World sexual minorities, and when generalities were made about our lifestyles, attitudes, and behaviors, they were often made in reference to white cultures--white cultures being the basis for Third World cultures to deviate from or strive for (33).

Finally, ethnic minority gay youth must contend with discrimination and special problems from their own ethnic group because of their sexual orientation. Hughes believes that ostracism and separation from their own ethnic group is particularly painful and difficult for these youth to cope with:

They expect acceptance by those like themselves who understand and have experienced oppression. Too often, blacks don't want to face the issue and see homosexuality as a struggle for white gay males. Ethnic minority gay youth are seen as an "embarrassment" to their cultural group. There is more concern for daily survival issues than an increased understanding of homosexuality (29).

Jones adds that:

Lesbians and gays growing up in Third World communities experience just as much, if not more, oppression as heterosexual minority

youth do in non-Third World communities. Unfortunately, most of the negative attitudes and oppressions bestowed upon lesbians and gays in Third World cultures are reactions to the influence that mainstream white culture has on it (33).

Two issues that strongly effect ethnic minority gay youth are religion and the family.

Ethnic minority cultures have historically believed that homosexuality is a sin according to the faiths to which they predominantly belong. Parents frequently use religion as the standard to evaluate homosexuality. A homosexual orientation in their son or daughter becomes incompatible with religious beliefs. Ethnic minority gay youth often internalize these religious values and feel guilty for having homosexual feelings and experiences, fearing they are condemned to hell.

The family also plays a central role in the lives of these youth with strong expectations that they will fulfill social roles and perpetuate the extended family. A homosexual orientation is sometimes seen as a sign of disrespect to the family by the youth and a threat to the family's survival.

Ethnic minority gay youth have tremendous fears of losing their extended family and being alone in the world. This fear is made greater by the isolation they already face in our society as people of color. These ethnic minority gay youth who are rejected by families are at risk of suicide because of the tremendous pressures they face being gay and a person of color in a white homophobic society.

Transsexual Youth

Transsexual youth are perhaps the most outcast of all young people and face a grave risk of suicidal feelings and behavior. Huxdly and Brandon found that 53 percent of 72 transsexuals surveyed had made suicide attempts (34). Harry feels that "transsexuals may be at higher risk than homosexuals and

much higher risk than the general population" to suicidal behavior (35). Transsexual youth believe they have a gender identity different from the sex they were born with. They often manifest this belief beginning in childhood through an expressed desire to be a person of the opposite gender, repudiation of their genitalia, gender nonconformity and cross dressing (25). These behaviors may subside by adolescence due to extreme pressures to conform to social expectations. Some transsexual youth, however, try to "pass" in junior high and high school as a person of the opposite sex or engage in increasingly pronounced behaviors that do not conform to gender expectations. These adaptations present serious internal and external conflicts for these youth.

All transsexuals are vulnerable to internalizing an extremely negative image of themselves. They experience tremendous internal conflict between this image and their persistent desire to become the person they believe they are. Heller notes that suicidal transsexuals tend to feel hopelessly trapped in their situation (36). These feelings may be particularly pronounced in young transsexuals who are forced to hide their identity. While wanting to change their sex, they are seldom able to do so and feel condemned to a life they are convinced is a mistake. The DSM III notes that transsexuals frequently experience "considerable anxiety and depression, which the individual may attribute to inability to live in the role of the desired sex" (25). This depression combined with a poor self esteem can easily result in suicidal feelings and behavior in transsexual youth.

Some transsexual youth, however, make increasingly braver attempts to live as a person of the opposite sex. They experience conflicts in making a social adaptation to their believed identity. Many young transsexuals will adapt the most stereotyped roles and behaviors traditionally associated with being a "male" and a "female" in our society. Like other youth, they are trying to define themselves by rigid adherence to these roles.

Sometimes transsexual youth experience problems similar to this:

A young transsexual male was arrested for soliciting an undercover police officer while in drag. He was taken to juvenile hall where he experienced anxiety and confusion around his role in the unit with other boys. One time he reported it was his duty as the "only girl" to provide the other boys with sexual favors. Another time he broke down crying feeling as though he was being used and abused by the other males. A week later he made a suicide attempt.

Transsexual youth who are open about their identity face extreme abuse and rejection from families and peers. Many are forced to leave their home communities and survive on the streets. Their prognosis in our society is poor and they are at high risk of suicide. Gender dysphoria is a disorder that we have little understanding of and a great deal of repulsion for. The only known course of treatment is to help transsexuals to adjust to their believed gender identity and obtain sex-reassignment surgery. Most transsexual youth, however, are unable to obtain or afford the help they need in resolving their identity conflicts.

It is important to distinguish between transsexual youth and gay and lesbian youth who do not conform to gender expectations. Gender nonconformity is common among gay youth in both childhood and adolescence. Some gay and lesbian youth may experience gender identity confusion during adolescence in the coming out process because of the intense social pressures for gay males to be like women and lesbians to be like man. Gay youth may feel they actually have to be a person of the opposite gender to meet those expectations. Hughes, in her work with both homosexual and transsexual youth, emphasizes the importance of working with a young person over a period of time to determine if they are truly a transsexual (29). Gay and lesbian youth come to recognize that

they neither want to change their sex nor live as a person of the opposite gender.

RISK FACTORS IN GAY AND LESBIAN YOUTH SUICIDE

Gay young people face the same risk factors for suicidal behavior that effect other youth. These include family problems, breaking up with a lover, social isolation, school failure, and identity conflicts. However, these factors assume greater importance when the youth has a gay or lesbian orientation. Jay and Young found that 53 percent of gay males and 33 percent of lesbians surveyed believed their suicide attempts involved their homosexuality (1). Bell and Weinberg report that 58 percent of gay males and 39 percent of lesbians felt their first suicide attempts were related to the fact that they were homosexuals (2). Suicide attempts by gay and lesbian youth are even more likely to involve conflicts around their sexual orientation because of the overwhelming pressures they face in coming out at an early age.

General

Bell and Weinberg found that initial suicide attempts related to homosexuality more frequently involved acceptance of self and conflicts with others for gay males, while lesbians tended to cite problems with lovers as the reason (2). Self acceptance may be especially critical for young gay males who tend to have homosexual experiences and are aware of their orientation at a somewhat earlier age than lesbians (1,15). Conflicts with others may be more salient for young gay males "identified" as homosexuals. Gender non-conformity elicits a negative response from others for lesbian and gay male youth, but society seems to have particular disdain for effeminate young males. Young lesbians may experience more extreme social isolation, often reporting an absence of same-sex experiences or knowing others like them during adolescence. They also face stronger social pressures to fulfill the woman's traditional role of marrying and having children and may experience more depression related

to not meeting social expectations. Problems with lovers may be especially critical for young lesbians because their sexuality is often explored within the context of their early intimate relationships.

The earlier a youth is aware of a gay or lesbian orientation, the greater the problems they face and more likely the risk of suicidal feelings and behavior. Remafedi observes that:

Younger gay adolescents may be at the highest risk for dysfunction because of emotional and physical immaturity, unfulfilled developmental needs for identification with a peer group, lack of experience, and dependence on parents unwilling or unable to provide emotional support (5).

He adds that younger gay adolescents are more likely to abuse substances, drop out of school, be in conflict with the law, undergo psychiatric hospitalization, run away from home, be involved in prostitution, and attempt suicide. The Los Angeles Suicide Prevention Center recently found that the strongest causative indicators of suicidal behavior among gay youth were awareness of their sexual orientation, depression and suicidal feelings, and substance abuse--all before age 14 (7). A 14 year old gay male interviewed for this paper confirms that profile:

When I was 11, I started smoking dope, drinking alcohol, and snorting speed every day to make me feel better and forget I was gay. I would party with friends but get more and more depressed as the night would go on. They would always make anti-gay remarks and harass gay men while I would just stand there. Late at night, after they went home, I would go down to the river and dive in--hoping I would hit my head on a rock and drown (23).

Society

It is a sobering fact to realize that we are the greatest risk factors in gay youth suicide. No group of people are more strongly affected by the attitudes and conduct of society than are the young. Gay and lesbian youth are strongly affected by the negative attitudes and hostile responses of society to homosexuality. The resulting poor self-esteem, depression, and fear can be a fatal blow to a fragile identity. Two ways that society influences suicidal behavior by gay and lesbian youth are: 1) the ongoing discrimination against and oppression of homosexuals, and 2) the portrayal of homosexuals as being self-destructive.

It is the response of our society as a whole to homosexuality, and specifically those institutions and significant others responsible for their care, that pose the greatest risk to gay and lesbian youth. Gock believes that homophobia, the irrational fear and hatred of homosexuals, is the root of the problem (37). Gay males and lesbians are still routinely the victims of violence by others. In a recent survey of nearly 2,100 lesbians and gay men nationwide, the National Gay Task Force found that more than 90 percent had been victims of verbal and physical assault because of their sexual orientation (10). Tacit and explicit discrimination against homosexuals is still pervasive in virtually all areas of life. Half of the States still prohibit homosexual relationships between consenting adults (37). Homosexuals are not allowed to legally marry and form "legitimate" long-term relationships. The vast majority of States and municipalities still discriminate against lesbians and gay men in housing, employment and other areas. Gay and lesbian youth see this and take it to heart.

Rofes warns us against the myth that homosexuality, in and of itself, encourages suicide (13). There is nothing inherently self-destructive in homosexual feelings and relationships that could be a source of suicidal behavior. In his book, *I Thought People Like That Killed Themselves* Rofes maintains we have created a stereotyped

image of the unhappy homosexual in literature and the media (e.g., *Boys in the Band*) for which suicide is the only appropriate resolution. This image is reinforced by the fact that homosexual characters in novels and films invariably kill themselves in the end. The myth is perpetuated by the absence of positive adult gay role models in our society where, historically, the only known homosexuals were those exposed by scandal and disgraced in their communities. Rofes maintains this creates a strong negative context for the early identity formation of young gay males and lesbians effectively socializing them into suicidal feelings and behavior. He sees a strong correlation between sexual orientation, social response to that sexual orientation, and subsequent suicidality in an individual.

Self Esteem

A predisposing factor in suicidal feelings among many adolescents is poor self esteem. This is especially true for gay adolescents who have internalized a harshly negative image of being bad and wrong from society, religion, family, and peers. For youth, a poor self-image contributes substantially to a lack of confidence in being able to cope with problems. The images of homosexuals as sick and self-destructive have impact on the coping skills of gay youth, rendering them helpless and unable to improve their situation. Gay youth who have internalized a message throughout their lives of being worthless and unable to cope from abusive and chaotic families are at even greater risk.

Youth with a poor self-esteem and poor coping skills are particularly vulnerable to suicidal feelings when confronting a problem for the first time. They really don't know how to resolve it or even if they can. Gay youth are highly susceptible to suicidal feelings during the "coming out" process when first facing their own homosexuality and the hostile response it evokes in others. They may attempt suicide when they first realize they have homosexual feelings or a gay orientation. Some youth deny their homosexual

feelings and engage in unconscious self-destructive behavior out of self hatred. Others try to "change" their orientation and make a suicide attempt when they recognize their homosexuality will not go away and is part of who they are.

Many youth realize they are gay or lesbian but attempt to hide their orientation from others. They suffer from chronic loneliness and depression. They may attempt suicide because they feel trapped in their situation and believe they do not deserve to live. A suicidal gesture may be a cry for help from these youth for others to recognize and understand their situation. Finally, those youth who are open about being gay, lesbian, or bisexual face continuous conflict with their environment. They remain vulnerable to suicide because they face these extreme pressures with a more fragile sense of self worth and ability to cope with life than other youth.

Family

Family problems are probably the most significant factor in youth suicide. Youth derive their core sense of being cared about and belonging from their families. Gay youth may make suicide attempts after being rejected by their families. For gay and lesbian youth forced to leave home, the loss of parental love and support remains a critical issue for them. Sometimes the youth's sexual orientation becomes a convenient excuse for parents to reject a son or daughter they did not want. Youth from abusive and dysfunctional families are at even greater risk. Wandrei found, in comparing suicide attempts by lesbians and heterosexual women, that lesbians were more likely to come from broken homes (39).

Gay and lesbian youth face more verbal and physical abuse from family members than do other youth. The National Gay Task Force found that more than 33 percent of gay males and lesbians reported verbal abuse from relatives because of their orientation and 7 percent reported physical abuse as well (10). These figures are substantially higher for youth open about their sexual orientation

while still living at home. Sometimes this harassment becomes too much to bear for gay youth and a suicide attempt results.

Gay and lesbian youth may feel suicidal because of a failure to meet family expectations. All youth need approval from their parents. Some youth report only feeling loved by parents when they are fulfilling their parents image of who they should be. Gay youth often feel they can not meet their parents standards and may attempt suicide after real or anticipated disappointment by their families that they will not fit the social script of heterosexual marriage and grandchildren. This pressure is particularly strong for lesbians. Gay youth fear they will not have families of their own and be alone as adults with no one to care for them.

Communication problems also play a serious role in family issues for gay youth. Many lesbian and gay youth hide their orientation from their parents out of fear of rejection. They have often seen a strong negative reaction to homosexuality by parents and siblings including homophobic remarks. The anticipated inevitable loss of love can precipitate a suicide attempt. Parris related a call to a suicide hotline in Washington, D.C.:

The youth said that he was gay and wanted to talk with his parents about it but was afraid because they were very religious. A week later, a man called...to say his son had committed suicide. They were calling an unfamiliar number on their long distance phone bill. By matching the man's address...the tragic connection was made (19).

Religion

Religion presents another risk factor in gay youth suicide because of the depiction of homosexuality as a sin and the reliance of families on the church for understanding homosexuality. Many traditional (e.g., Catholicism) and fundamentalist (e.g., Baptist) faiths still portray homosexuality as

morally wrong or evil. Family religious beliefs can be a primary reason for parents forcing youth to leave home if a homosexual orientation is seen as incompatible with church teachings. These beliefs can also create unresolvable internal conflicts for gay youth who adhere to their faith but believe they will not change their sexual orientation. They may feel wicked and condemned to hell and attempt suicide in despair of ever obtaining redemption.

School

Many gay and lesbian youth feel trapped in school settings because of a compulsory obligation to attend and the inability to defend themselves against verbal and physical assaults. Schools do not adequately protect gay youth with teachers often reluctant to stop harassment or rebut homophobic remarks for fear of being seen as undesirable role models (19). Verbal and physical attacks against gay youth have increased in recent years as students become increasingly threatened by the presence and openness of peers with a lesbian or gay orientation. This abuse begins as early as late elementary school, becomes pronounced in junior high when youth are still immature, and continues into high school. The failure of schools to address this concern can be tragic:

In Lebanon, Pennsylvania in 1977, a 16-year old boy fatally shot himself before entering the 10th grade. He left a suicide note explaining he could not return to school and sustain the abuse and ridicule about being gay from his classmates. A few friends at school supported (him) though they knew he was gay, but the majority ridiculed him without mercy. He skipped classes to avoid the torture and welcomed the summer vacation as a respite. But he was already taking pills to escape the reality of the approach of another school term, when he would have to move from junior high to the even more sharply defined roles of senior

high. On September 3 he shared that anxiety with a friend and on September 5 he shot and killed himself (40).

The failure of schools to educate youth about homosexuality presents another risk factor to gay and lesbian adolescents. By ignoring the subject in all curricula, including family life classes, the schools deny access to positive information about homosexuality that could improve the self esteem of gay youth. They also perpetuate myths and stereotypes that condemn homosexuality and deny youth access to positive adult lesbian and gay role models. This silence provides tacit support for homophobic attitudes and conduct by some students.

Social Isolation

Social isolation has been consistently identified as one of the most critical factors in suicide attempts by youth. The isolation and alienation young people experience in all aspects of their lives can be overwhelming. Those youth hiding their identity often withdraw from family and friends out of fear of being discovered. They feel there is no one they can talk to and no one who will understand. Tartagni, based on his experience teaching in public school, writes that "one of the loneliest people in any high school in America is the rejected and isolated gay adolescent" (41). This isolation may be more extreme for young lesbians who often report a total lack of contact with others like themselves during high school. Joanne, in *One Teenager in Ten*, describes her feelings after realizing her lesbianism in adolescence:

In October, I realized my lesbianism and I did not have someone gay to talk with. I recall the anguish I suffered looking back over my journal during that time period. "Please. Help me. Oh shit, I have to talk with someone...I have to tell someone, ask someone. WHO??!! Dammit all, would someone please help me? Someone, anyone. Help me. I'm going to kill myself if they don't" (28).

Openly gay youth experience blatant rejection and isolation from others. One young gay male related that his parents refused to eat at the dinner table with him after they learned he was gay. Male peers cruelly separate themselves from young gay males with jokes about not wanting to get AIDS. Gay youth frequently do not have contact with other gay adolescents or adults for support. Parents often forbid them from associating with people they "suspect" or know to be homosexuals. Youth service workers often feel uncomfortable talking with gay young people because of their prejudices and lack of understanding for who they are. The Los Angeles Suicide Prevention Center, in their recent study on gay youth suicide, ironically found that gay young people rated social support as being very important to them while simultaneously experiencing people as being more rejecting of them than did other youth (7).

Substance Abuse

Some gay and lesbian young people cope with the many problems they face by using alcohol and drugs. The age of onset for substance use among all youth has become lower in recent years and in 1985 is estimated to be 11.9 years for boys and 12.7 years for girls (42). This coincides with the age that many youth are becoming aware of a gay or lesbian orientation. Rofes found that lesbians and gay men have a higher rate of substance abuse than heterosexuals and found this to be correlated with increased suicidal feelings and behavior (13).

Gay youth are especially susceptible to substance abuse in trying to cope with the conflicts of the coming out process. Remafedi believes there may be a higher rate of substance abuse among gay youth than among gay adults (5). He found that 58 percent of young gay males he interviewed could be classified as having a substance abuse disorder in the DSM III. Gay youth forced to live on the streets experience more severe drug problems. The Larkin Street Youth Center in San Francisco reported that more than 75

percent of their clients identified as gay had serious and chronic disorders (8). The Los Angeles Suicide Prevention Center found a strong correlation between substance abuse and suicide attempts among gay young people (7).

Professional Help

Perhaps no risk factor is as insidious or unique to the suicidal behavior of gay and lesbian youth than receiving professional help. The large number of gay youth who have had contact with mental health and social work services during their turbulent adolescent years would seem to be a positive indicator for improving their stability and future outlook. This is sadly not often the case. Many helping professionals still refuse to recognize or accept a homosexual orientation in youth despite growing evidence that sexual orientation is formed by adolescence (15). They refuse to support a homosexual orientation in youth despite the fact that homosexuality is no longer viewed as a mental disorder (25). They continue to insist that homosexual feelings are just a passing "phase", while making the goal of treatment arresting or changing those feelings and experiences. Martin pointedly describes this process:

Pain and suffering are inflicted on the very young, whom society is supposedly protecting, under the guise of preventing the spread of homosexuality or of treating the individual (24).

He adds that some psychiatrists even advocate creating conflict, guilt and anxiety in adolescents concerned about homosexual feelings where none has previously existed.

Youth who deny their feelings and experience "ego-dystonic homosexuality" are especially vulnerable to this type of adverse treatment. Rather than helping these youth to accept and understand predominantly homosexual feelings and experiences, we see their denial as a "hopeful" sign that they can still develop a heterosexual orientation. When homosexual feelings persist after

treatment has attempted to change them, the youth despairs and is at potentially greater risk for suicide than if we tried to help him/her towards acceptance.

Youth who are aware of their lesbian or gay orientation but hide it from others, may seek help without identifying their concerns about their sexuality. We often do not recognize these youth because we don't acknowledge they exist. We are uncomfortable in discussing or addressing the issue and consequently are unable to identify or resolve the source of the youth's conflicts. A suicide attempt may be an effort by the youth to force the issue and bring it to our attention. It may also be an act of despair over a problem that they feel can not be addressed through professional help.

Even openly gay and lesbian youth are subjected to treatment with potentially adverse effects. Frequently, informing family and counselors that a youth is gay is the impetus for imposed treatment. We assume that the youth's gay orientation is the source of the problem rather than the response of others to his/her being lesbian or gay. Encouraging these youth to change can cause regression in the development of a healthy gay identity and reinforce traditional stereotypes of homosexuals as sick and self destructive. This, in turn, further weakens the youth's self-esteem and ability to cope with problems. Even those professionals who accept the youth as gay or lesbian are often unable to support the youngster in dealing with conflicts at home and in school.

Youth Programs

There is a critical lack of program resources for gay and lesbian youth. Many social and recreational programs for youth make no effort to incorporate gay young people into their services. Few programs will accept or support a gay adolescent in their sexual orientation. Agency policies tacitly or explicitly forbid the hiring of openly gay and lesbian staff, denying gay youth access to positive adult gay role models. Homophobic remarks and attitudes by youth and staff in

many of these programs go unrebuted. Consequently, gay youth do not use many of the youth service resources available to them or soon leave if they do. This increases their social isolation and alienation from their peers.

Other gay and lesbian youth who are wards of the juvenile court have little choice but to live in those placements to which they are referred. Here, they re-experience many of the problems they had in their home communities. Many foster families are rejecting of gay and lesbian youth, feeling less investment than a youth's natural family to keeping the youth in the home. Gay male and lesbian adults are prohibited in most States from being foster parents with gay youth again denied access to supportive adults who could serve as positive role models for them.

Group home placements present special hardships for gay youth because abusive peers often live in the same home with them. Those programs without an on-site school require gay youth to return to public school for their education. Program staff have seldom received training on issues and concerns related to homosexuality. They are frequently unable to understand or work with gay youth effectively. Group homes become a living hell of harassment, isolation, and conflicts with other staff and residents offering gay youth little support and no resolution. A suicide attempt may be an effort to force removal from the placement and find a different home. Many homes, however, will not accept gay youth and few offer specialized services to meet their needs.

Relationships with Lovers

We are all victims of the myth that our first love will be our one true love until death do us part (e.g., Romeo and Juliet). Young people are especially vulnerable to this misconception and breaking up with a lover is one of the most frequent reasons for their suicide attempts. The first romantic involvements of lesbian and gay male youth are a source of great joy to them in affirming their sexual identity, providing them with support, and assuring them that they too can ex-

perience love. However, society places extreme hardships on these relationships that make them difficult to establish and maintain. Bell and Weinberg found that relationship problems were the single most frequently cited reason for the initial suicide attempts of lesbians (62%) and gay males (42%)(2).

Intimate relationships are the primary focus of hostility and discrimination against homosexuals. Society severely restricts where homosexuals can meet, prevents public displays of affection between them, and does not allow legal marriages to be formed. Gay and lesbian youth suffer greater isolation than homosexual adults and far greater social deprivation than other adolescents. It is extremely difficult for them to meet other homosexuals and they frequently do not know anyone like themselves. Gay youth who hide their identity often form their first romantic attachments to unknowing friends, teachers, and peers. These are often cases of unrequited love with the youth never revealing their true feelings. Gay youth are fragile in these situations and may experience despair or suicidal feelings from never being able to fulfill their hopes for a relationship. Some gay youth bravely reveal their feelings and may attempt suicide after blatant rejection by a teacher or the loss of a close friend.

Young gay males often experience their first homosexual relationships as brief sexual encounters in clandestine meeting places (e.g., parks). The extreme need for secrecy and anonymous nature of these contacts seriously hinder their further development. The intensity of sexual feelings that accompany these encounters can easily be mistaken for romantic attachment by young gay males. They may feel suicidal at the failure of these experiences to meet intimacy needs and the inability to fulfill the social expectation of sustaining the relationship. Young lesbians experience greater isolation than young males. They are less likely to explore their sexuality or have relationships during adolescence. They may feel suicidal at the despair of ever finding love in relationships with

other women.

Gay and lesbian youth develop intimate relationships at a later age than other youth and are unable to develop relationship skills in the manner of other adolescents. Their first romances are an emotionally turbulent trial and error process that resembles a second adolescence. Gay youth bring to these relationships extreme dependency needs resulting from the deprivation experienced in their relationships with family and peers. They also are still in the process of forming their identity and have unresolved issues of guilt and poor self-esteem. When conflicts arise in homosexual relationships there are few social supports available to assist them. This is compounded for gay youth by their frequent need for secrecy and the fact that they may not be open about their identity with family and friends.

Breaking up with a lover may confirm earlier negative experiences and concepts associated with being a homosexual. Young lesbians often explore and define their sexuality within the context of their first relationships. A relationship failure for them may be synonymous with problems in developing a positive lesbian identity. For some gay youth, relationships become a way of filling needs for love and belonging missing from family and peers. When the relationship ends, the youth feel as though they have lost everything. They fear that they will always be alone, that no one cares, and nothing is worth living for.

Independent Living

Gay and lesbian youth are more likely than other adolescents to be forced to leave home and become self sufficient prematurely. Some of these youth have been hiding their identities and can no longer stand the extreme isolation in their lives. Many others have been rejected by families and have dropped out of school, effectively forced out of their communities because of their sexual orientation. Gay youth come to large cities hoping to find others like themselves, legitimate employment, a lover and a new

"family." They soon become aware of the lack of opportunities available to them and become enmeshed in the problems of survival. Suicidal feelings emerge as the hope for a new and better life begins to pale.

Most gay youth are unprepared for the difficulties they encounter. They are discriminated against in finding employment and housing by virtue of being both young and homosexual. Many have no vocational training and some were not able to finish high school. They often find limited support from the lesbian and gay male adult community who fear involvement with youth. Many are forced to turn to the streets for survival. A recent study on adolescent male prostitution found that nearly 75 percent identified themselves as gay or bisexual, with family conflicts as the primary reason for leaving home (43). Many gay youth become homeless. Others depend on relationships with people they meet on the streets to obtain shelter and survival needs.

Gay youth living on the streets are at greater risk of suicide due to repeated exposure to chronic substance abuse, physical and sexual assault, and sexually transmitted diseases including AIDS. Their contact with the limited segment of gay adults involved in street life confirms a negative image of homosexuality and they remain unaware of the variety of positive adult gay lifestyles open to them. Their relationships are tenuous and complicated by dependence on their lovers for support. Some gay and lesbian youth engage in increasingly reckless and self-destructive behavior as an expression of the sadness and anger they feel because of the unresolved issues with their families and despair over their new life. A suicide attempt may result from a negative contact with their family, breaking up with a lover, or failure to make it on their own.

AIDS (Acquired Immune Deficiency Syndrome)

Gay and lesbian youth again belong to two groups at high risk of contracting sexually transmitted diseases: gay/bisexual males

and adolescents. Although the number of confirmed cases of AIDS and ARCs (AIDS Related Conditions) among adolescents is small, it is believed that cumulative exposure to the virus, beginning in adolescence, may result in a diagnosis or symptoms as a young adult. Gay and bisexual males have always been subject to a greater number of health problems through sexually transmitted diseases (STD). They comprise a substantial majority of confirmed cases of AIDS and more than 50 percent of adult gay males will contract Hepatitis Type B during their lifetime (44).

Young people are taught in our society that sex is a secretive and spontaneous activity. Adolescent males are not encouraged to take responsibility for their sexual behavior; the vast majority do not take precautions in their sex practices. They engage in impulsive and unplanned sexual activity with grave consequences. Young people contract several million cases of STDs every year (45). Gay and bisexual male youth are particularly vulnerable because of their need for secrecy in sexual contacts and the frequency with which they engage in unplanned sexual activity. Those gay and bisexual male youth living on the streets face a substantially greater risk of exposure to STDs because of repeated sexual contacts in their relationships and prostitution experiences. Street youth face additional exposure through intravenous drug use.

Sexual experiences are important to gay male youth as a way of exploring and affirming their sexual orientation. Many do not take precautions and share a feeling of invulnerability to future consequences that is common among all youth. Remafedi found, however, that 45 percent of young gay males interviewed had a history of STD's (5). The attitudes of young gay males towards exposure to AIDS ranges from denial to extreme fear to not caring. One young male said he was not concerned because "teenagers do not get AIDS." Another was convinced that a head cold he had developed was the first symptom of AIDS. Those who are at greatest risk may be those who simply

do not care whether they are exposed to the virus. Some gay youth have an uncaring approach to life that reflects a "suicidal script." They are more prone to self-destructive behavior because of the severity of the problems they have experienced throughout their lives and specifically in relation to their sexual orientation. Contracting AIDS becomes for them the fulfillment of a life of pain and suffering they no longer want to cope with. They feel that they deserve to die.

Future Outlook

A final risk factor for gay and lesbian youth suicide is a bleak outlook for the future. Young people have difficulty seeing a future life that is different from the present. Gay and lesbian youth fear their lives will always be as unhappy and hard as they presently are. They do not know that they will receive any more caring, acceptance, and support than they are getting now. The little information they have about homosexuality usually reinforces these mistaken beliefs. Gay youth do not understand what life could be like as a gay male or lesbian adult. They do not have accurate information about homosexuality, positive role models to pattern themselves after, or knowledge of gay and lesbian adult lifestyles and communities. Lesbian and gay youth frequently don't know that many lesbian and gay male adults lead stable, happy, and productive lives. They go through adolescence feeling lonely, afraid, and hopeless. Sometimes they take their own lives.

ENDING GAY AND LESBIAN YOUTH SUICIDE

We can substantially reduce the risk of suicide among gay and lesbian youth. The problem is clearly one of providing information, acceptance, and support to gay youth for coping with the pressures and conflicts they face growing up as homosexuals in our society. However, in addressing their concerns we confront two issues of greater magnitude: 1) the discrimination against and maltreatment of homosexuals by our society and 2) the inability of our society to recog-

nize or accept the existence of homosexuality in the young. The homophobia experienced by gay youth in all parts of their lives is the primary reason for their suicidal feelings and behavior. Rofes notes that it is no longer difficult to document the violence, shame, and hatred by society with which lesbians and gay men have lived (13). This is the issue we must address to save the lives of gay males and lesbians who are young.

Society

The first step in ending gay youth suicide is to end the discrimination against and stigmatization of homosexuals in our society. We have tenaciously clung to lies and prejudices about homosexuals for far too long. Too many lives have been brutalized and lost. A growing body of research contradicts our negative biases and assumptions about gay males and lesbians. We do not, as a society, want to continue to hold the untenable position of senselessly hurting others--especially the young. Gay males and lesbians need to be accepted as equal partners in our society. Laws should safeguard their individual rights and not permit discrimination against them in housing, employment, and other areas. Laws prohibiting homosexual relationships between consenting adults should be repealed and marriages between homosexuals should be recognized. Special attention should be paid to the enforcement of laws that punish those who commit violence against homosexuals. Laws can help to establish the principle of equality for lesbians and gay men and define the conduct of others in their interactions with them.

It is an even more comprehensive task to address the negative attitudes about homosexuality held by so many people. A conscious effort must be made to dispel the destructive myths about homosexuality at all levels of society. We must promote a positive image of gay males and lesbians to reduce oppression against them and provide gay youth with role models to pattern themselves after. Massive education efforts need to take

place that would provide people with accurate information about homosexuality. These efforts especially need to be directed to those who have responsibility for the care of the young including families, clergy, teachers, and helping professionals. The media needs to take responsibility for promoting a positive image of homosexuals that presents a variety of gay male and lesbian lifestyles. We must also take personal responsibility for revising our own homophobic attitudes and behavior as an example to others in the same way that we have worked towards revising discriminatory racial attitudes and conduct. It is at the personal level that we have the greatest impact on the lives of those around us.

Third, we must directly address the issue of homosexuality in the young. Our society has historically denied the sexuality of young people. We must educate ourselves on the issues and problems related to sexual development in young people. Society needs to promote a positive image about sexuality and provide youth with accurate information on the subject. We need to recognize that youth are sexually active from an early age and that sexual orientation is frequently formed by adolescence. All youth need to be provided with positive information about homosexuality that presents it as a viable adaptation. We must accept a homosexual orientation in young people in the same manner we accept a heterosexual orientation. Finally, we need to assist gay and lesbian young people in the coming out process and support them in the many conflicts they presently face.

Family

Gay and lesbian youth need to receive acceptance and understanding from their families if we are to reduce their risk of suicide. Parents need to be educated as to the nature and development of homosexuality in individuals. They often feel guilty and ashamed upon first learning that their child is gay because they have been told that it is wrong and they are to blame. Parents should

know that homosexuality is a natural and healthy form of sexual expression. They do not need to feel bad about something that is good. Parents should also know that we still do not know the origins of a heterosexual or homosexual orientation. Research indicates a predisposition towards sexual orientation in children that limits the role of family in its development.

Families have a great deal of influence on how their children feel about their sexual orientation. Parents should be made aware of the potential negative impact homophobic remarks and behavior have on their child. Homophobic conduct can be taken as rejection by youth struggling with their sexual orientation or encouragement by other youth to victimize homosexuals as they grow older. Families need to take responsibility for presenting homosexuality in a positive context to their children. Parents need to accept and understand a son or daughter with a homosexual orientation. Those parents who have difficulty accepting their lesbian daughter or gay son should get more information on the subject and not try to "change" them. They should let the child know they are still loved and cared about as individuals regardless of their sexual orientation.

Ethnic minority families need to understand and accept their gay and lesbian children. Ethnic minority gay youth depend even more strongly on their extended family and culture for support because of the additional oppression they face as a racial minority within society as a whole and the homosexual community. Parents need to be educated as to the extent and diversity of lesbians and gay males within ethnic minority cultures. They need to understand that their child means no disrespect to the family and cannot be any different from whom they are.

Society needs to reinforce parental responsibilities for the care of their children, irrespective of sexual orientation, until they become adults. Parents need to be held accountable for the abuse of their children related to their homosexual orientation. We need to become more conscious of the extent

to which the abuse of gay adolescents occurs within their own families.

Religion

Religions need to reassess homosexuality in a positive context within their belief systems. They need to accept gay youth and make a place for them in the church and include them in the same activities as other youth. Religions should also take responsibility for providing their families and membership with positive information about homosexuality that discourages the oppression of lesbians and gay men. Faiths that condemn homosexuality should recognize how they contribute to the rejection of gay youth by their families and suicide among lesbian and gay male youth.

Schools

Public and private schools need to take responsibility for providing all students at the junior high and high school level with positive information about homosexuality. Curriculum materials should include information relevant to gay males and lesbians as it pertains to human sexuality, health, literature and social studies. Family life classes should present homosexuality as a natural and healthy form of sexual expression. Information on critical health issues such as AIDS should be presented to all students. Curricula should include values clarification around social roles to increase the respect for individual differences and reduce the stigma attached to gender nonconformity. A variety of gay male and lesbian adult lifestyles should be presented as positive and viable for youth. All youth should learn about prominent lesbians and gay males throughout history. Social studies courses should include issues relevant to gay male and lesbian concerns and provide youth with positive gay and lesbian adult role models in our society.

Schools need to take responsibility for protecting gay and lesbian youth from abuse by peers and providing them with a safe environment to receive an education. School staff need to receive training on how to work

with gay youth and handle conflicts involving gay youth. Teachers should feel secure in being able to rebut homophobic remarks and defend gay youth against harassment. Strong disciplinary actions should be imposed on those who victimize gay and lesbian youth. It is important for schools to hire openly gay male and lesbian teachers to serve as role models and resource people for gay youth. Counseling services that are sensitive to the needs and concerns of gay youth should be available to them. Special educational programs may need to be developed for those youth who cannot be incorporated into existing school settings to ensure that young gay males and lesbians receive an equal education.

Social Support

Gay and lesbian youth need access to the same social supports and recreational activities that other youth have. This would reduce their isolation and enhance their positive social development. Communities need to develop social groups and activities (i.e., dances) specifically for gay and lesbian youth as a way of meeting others like themselves and developing relationship skills. Existing youth programs such as the Boy and Girl Scouts should incorporate gay youth into their activities. Youth programs such as Big Brothers and Sisters should enlist gay and lesbian adults to work with gay youth. It is very important for gay youth to see the potential of a happy and stable lifestyle as adults. Lesbians and gay men need to become more involved in supporting gay youth and being positive role models for them. This requires assurance for gay adults that they will not be harassed and accused of "recruiting" youth in doing so.

Professional Help

Lesbian and gay youth must have access to social services and professional counseling that is sensitive to their needs and able to address their concerns. This is critical to reducing their risk of suicide. Sexuality is one of the most important issues facing all young

people. We need to be open about sexuality and accepting of homosexuality in young people. All social service agencies and mental health professionals working with youth need specialized training on homosexuality and issues relevant to gay and lesbian youth. We also need to address issues of suicide and depression in young people. Suicidality needs to be explored with youth who have a gay, lesbian, bisexual or transsexual identity. Problems related to a homosexual orientation should be assessed as a possible reason for suicidal feelings. The goal of treatment should be to assist lesbian and gay youth in developing a positive identity and to support their sexual orientation in the conflicts they face with others. Additional counseling guidelines are provided in Appendix B.

Youth agencies need to provide outreach to gay and lesbian youth to make them aware of services and assure them that they are welcome. Gay youth are often afraid to seek help because of potential negative reactions from others. Programs should hire gay staff that reflect the population of gay youth under their care. Helping professionals should be prepared to offer referrals to gay-identified services and therapists if requested by the youth. It is an accepted premise in social services that individuals have access to programs and staff that reflect their cultural background. This principle is no less true for gay young people who often would prefer to talk about their problems with a lesbian or gay man.

Specialized services should be developed for gay and lesbian youth that reflect their particular needs. Health care programs aimed at preventing AIDS and other sexually-transmitted diseases need to be directed towards young gay males. Alcohol and substance abuse programs need to target gay and lesbian youth as a population at risk. Pregnancy-related services should not assume a heterosexual orientation in young women and be prepared to discuss lesbian concerns. Vocational training and independent living skills programs may need to address special problems gay youth face in becoming self suf-

ficient and in being incorporated into an adult gay community.

Residential Programs

The juvenile justice system needs to take responsibility for ensuring that gay and lesbian youth receive fair treatment by the juvenile court and are placed in safe, nurturing, and supportive environments. Specialized training in working with and understanding gay youth should be provided to foster parents, group home personnel, treatment center staff, and juvenile hall counselors. Gay youth should be incorporated into placements, whenever possible, where the staff has been taught how to support gays in issues with other residents. It is critical for the juvenile court to show leadership in preventing discrimination against gay youth by prohibiting placements that refuse to accept them or that provide them with inferior care. The needs of some gay and lesbian youth might best be served in the immediate future by placement in a gay identified foster or group homes. Extremely few such placements presently exist. The juvenile court should facilitate the licensing of gay male and lesbian foster parents along with the development of residential programs specifically for those gay youth who cannot be incorporated into existing placements.

Research

The lack of information about gay and lesbian youth suicide is a reflection of the oppression of homosexuals by our society and the invisibility of large numbers of gay males and lesbians within the youth population. There is growing awareness that a serious problem exists but we have only started to break down the wall of silence surrounding the issue. Comprehensive research is needed to determine the extent and nature of suicide among young gay males, lesbians, bisexuals, and transsexuals. These studies need to ensure that the entire spectrum of gay youth is adequately represented including lesbians, homeless youth, and ethnic

minorities. This research can be the foundation for greater recognition of the problem and the allocation of resources designed to address it. Hopefully, the work done in recent years will serve as the beginning of the end of suicide among gay and lesbian youth.

APPENDIX A

RISK FACTORS IN GAY AND LESBIAN YOUTH SUICIDE

General

Awareness/identification of homosexual orientation at an early age
Self acceptance of homosexual orientation
Conflicts with others related to homosexual orientation
Problems in homosexual relationships

Society

Discrimination/oppression of homosexuals by society
Portrayal of homosexuals as self destructive by society

Poor Self Esteem

Internalization of image of homosexuals as sick and bad
Internalization of image of homosexuals as helpless and self destructive

Identity Conflicts

Denial of a homosexual orientation
Despair in recognition of a homosexual orientation

Family

Rejection of child due to homosexual orientation
Abuse/harassment of child due to homosexual orientation
Failure of child to meet parental/social expectation
Perceived rejection of child due to homosexual orientation

Religion

Child's homosexual orientation seen as incompatible with family religious beliefs
Youth feels sinful, condemned to hell due to homosexual orientation

School

Abuse/harassment of homosexual youth by peers
Lack of accurate information about homosexuality

Social Isolation

Rejection of homosexual youth by friends and peers
Social withdrawal of homosexual youth
Loneliness and inability to meet others like themselves

Substance Abuse

Substance use to relieve pain of oppression
Substance use to reduce inhibitions on homosexual feelings

Professional Help

Refusal to accept homosexual orientation of youth
Refusal to support homosexual orientation of youth
Involuntary treatment to change homosexual orientation of youth
Inability to discuss issues related to homosexuality

Residential Programs

Refusal to accept/support homosexual orientation of youth
Isolation of homosexual youth by staff and residents
Inability to support homosexual youth in conflicts with residents

Relationship Problems

Inability to develop relationship skills like heterosexual youth
Extreme dependency needs due to prior emotional deprivation
Absence of social supports in resolving relationship conflicts

Independent Living

Lack of support from family
Lack of support from adult gay community
Involvement with street life

AIDS (Acquired Immune Deficiency Syndrome)

Unsafe sexual practices
Secrecy/unplanned nature of early sexual experiences

Future Outlook

Despair of life as hard as the present
Absence of positive adult gay/lesbian role models

APPENDIX B

COUNSELING GAY AND LESBIAN YOUTH

Those of us who work with young people need to be able to identify gay and lesbian youth, accept them for whom they are and support them in resolving their problems. Many of these problems are directly related to their sexual orientation. If we can't identify these youth, we probably won't be able to help them. The first step is being able to talk about sexuality concerns with any youth under your care.

Sexuality Counseling

Don't be afraid to talk with youth about sexuality issues. You do not incur any liability for doing so. Initial interviews should include questions about the youth's sexuality just as they include other issues that affect their life (i.e., family, school, substance use, suicide, and depression). It is appropriate to do further sexuality counseling with a young person if you have a good relationship with him/her and necessary if you feel that sexuality conflicts are an important part of the situation. It is good to examine your own attitudes and minimize prejudices so that youth can feel free to convey their feelings and experiences to you. The principle of nonjudgmental therapeutic intervention is especially important in working with gay and lesbian youth. Feel comfortable with your own sexuality in order to keep tensions between you and your client to a minimum.

Sexual Orientation

Don't be afraid to ask youth directly about their sexual orientation. Sexual orientation should be routinely included in questions and discussions related to sexuality concerns. Some youth will volunteer the information that they have a gay or lesbian orientation. If you strongly feel that a youth is gay, the only way to find out may be simply to ask. This does not reflect negatively on you, and your intuition is often correct. Even if you are

wrong, it rarely hurts your rapport with the youth if approached in a sensitive way. If you are unable to broach the subject with them, it is most likely a reflection of your own discomfort with the issue. Remember that one of the greatest risk factors in the problem gay youth face is the wall of silence surrounding the subject. The silence needs to be broken if you are to enter the lonely place where many gay and lesbian youth reside. It may be good to let youth know in some way that you accept young people regardless of their sexual orientation before asking them. Be prepared to give youth accurate and positive information about homosexuality. Assure them it is a healthy and positive form of human expression. Gay youth will be listening closely.

Acceptance

Accept the youth's sexual orientation as they report it to you. Their sexual identity should be based on the self reporting of their feelings and experiences. Do not label a youth as heterosexual or homosexual based on your own assumptions. Assure gay youth it is not sick, bad or wrong for them to be the way they are and that you are not going to try and change them. Let them know you care about them just as much after the disclosure as before. They are used to being rejected by others who find out they are gay. Respect them for being open and honest with you. It was probably hard for them to do and shows that they trust you.

Sexual Orientation Confusion

Do not assume a youth is confused about their sexual orientation if they identify as gay or bisexual. Many people both gay and straight have trouble accepting that an individual is bisexual. It is important to validate bisexuality as a viable option for youth. However, some youth are genuinely confused about their sexual orientation. It is important for them to know that it is alright to be confused. They should not feel pressured

to label themselves one way or another. A useful method in helping them to clarify a confused or undecided orientation is the Kinsey Percentage Scale. This technique allows the youth to be any combination of homosexual and heterosexual feelings and experiences that adds up to 100 percent. They can be 85 percent straight and 15 percent gay. Or they can be 40 percent straight and 60 percent gay. It is important to let them know you will accept them no matter where they fall on this scale. The purpose of this method is to give youth a context that allows them to identify their orientation along a continuum. It is easy to move from here to discussing specific feelings and experiences with them.

Gender Identity

Assure effeminate young gay males and masculine young lesbians that it is alright for them to be that way. Gender nonconformity is common among gay youth and may be a way for them to affirm their identity. Some gay youth, however, become confused by cultural stereotypes that insist gay men be like women and lesbians be like men. They feel they actually have to be a person of the opposite gender in order to be gay. Be prepared to talk with them about their perceptions of what it is like being a young gay male or lesbian. Help them to separate social adaptation issues from whether they really believe they are a person of the opposite sex. Assure them they do not have to be any particular way in order to be gay. Transsexual youth will express a persistent desire to be a person of the opposite sex and live as that person over time. They will engage in frequent cross dressing and adapt the name of a person of the opposite sex. It is important for you to accept these youth for who they believe they are and call them by the name they want to be called. This is critical to establishing basic rapport with these youth and effectively addressing their concerns.

Self Esteem

Gay and lesbian youth frequently suffer from low self esteem. They have often received a disproportionate amount of negative attention because of their sexuality. Being gay has been the focus of problems and stigmatization for them. Assure them there is nothing wrong with being gay and that it is the response of others to homosexuals that is the source of the problem. Help them to develop pride in who they are and a positive identity as a gay male or lesbian. Sometimes they have had too much of their identity focused on their sexuality. It is easy for them to come to see themselves as sexual beings after becoming known as homosexuals. Assure them that sexuality is only part of who they are. Explore other areas of potential growth that give them a broader understanding of themselves as individuals. Know the potential of gay youth under your care and work with them in a way that allows them to achieve more success than failure. Give positive feedback whenever possible. Be confident and optimistic of their ability to improve their situation and lead stable and happy lives as gay male and lesbian adults.

Family

Gay and lesbian youth sometimes mistake their parents inability to accept their sexual orientation as a rejection of them as individuals. Frequently, parents still love their child but need time to come to understand and accept them as gay. Gay youth have trouble recognizing that an initial negative reaction by parents may change in the future. Help families to clarify their feelings for each other and encourage gay youth to be patient in gaining acceptance. Those gay and lesbian youth who have not come out to their parents should not be pressured to do so. It is a personal decision that they should make carefully. Finally, assure gay and lesbian youth that they too will have families as adults. While not the traditional family, their families will be comprised of those friends, lovers, and relatives who remain close with them over a long period of time. Their relationships can

be as rich and rewarding as those of other people. Being a gay male or lesbian does not mean that you are going to be alone.

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ISSUES FOR SURVIVORS

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SUMMARY

The harvest of dead youth is only a small part of the total damage caused by the current crisis in teenage suicide. For each teenager who dies, a phalanx of survivors is suddenly burdened by devastating reactions. Their lifestyles are altered, their futures scuttled, their minds and bodies attacked by infirmities. Many of them are so shaken that they require professional help.

Unfortunately, the plight of survivors has been almost totally unrecognized. Only a few observers have studied their needs and formulated suggestions for their rehabilitation. Their books on the subject offer useful insights and protocols for regaining a semblance of normalcy. Successful therapy depends largely on what happens during what is now called the grief recovery process.

A survivor himself, the author of this paper describes the steps taken by his family. Each step on the route to peace of mind, he warns, can also involve an emotional booby-trap that can defeat the entire process of liberation; it can also doom a griever to perpetual sorrow. Phases presenting unique difficulties include shock, denial, bargaining, anger, and guilt. Special danger exists, the author says, in the average survivor's confrontation with stigma. Regrettably, he relates, the discovery that the rights of female grievers are frequently denied under the guise of chivalrous "protection." This well-meant denial can sometimes leave a life-long trauma. It must be corrected, and it can be corrected when women survivors, despite their grief,

assert their rights and challenge their masculine care-givers.

Under some circumstances, survivors require special help. Sources to be explored are named. So are procedures for self-help that may dissolve persistent grief fragments. Finally, aspects of community behavior are challenged. If these suggestions were followed, thousands of grievers who have been incapacitated might regain their lapsed roles as worthwhile and useful human beings.

INTRODUCTION

A strange new blight afflicts our earth. Its distemper infects thousands, perhaps millions of our citizens. Neither virus nor isotope distributes its mischief. Its pathogens are man-made and are transmitted by bullets and drugs and broken hearts.

Two examples.

Ken and Mary Whitman were happy Floridians using their combined salaries to put their three sons through college. Jock, the oldest, came home during spring break. One night, the Whitmans returned to their home following a late meeting and found his body swinging from a backyard tree.

Mary charged Ken, the father, with applying too much harsh discipline. He charged her with coddling the boy and countermanding his own orders. The two surviving sons took sides, one for each parent. The Whitmans

separated and fought bitterly over their divorce. Within months, that family had dissolved.

On the Pacific coast, Joan and Tom Miller arranged for their son and daughter to help celebrate their 20th wedding anniversary. On the afternoon of the party, daughter Barbara arrived home late from her job. Passing the garage, she smelled gasoline fumes. Her mother's lifeless body was sprawled over the steering wheel of her car. No suicide note could be found, nor any reason for the act. Family members became unhinged. Tom's social drinking exploded into alcoholism. Barbara became convinced she could have saved her mother's life if she had come home on time. Son Jim, 12, felt shut out and rejected. Acting out his rage, he stole a bike, destroyed school property, and was expelled. The State sent him to a foster home. Barbara attempted suicide, botched it, and was consigned to a treatment center. The father refused help for his alcoholism and was fired. The doomed family lasted less than a year.

Few observers will deny that an ancient and intractable malady seems to possess our spirits. Its infection spares neither nations nor continents. Its victims are a mob too large to count or comprehend. Their ailments fill a pharmacopoeia. Their depression spins off a spray of shattered families, bankrupted careers, and poisoned dreams.

The germ that spreads the plague is called suicide. The men, women, and children left behind are called survivors, and they are in trouble.

So what else is new?

Well, it's new that we are finally aware that our young people are committing suicide at an unprecedented rate. And that every one of those deaths sends up a mushroom cloud that drops a fallout of pain, guilt, and depression on the uncountable survivors left behind.

Daily, the media trumpet a warning. Famous lecturer-on-love, Leo Buscaglia, says "In the United States 14 people between the ages of

15 and 24 kill themselves every day." That's about 5,000 per year. The suicide rate for this age group has tripled over only three decades. Worse, for every death reported, there are an estimated 50 to 100 attempts.

Dr. Art Ulene, the TV pundit, says, "Nearly 60 Americans take their lives every day and ten times that number attempt suicide."

Paul Harvey, commentator and columnist, says that 13 school children are murdering themselves daily.

Newspaper stories confirm their tallies. In Woods County, Wisconsin, five young people shot themselves to death last winter. Ten others in the same community made the attempt and failed. In the suburbs north of New York City, 17 suicides were recorded in a brief time span. Clusters of death have erupted among teenagers in and near Plano, Texas, on Chicago's North Shore, in Lincoln, Nebraska, and in California. Neither sex is spared. More girls than boys attempt by a ratio of four to one. More boys than girls succeed by a ratio of about four to one.

One asks: are such figures accurate? The answer is no. No person on earth knows how many suicides take place in America. The figures are collected using an archaic system that is corrupted by indifference and cronyism. Assigned officials include not only coroners, physicians, and medical examiners, but in some places, deputy sheriffs, morticians, and justices of the peace. Under-reporting is assured in many districts by the refusal of back-patting appointees to pin the stigma of suicide-in-the-family on a friend, a leading citizen, or an elected politician.

The result is a shambles that has been called "the great cover up." Covered up also is the fact that our country has become the killing ground not only for any army of young people who are sick of life, but also of a much greater mass of survivors whose roll call mounts annually into the hundreds of thousands, perhaps into the millions.

Who are they? We can tick them off on our fingers beginning at the family core and

counting the husbands, wives, parents, children, brothers, sisters, grandparents, uncles and aunts. Next, count their pastors, coaches, doctors, counselors, teachers, employers. Last, there are schoolmates, clubmates, and even filling stations attendants.

What do those survivors want from life? Researchers have studied them and named their stations of the cross. Their journey is called the grief process. Its elements include shock, denial, bargaining, stigma, contamination, isolation, fear of insanity, guilt, anger, rejection, ostracism, acceptance, and finally, deliverance.

Their problem is that they don't know what hit them. Nor has their life experience equipped them to cope well enough to stabilize their lives. In many ways, social workers report, they act and think like young babies.

In our culture, society assumes a responsibility for babies. But where does one start? Our courts of law and the practice of journalism offers one formula. Why not examine some witnesses?

An investigator to whom all professionals are indebted is Edwin Shneidman, formerly co-founder and co-director of the Los Angeles Suicide Prevention Center, now located at the University of California. In one of his books, *Voices of Death*, he suggested four initiatives that can help grief-stricken survivors.

First, refuse to accept the stigma of suicide.

Second, rid yourself of the notion that you, the survivor, might suffer a similar fate.

Third, free your daytime thoughts and your night-time dreams of images of blood and violence.

Fourth, restrain any obsession to learn the whys, the whats, and the if onlys.

To assist the recovery process, Shneidman published an essay entitled "Care of the

Bereaved." Here is his advice, paraphrased.

A counselor should begin to work with a survivor-victim as soon as possible.

Be aware that your survivor client will probably welcome a chance to talk with a pro.

Expect to encounter powerful negative emotions such as irritation, anger, envy, shame, guilt, and the like. All of them must be ventilated.

Obtain a medical examination by a physician. It will give you a baseline for checking developments.

Reject the temptation to act as a voice of conscience and offer instead, the soft voice of reason.

Avoid all banalities.

Expect a slow recovery punctuated by setbacks. Expect working through the process to take a long time. Healing is rarely achieved in less than a year. It may extend to the grave.

Insist on a program of health care including suicide prevention, intervention if needed, and postvention as a safeguard.

Since Shneidman's first publication, the world has adopted many of his recommendations and the lot of survivors has improved. Hundreds of volumes now offer programs to prevent suicide. Only a handful are concerned about survivors. The latter are all worth reading, particularly a small volume titled *Suicide* by Jacques Charon, the American philosopher. His historical chapters provide valuable background, and his abstracts of what some of the world's greatest minds have thought of suicide are inspiring.

Or pick up *Suicide and Grief* by Howard W. Stone, a professional counselor. When he discusses pastoral care, his words are golden. His battle plan says:

Keep active.

Join group activities such as club, church, or charity.

Work hard at creating new friends.

Bring into the open whatever hostility still festers.

Rediscover hope.

Find a meaning for your life.

Living When a Loved One Has Died by Earl Grollman has earned its right to be called a classic.

The Ultimate Loss by Joan Bordow reports the death of a child. A survivor herself, she calls it the most devastating of all deaths, and "an affront to our attempt at immortality as well as our sense of fair play."

The Morning After Death by L.D. Johnson tells of a daughter's death by accident on an icy highway. Dr. Johnson, professor of religion at Furman University, has given us the story of a man's triumphant pilgrimage through tragedy. Don't miss the chapter called "The Nature and Uses of Death."

I liked what I found in *Suicide Assessment and Intervention*, a book of essays. Its fifth chapter by Barbara Bell Foglia directs attention to bereaved children. They have never known death and cannot understand it, she says. So when it happens, include them in family conferences. Exclusion makes them feel unworthy. Above all, do not lie. Daddy has not gone on a long, long journey. Mommy has not been called to be with God. Dead is dead is dead.

A motif that emerges from all these writings is a clear understanding of a survivor's suffering. Iris Bolton writes of its many faces in her book, *My Son...My Son...* when she quotes her clients as insisting:

"I am going crazy."

"I cannot live without my man."

"Nobody feels my anguish like I do, so how can anyone else understand my despair?"

"A doctor told me that suicide can be inherited and it frightens me that another person in my family may choose to die,

even me."

"People think we're a bad family, that I'm a bad mother. How can I face anyone again?"

"I can't stop reliving the moment I found the body and seeing the blood."

"If I let go, I'll explode."

But the record shows that unbearable pain can become bearable and that hopelessness can be converted into hope. I've seen it happen.

I saw it happen when Curtis Mitchell Bolton, age 20, my grandson, and the son of Iris and Jack Bolton, shot and killed himself. It takes only a split second to create a survivor, a family of survivors, or a town full of survivors. I shall not recite the bad aftermath. I shall name some of the good things because they became the solid rock on which we built recovery.

The first good thing was advice offered to the Boltons by a friend of the family who was also a psychiatrist. As Iris describes it, "That first visit, he took my husband and me and our three sons into a private room. His gaze locked my eyes to his. 'You will survive,' he declared firmly. 'You will survive, if you choose to do so.'"

Next he advised that all important decisions be made by the whole family. Huddling together, conferring together during those first days, they discovered comfort in consensus.

His third injunction was to look for some good to emerge from the horror of the moment. "Seek it," he urged. I thought, "What an absurdity." Nevertheless, we began to search.

Permit me to pause long enough to indulge in a personal reminiscence. When my grandson shot himself and when I first became the kind of strangled survivor who usually emerges from this kind of experience, I endured a quality of pain previously unknown to me. It spread through the family, sparing no one. Because of it, I became a stu-

dent of pain and of the unique agony that is so often the result of a suicide. What I am reporting now extends far beyond my own experience. Indeed, I am indebted to many survivors and owe special thanks to the members of support groups and to the expressions of members of the caring organization called Compassionate Friends.

I must add this caveat. I can disclose no magic formula to anesthetize human suffering. No rule of thumb applies. The grief process is said to be a series of steps. These steps do not march in single file. Often, they behave like unruly children on a school bus. They change places. They roar and they whisper. In the midst of their grief, some survivors become so confused they literally cannot recall their ABCs. My own experience was a sort of free-fall into a bottomless black hole.

My concern for survivors is that some do not plunge as I did. Instead, they soar, some of them into a booby trap. Think of grief as a minefield strewn with explosives. Survivors are not ordinarily equipped with mine detectors. Nor are many consultants. Some of the latter say, "Just take your pills. You'll be all right." Don't believe it.

Consider this situation. A family has lived for months or years in misery, enslaved by the alcoholic tyranny of a father. His suicide suddenly liberates them. They think, "At last, I don't have to submit to abuse and humiliation." But second thoughts occur. Our moral code asserts that nobody should feel good because of another's death. So guilt takes over. Without help, it may last for years, through additional decades of enslavement.

Grief's second step is usually called denial. Defending itself from shock, the human psyche rejects reality and tries to find a refuge in fantasy. The experience is like being tossed about in a cement mixer. Our orderly world is overturned. So are our most valued precepts. We have believed that a religious faith and a loving heart guaranteed a good life. The bitter fact is that life is no longer good. A dear one's death has scuttled both our faith and future.

So the ego tries to escape the pain by denying the suicide. Circumstances are invented to "prove" the accident. Newspaper stories which repeat one's fancies authenticate their veracity. This is another booby trap. Deep down, one knows that the story is a lie and that pretending otherwise involves a lifetime of lying. What such a survivor does not know is that keeping a secret--any secret--absorbs a prodigious amount of energy. Lack of energy depletes the body and mind for as long as one lives. Presently, fear invades one's tissues, fear that the lie will be discovered. Close behind walks the monster called guilt. Ultimately, comes death.

Next, make way for anger. Let's face it. Anger elbows its way into grief in the majority of suicides. The deed is so surreptitious and so unfair. The brain protests, "Why wasn't I told that his staying alive had become unbearable? Now I'll never know."

Or "Surely I could have been given an hour to argue against his decision to die."

Or "It's so unfair that I'm faced with a future alone, and without even a chance to plan."

Yes, anger floods the mind, washing over all those near and dear. Nor does God escape. Which leads to another kind of ambush. Many survivors begin to play the game of "Who's to blame?" When an accident happens, we Americans are the world's fastest finger-pointers. "Who Done It" is a literary game. After a suicide, the question can become an obsession. A survivor usually learns the hard way that placing blame rarely solves a problem. To help overcome this hazard, a counselor requires steady thinking and affectionate guidance. In today's world, both qualities are in short supply.

Guilt provides another ambush. And guilt is almost inevitable. It comes bubbling out of one's collection of If Onlys: if only I had been a better friend or parent, if only I had spent more time at home, if only I had known what I now know about depression. Teeming with a host of such questions, in some of us, the mind turns to What Ifs.

What if I had shown how much love I could give? What if I had backed off instead of forcing a showdown? What if I had flushed those extra pills down the john, or buried that pistol, or burned that rope.

William A. Miller wrote a useful book a few years ago called *When Going to Pieces Holds You Together*. He tells of a married couple who saved their money all their lives for a round-the-world trip. At age 65, he retires and they buy their tickets. They go to the airport and check in. Their plane is announced, he suffers a heart attack, and dies.

Miller tells us that the wife lapsed at once into the If Only ritual, mumbling over and over:

"If only we'd never thought of this trip."

"If only I'd got him to the hospital sooner."

Another case. A father had twin sons of whom he was very proud. During a walk in the woods, the boys strayed into a pond and were drowned. The father sobbed, "If only I'd taught them to swim." He turned to alcohol for 12 miserable years, repeating daily his self-accusation. Finally, he killed himself.

Guilt spreads like a cancer, destroying self-esteem and sapping one's energy. Thus weakened, many minds think, "If suicide was the only way out for my loved one, then it was because I failed him. So I'm responsible for his death and I must be a terrible person." The thought persists, nourished by apathy, and another survivor is ambushed.

But there's more. Psychologists tell me that guilt often turns to shame, and that shame is a consequence of a perceived failure. Failure demeans the ego. The ego, fighting back however it can, sometimes suppresses the idea of failure and stores it in the mind's back alleys where it decays and stinks for a lifetime.

Some of us turn belligerent and aggressive.

Some of us seek revenge.

Some of us hit the bottle.

Not a pretty picture, is it? Nor is it what the person who committed suicide wanted. His quest in most cases was simply for peace or surcease of pain.

What I am saying is that each step of the grief process usually presents a potential pitfall. Survivors are dumped without warning into an emotional jungle. At first, they are like marionettes, reacting to the pull of forces they do not understand. They respond from the gut, as you counselors know. Those responses are really feelings. Let me repeat what some survivors said:

"I feel utterly lost without the presence of the person who has left me."

"I need the presence of someone to whom I can give my love."

"My memory is missing. I've lost my brain."

"I'm obsessed with that moment when I discovered the suicide and I relive it daily through all my five senses."

"Driving my car, I must think carefully through each movement of my foot or hand. If I don't, I may forget to apply the brake or to turn the steering wheel when I drive into my garage."

"I can't believe that I am alone. Once, I saw my wife standing at the foot of my bed."

"When I catch myself laughing at a friend's joke, I feel guilty."

"People treat me as if I'm contagious."

"I just want to cut and run."

Can anyone doubt that many survivors need help?"

But there's more. In examining the grief process, let's look at what is perhaps the stickiest wicket of them all. Its name is stigma.

Stigma was once defined among the ancients as a sear left by a hot iron. I like that! Can you think of a hotter iron than suicide? Our modern definition says stigma is a stain or a

mark of shame. And I'll buy that. For suicide surely leaves a stain, a judgment which is applauded and endorsed by our society as an unalterable moral fact. Society's attitude, I believe, is a sorry commentary on what we call Christian civilization.

Trace it back a few thousand years. Mankind's primeval fear of evil spirits and voodoo gods gave it a start. It became a social monster about 400 years after the death of Christ when Saint Augustine, the Bishop of Hippo, proscribed suicide because of God's sixth commandment which said, "Thou shalt not kill." Thus, suicide became a sin.

What does its stigma do?

To put it bluntly, it paints innocent bystanders with tar and feathers. If killing is sin, then killing the self produces a sinner. For centuries now, the act has smirched, smeared, slurred and shamed millions of persons whose worst sin was loving another whose allocation of misery was too great to bear.

What does it do?

The telephone stops ringing.

Invitations to parties, birthday celebrations, Christmas tree burnings, fetes which one has attended for years, no longer crowd one's mailbox.

Social gatherings that are attended become stressful because old friends steer small talk away from the mention of death or the name of the dear one who has died.

Walking down the street, you see an old friend approaching. Your heart leaps with pleasure. The friend sees you and crosses to the other side. You know she is pretending. It happens.

This ostracism leads to isolation. One survivor reported, "I feel as if I'd been quarantined." Isolation turns thoughts inward, to apathy, to illness. Sometimes, it persuades one to build a shrine to one's lost love. Have you seen them? Bedrooms where every college pennant, every poster is in the exact spot where it was tacked a decade earlier. Or a dresser top bearing a half-smoked pipe, a golf

ball, and enough change for bus fare. Or a cradle holding a doll.

Often, the damage runs deeper, even into mental decline, a result of the absence of life-supporting relationships.

Quickly, I must catalog a handful of additional hazards that threaten recovery. For instance, the "I'm Going Crazy" syndrome. It strikes early. Your world blurs as if you are submerged. Life wobbles along in slow motion. Making a decision becomes difficult or impossible. Reaching the end of your tether, you conclude, "I'm going crazy." But you are not. You are merely living through the painful process of recovery.

If you are a woman, almost certainly you will be afflicted with over-protection. Well-meaning and thick-headed males may take charge. Pastors and police are usually males. So are physicians, morticians, and cemetery lot salesmen. They want to be helpful but almost without exception they impose their own code of chivalry on mothers, wives, and daughters. One issue is a women's right to view the body of her loved one. Most males are biased to the contrary. Women are weak, unfitted for horrid sights. So they "protect" her. The men of the family are escorted to the mortuary. Not the woman. Recently, I read of a young mother whose need for a last look was denied by her menfolk. On the day of the funeral, she sat like a mad woman hugging the coffin in her arms until she was dragged away. Was her child really inside? We can be certain the question will haunt her all the days of her life.

All this must be changed. But only feminine survivors can change it. To take a last loving look is their right. The change is coming and I hope soon.

Another obstacle to deliverance from grief is what might be called Dangerous Days. Why dangerous? Because they bring to mind all the good things of one's past life. In a normal life, the best days are usually Mother's day, Christmas, birthdays, and anniversaries. In one's post-suicide life, one learns to avoid them. One of the worst days is the first an-

niversary. The mind says, "Exactly one year ago, it happened. Right here in this room. I remember every detail." And the pain returns. But gradually one learns to dodge and to cope, and then you hate yourself for diminishing the goodness of the life you mourn.

Occasionally, that self-hate thrusts you back into the abyss from which you have climbed and you feel doomed forever to eternal damnation. This too will pass. My daughter took the agony of her relapse to the same friend and guide who had counseled her in the beginning. Her attack was normal, he assured her. Almost certainly, it had originated in a remnant of her year-old grief. A remnant, he reminded her, was a fragment of something left over. She understood and her deliverance came quickly.

We have not discussed how long deliverance from grief takes. Sometimes it lasts so long that it becomes an issue. Even old friends tend to magnify its length and to resent its persistence. A flesh wound usually heals quickly. A broken bone takes a bit longer. But a broken heart is bound to no time span. Impatient friends offer encouraging advice. "Let's get it over, fella! We've got a job to do." Or "Come on kiddo! Stop your crying and pick up the pieces."

Lucky, indeed, is the survivor who has a friend who understands that everyone recuperates in a different way and at a different speed. Lucky, indeed, is the friend who can help a survivor to reach the peaceful plateau of understanding that one never gets over such a loss but that presently one will learn to live with it.

Along the way, many survivors wonder if they need help. For most, the answer is yes. Help may come from a professional or from a suicide survivor group. Hundreds of the latter exist. Ask your doctor or your pastor. If you prefer a one-on-one relationship, experts often recommend a trial run of three consecutive visits. Get to know each other, what goals he sets, what improvements he anticipates. If you prefer the caring com-

panionship of persons who have escaped from their own personal black hole, find a survivor group and listen to it. If you are on the same wavelength, there is no better therapy.

The point I belabor is this: the casualties resulting from the suicide of a single teenager always extends far beyond his imagining. We know little about the path that he has chosen to follow but we know for certain that the territory he leaves behind is no Fun City.

Earlier, I intimated that survivors have been neglected long enough. And I asked what services do they need most. My experience tells me that they need to know how others have felt in the same situation. Specifically, they need to be forewarned (as does the whole public) of the storms others have survived and how able counselors have helped them to withstand the thunder and lightning. A perfect guidebook will never be written for every client. But our modern world which mobilizes religion, psychology, and medicine to make us more comfortable offers so many choices. Somewhere help is available. Often, it is within one's own body.

Patricia Sun, a California lecturer and healer, says this: "Every time you feel pain, every time you feel despair, every time you feel loss, every time you feel fear ... it is always your cutting edge."

Some survivors who learn about the grief process feel cheated unless they are conducted through every emotional swamp and sinkhole. They must learn that no ladder will ever help them to escape. A grieving youth who lost his mother spent months bouncing around until his life settled down. He reported, "You build your own grief process and you build your own recovery. It's not right or wrong or good or bad. It just is."

Once one emerges, one becomes a member of a special brotherhood. Sascha Wagner, herself a survivor, describes them: "Some of us get desperate and we don't make it through. Others manage to make it and there is a specialness to such persons. They have an inheritance and they kind of become

a kind of living memorial to their dead children. Those who survive--that's us--make the difference that keeps the trees growing."

So what do we want? What beyond mere survival?

Here is my wish list:

That we not be castigated by the stigma of a suicide that we neither solicited nor approved.

That our loved ones, now dead, not be consigned to oblivion through talk that avoids their existence.

That our productivity as good citizens be accepted socially politically, and industrially.

That the patience of our peers will allow us, each in his own way, to gain the strength we need to balance and carry our life-long burdens.

That in due time we may be surprised by joy.

Finally, I would beg for survivor research that will help educate families in the grief process.

- Teach caregivers, educators, pastors and teenagers that liberation begins when isolation and depression and resentment are guided into productive channels.
- Teach that the swiftest healing comes to those who seek a blessing amid the debris of their messed up lives.
- Teach that suicide is no disgrace when it is chosen to meet a positive need, or even to challenge an incredible fantasy.

Surely, we live in a time of change for the better. Count the once-forbidden topics that have emerged from centuries of silence during our own generation. One can name women's rights, minority rights, abused children's rights, even Gay rights.

It is time, at last, for survivor's rights.

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PREVENTION OF ADOLESCENT SUICIDE AMONG AMERICAN INDIAN AND ALASKAN NATIVE PEOPLES

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INTRODUCTION

In 1985 there was yet another round of media attention to the phenomenon of adolescent suicide in American Indian and Alaskan Native (hereafter, "Indian") communities. This has been a long-standing problem, and a topic which has been periodically "viewed with alarm" by the media. It is also a subset of a concern over similar recent trends in the majority population. Suicide, in combination with high rates for other self-destructive behaviors (e.g., homicide, accidents, substance abuse, unwed motherhood), has meant an ongoing destruction of Indian communities. It is appropriate, then, to talk about prevention of these self-destructive behaviors.

Indian suicide is a topic which has been periodically written about in the professional literature. I will not attempt to review that literature, or to repeat the work of such researchers as Shore (1) or Beiser (2) in epidemiology, or Berlin (3,4) Levy and Kunitz (5), and Ward (6) in suicide prevention. Rather, I will make some general comments about adolescent suicide among Indian people, its epidemiology, and approaches to its prevention. Some of these points have been made previously by the above and by other authors, but is important to review them.

Data Problems

There is an *a priori* assumption, often made in the press (and sometimes in the literature),

of an "epidemic" of suicide among adolescent Indians. Despite the importance of sound epidemiologic data to define whether indeed an "epidemic" exists, only a few articles have used epidemiologic methods to define the extent and shape of the problem of suicide among Indian adolescents. Such work is necessary as a basis for appropriate clinical and community action. Unfortunately, however, studies in the area of Indian suicide present a multitude of difficulties.

One problem is that suicide is a relatively rare event, especially in small populations such as Indian tribes. This is of concern because a very small change in raw numbers can look very large in terms of rates. These small changes (which result in large changes in rates) may be due to real changes in the prevalence in suicide, but can also result from problems in reporting suicide deaths. For example, different individuals from time to time may report and record suicide deaths in a community or county. They may or may not correctly identify Indians as Indians on death certificates. In addition, they bring to the process different attitudes about suicide, which affect their definition of suicide and their willingness to report it. Indian communities themselves may be reluctant to identify suicides as such for fear of adverse publicity, and this reluctance may wax and wane.

With regard to "epidemics" among Indian

people *per se*, it is not clear that suicide rates are higher in Indian communities than for the surrounding areas. To evaluate this, it is important to use contemporaneous data for comparison from the same general area as the Indian data before deciding that a problem is specifically an Indian problem. One frequent mistake is to compare the total U.S. suicide rate with the local Indian rate, or to compare both the total U.S. Indian and non-Indian rates.

Using data from one or a few tribes to generalize to all Indian people presents another difficulty. There are, depending on the definition used, more than 400 identifiable tribal groups in the United States, which are quite diverse with regard to size and culture. To assume that suicide rates, reasons for suicide, and potential solutions to suicide among tribes are identical, or even similar, is a serious mistake. For example, there are large differences in rates and patterns of suicide between Navajo and Hopi, the latter of whom is completely surrounded by the former. Such differences are easily "swamped" in reporting figures for large areas.

Related to the problem of tribal diversity is the paucity of the data on non-reservation Indians. Less than half of Indians live on reservations; the remainder live in urban or rural communities, often far from reservations. It would be a serious mistake to assume that the nature and extent of the problem is the same for all of these communities. Studies that attempt to group these communities together may present an erroneous picture.

Finally, there is a problem of what data are included by the various sources to determine suicide rates. For example, the Indian Health Service (IHS) areas have changed over time as have the definitions of an IHS "reservation state". Using IHS data to look at suicide trends, therefore, may present a problem.

Two Studies

Two examples of attempts to deal with the

data problems follow.

Pam Thurman sought data on suicide in Cherokee County, Oklahoma and also talked with people who could fill the gaps in the data. (She herself is a member of the community, which allowed her access to such informal data sources.) She found that the suicide rate among Cherokees was not different from the white suicide rate in the county (7).

In the second study, Levy and Kunitz found that suicide rates varied widely within the Hopi tribe, that suicides were often clustered within particular families, and that the Hopi rates rose and fell with that of other rural counties of Arizona (8).

To understand the problem of adolescent Indian suicide better, we clearly need further epidemiologic and services research. We need to look more closely at small, homogeneous areas, using appropriate comparison groups (e.g., local rates for non-Indians). We need better methods for collecting vital statistics including working closely with the tribes in a way that doesn't penalize them for reporting suicides, e.g., providing the press with another sensational story. In addition, data need to be interpreted in light of the culture of the community and in light of its rural or urban character.

With regard to services, research is needed on how the presence or absence of particular services, treatment personnel, or treatment facilities affects suicide rates.

Finally, what "protects" some communities against suicide? This can be as revealing as learning about the communities with high rates. Here, we could and should study the similarities and differences between areas with high or low suicide rates.

Strategies for Improving the Situation

The first consideration in dealing with a problem is to be sure that it really is a problem. Suicide and other self-destructive

behaviors are always found in a population, and even one case is cause for concern. There also may be peaks from time to time in the baseline rates of suicide in a community, just as there are in diseases and other social maladies, and these certainly constitute a reason for specific response in that community. If an "epidemic" does occur, a more general response may be appropriate. Before responding, however, epidemiologic data should be obtained using methods which are congruent with the particular situation. To rely on news reports of a high suicide rate, or on national aggregate statistics as a rationale to move into a particular community or group of communities with large-scale plans to "fix" the problem may be grossly inappropriate, a waste of resources, and damaging to the community.

When going into a community, whether to collect data or mount a program, it is absolutely necessary to work with community representatives initially and throughout the project and to conform with the culture and beliefs of the particular community. This is true in any community, but especially in Indian communities, for Indian people have learned from long experience that when the white man wants to study them or help them with a new program, the outcome stands a very good chance of being negative. Finally, a solution in one community may be totally ineffective and inappropriate in another community, even if the communities are nearby or seem similar in many ways.

It is also very important to understand suicide as one of several self-destructive behaviors which are "end-stage" behaviors. It is seldom that someone dies a self-inflicted death without previous events or conditions which led to the final behavior. The specifics of these previous events or conditions are key to the prevention and treatment of self-destructive behaviors. Although "end-stage" services (such as suicide crisis centers) are useful, prevention and treatment must begin much earlier. To rely on interventions at the last stage is analogous to trying to prevent renal disease by providing services to people

ready for dialysis. We must also find ways to look more definitively at several causes of death which may have a common etiology instead of looking separately at suicide, alcoholism, homicide, and accident statistics.

Prevention

How, then, can we prevent suicide in Indian youth? Some foci include:

1. Improving socioeconomic conditions. This is not a direct concern of psychiatric and other health care personnel and programs, but must be included as one of the keys to influencing self-destructive behaviors. Specifically with regard to Indians, until there is a solid economic base on reservations and in other Indian communities, it will be very difficult to alter the rates of these negative behaviors. The effective involvement of qualified Indian people in the process of economic and political development is a "must" (although simply terminating all help, in the name of "self-determination", is very destructive).

2. Recognizing and treating underlying psychiatric disorders, providing services for Indian people which are adequate in number and quality, and coordinating with other health services. Clearly, many psychiatric disorders, mild and severe, are important risk factors for suicide and other self-destructive behaviors. Many of the disorders of youth which can lead to suicide are treatable. In spite of this, the mental health programs of the IHS have been chronically under-funded; mental health, alcoholism, drug abuse, and general health services are often separated administratively and functionally; and there are far too few qualified treatment professionals in the mental health, alcoholism, and drug abuse treatment programs. Also, because mental health services are so decentralized in the IHS, there is little development of national or even regional strategies for effective service delivery.

The majority of Indians are healthy, perhaps even healthier overall than at any time since the European invasion of the continent. But

a great prevention challenge remains in helping adolescents and parents who suffer from alcoholism, drug abuse, and other psychiatric disorders. Case-finding, effective service delivery, and improved services *per se* are essential in terms of early identification and treatment of pathology which leads self-destructive behaviors.

3. Coordinating health (including mental health, alcoholism, and drug abuse) services with other human services. It is important to work with schools, employers, tribal leadership, and families in dealing with self-destructive behaviors. A key actor is the primary care physician who is in an excellent position to recognize and deal with factors which may lead to violent behavior. This role may include treating the patient, referring to qualified psychiatric specialty care, and making connections between schools, families, etc., thereby building a care-giving network or system for the troubled youth. This means dealing with basic problems early, not waiting for the last stage behaviors.

4. Addressing culture conflicts among young people. There is often an enormous conflict between the white and Indian cultures, which profoundly influences youths who are forming their personal identities. Having meaningful cultural experiences, as well as helping youth to deal with white culture *vis a vis* their Indian culture, are important in the community, the family, and the schools. Some active treatment programs that address this conflict can be adopted as prevention models. These include the model boarding school on the Navajo reservation (9), and the Rainbow Lodge alcoholism treatment program in Canada (6).

We have spoken about primary prevention (prevention of self-destructive behavior, *per se*), and of secondary prevention (early recognition and treatment of conditions which may lead to self-destructive behavior). Equally important is tertiary prevention: providing appropriate followup services to Indian youth who have received active psychiatric treatment or who have actually engaged in self-destructive behavior. This

must be done with a recognition that the alienation which Indian youths feel toward the care-giving system can be profound. Therefore, active outreach must be performed in a culturally sensitive way.

CONCLUSION

Suicide and other self-destructive behaviors in Indian youth are not new problems. At the present time we do not have the information to determine the extent and shape of the problem in a given Indian community at a given point in time. From time to time, awareness of problems surfaces outside of the Indian community, but this may not be so much discovery of "epidemic," but rather highlighting a particular community at a particular time. Prevention needs to be aimed not to the communities which have most recently made the press, but rather at communities which can be demonstrated by epidemiologic research to have a problem needing a specialized response. That response must be scaled to fit the nature and extent of the problem, not simply reacting with large scale initiatives when less expensive measures are called for. Both the gathering of data and the planning of responses should be done in conjunction with the tribes themselves, with unobtrusive measures and with cultural sensitivity. We should remember that the challenge is not just suicide, but all self-destructive behaviors, all of which are interwoven with one another. Finally, we should not be satisfied with prevention only at the "end stage", but work towards early recognition and treatment of conditions, social and psychiatric, which lead over time to self-destructive behaviors.

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SUICIDE AMONG ASIAN AMERICAN YOUTH

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Since the mid-1960s, the media have portrayed the positive stereotype of Asian American youth as a special population who work hard to pull themselves up by their bootstraps (*New York Times Magazine*, January 9, 1966; *U.S. News and World Report*, December 26, 1966; *Time Magazine*, March 28, 1983; *Sunday Chicago Sun-Times*, January 22, 1984; *Chicago Tribune*, January 15, 1986). Little attention, if any, was placed on the social problems faced by young Asian Americans in their struggle to excel and to establish themselves in the U.S. society. Similarly, research on suicide among Asian American minorities has not focused on the age group 15 to 24 years old, but have instead tended to highlight the problems of the elderly (e.g., Bourne, 1973; McIntosh and Santos, 1981).

OBJECTIVES

This paper fills the knowledge gap concerning Asian and white American youth suicide by examining the national suicide data for two time periods in the age range 15 to 24

years. Aside from the apparent need for a descriptive database, such a comparison serves four other objectives: (1) to determine the magnitude and direction of the ethnic differences in youth suicide between Asian and white Americans; (2) to examine the changes in the suicide rate over time between the different groups; and (3) to explore plausible factors for the observed ethnic differences in Asian American youth suicide; and (4) to discuss the implications of the research findings from a prevention perspective.

Many of the findings in this paper are based on data extracted from death certificate records and submitted by each of the 50 States to the National Center for Health Statistics (NCHS). Created in 1960, NCHS is mandated to collect, analyze, and disseminate statistical and epidemiologic data on the health of the nation. Because the size of the Asian American population has remained numerically insignificant until recently, national mortality data for this special population are difficult to analyze and interpret even though they have existed for some time at NCHS. Furthermore, since analyses of

such data require population denominators collected by the Bureau of the Census, the absence of intercensal estimates for Asian Americans in general and Chinese and Japanese in particular, has severely limited the use of these records for research purposes. For these reasons, meaningful calculation of suicide rates can be made only for the years 1970¹ and 1980.

Of the 40-some Asian American subgroups enumerated in the last census, only the suicide statistics for Chinese and Japanese Americans will be presented in this paper for reasons of availability of data and confidence in the quality of the data². This decision should not be interpreted to mean that the statistics obtained for these two older Asian American groups in any way represent all Asian Americans. In the strictest sense, the term Asian Americans is a meaningful concept only insofar as it identifies the geographic origins of a group of people who are visibly and culturally different from the majority white population. However, the population itself is comprised of a number of diverse groups which, in many ways, are as different from one another as they are different from other races.

It should also be stated that mortality data in general, being collected primarily for legal purposes, have their inherent limitations. Reporting or classification errors are possible. The magnitude of errors may vary by State as well as by specific information (e.g., sex may be more accurately recorded than ethnicity). Although many studies assess the

quality of medical recording in death certificates, such studies have not been targeted to a specific population such as the Asian Americans. We do not know, therefore, the extent of underreporting or misreporting of race or of cause of death for Asian Americans other than what Yu (1982) reviewed in her earlier work on infant mortality. This acknowledgement of the limitations of data must also be balanced by an appreciation of the fact that the United States probably has one of the better maintained vital registration systems of all modern nations, and mortality data extracted from death certificates are our only source of statistics on suicides. Thus, in the absence of alternative sources of statistics on suicide, we are forced to use the death certificate data. Caution, however, is clearly warranted in the interpretation of these statistics.

SOCIODEMOGRAPHIC PROFILE OF ASIAN AMERICAN YOUTH

Unpublished data based on 100 percent count of the U.S. Census show that there were only 89,342 Chinese Americans and 96,059 Japanese Americans between 15 and 24 years of age in 1970 (Liu and Yu, 1975). This age group represented 20.5 percent of the total Chinese American population and 16.2 percent of the total Japanese American population at the time (Table 1). (All tables appear at the end of this chapter.) By 1980, the number of 15 to 24 year olds increased by 63.5 percent (to 146,035) for Chinese Americans, and 25.4 percent (to 120,443) for Japanese Americans, compared to only 11.7 percent increase for white Americans.

Table 2 shows the school enrollment pattern of 15 to 24 year olds by nativity and sex, based on the 1980 Census. In every age group examined (15-24, 15-19, and 20-24 years), white Americans have the largest percentage not enrolled in school followed by Japanese Americans. Chinese Americans consistently have the lowest percentage not enrolled in school. Their rate, for the most part, is

1. National mortality data prior to 1970 which contain information on Chinese and Japanese Americans have either been destroyed because they were not packed in tapes so as to be accessible for computer manipulation, or for those years in which they are available (e.g., 1968 and 1969), appropriate population denominators with detailed breakdowns by age and sex for Chinese and Japanese are not available from the Bureau of the Census.

2. Data for other groups, such as the Filipinos, are available but are of dubious quality because they produce death rates which are improbable. Likewise, data for the Pacific Islanders are extremely small, subject to severe fluctuations, and geographically confined to Hawaii and the West Coast. Consequently, a meaningful concept of national suicide statistics for the Pacific Islanders remains to be studied.

roughly half that found for white Americans. This is true regardless of nativity and sex³. In the late teens (15-19 years of age), the percentage of Chinese not in school is only about one-third of that for white Americans. Since this is true for both foreign- and native-born, cultural transmission of values concerning the importance of education in the Asian American communities is probably far more important than selective immigration *per se* in explaining the differential rates of school enrollment between these ethnic groups.

The employment status of persons 15-24 years old who are not in school is shown in Table 3. Among foreign-born males not in school, the employment rate of white Americans is the highest of the three ethnic groups compared. About 82 percent of white Americans, 77 percent of Chinese Americans, and 73 percent of Japanese American youth who are not attending school are employed. Among foreign-born females, a larger percentage of Chinese and Japanese American youth (67 and 58 percent, respectively) are employed compared to white Americans (53 percent).

Among native-born males, the employment rate of white and Chinese Americans are similar (about 79 percent), both being somewhat lower than that found for Japanese Americans (85 percent). For native-born females, white American youth have the lowest employment rate (65 percent) compared to Chinese (84 percent) and Japanese Americans (81 percent). It appears that native-born Asian American women are shouldering the responsibility of productive employment at a young age, probably to support themselves as well as their parents and siblings.

An examination of the employment status of those who are in school shows that among the foreign born 15-24 year olds, Japanese have

the lowest percentage of persons who are working while going to school (Table 3). This is true for males (26 percent, compared to 30 percent for Chinese and 32 percent for white Americans) as well as females (28 percent, compared to 34 percent for Chinese and 31 percent for white Americans).

Among the U.S.-born youth, white Americans have the lowest percentage of persons who are working while going to school (36 percent for males and 35 percent for females), while Japanese Americans consistently have the highest percentage of persons who are both employed and in school (42 percent for males and 43 percent for females). Among foreign-born youth, the findings are just the opposite. Japanese American males and females have the lowest percentage of persons who are working and going to school, while the Chinese and white Americans have similar rates.

Household type information on the 15 to 24 year olds are shown in Table 4. Among U.S.-born youth, the percentage of persons living in a married couple household varies from 64.3 percent for Chinese Americans, 65.4 percent for Japanese Americans, to 67.5 percent for white Americans. However, the percentage of youth living alone, in group quarters, or in nonfamily households shows somewhat greater variability, with the Chinese having the largest percentage (25.6 percent) of the three groups living in these "other" type of households. No doubt this is due to the high percentage of Chinese native-born youth who are enrolled in school, compared with the other two groups.

For foreign-born youth, the data in Table 4 are broken down by year of immigration. A larger percentage of Asian Americans who were between the ages of 15 and 24 in 1980 and who immigrated to the United States in the 1970s are either living in group quarters or in nonfamily households. Again, this is most likely due to the large numbers of Asian Americans who are enrolled in school and living apart from their family. Japanese American youth who immigrated during the 1970s have a disproportionately large per-

3. Tests of significance of differences in proportion were conducted for all the comparisons presented in Tables 2 to 4, inclusive. The differences between ethnic groups are statistically significant at the .05 level with one exception: the comparison of household type between white and Chinese Americans who immigrated before 1970 presented in Table 4.

centage (around 13 percent) living alone, compared with the other two groups (no more than 5 percent). Why this is so is far from clear.

AGE-SPECIFIC SUICIDE RATES: 1970 and 1980

Tables 5 and 6 show the average annual age-specific and age-adjusted suicide death rates for white, Chinese, and Japanese Americans in 1980 and 1970, respectively. Following the convention of the National Center for Health Statistics where these data are managed, the U.S. population in 1940 was used as the standard population for age adjustment.

Across time and for all ethnic groups in 1980, male suicide death rates in the 15 to 24 age range have exceeded female rates. With a suicide rate of 13.79 per 100,000 population in 1970, which increased to 21.91 per 100,000 in 1980, white American male youth have the highest suicide rates among the three ethnic groups compared. Overtime, there was a 58.9 percent increase in suicide rates among white males 15 to 24 years old. The Chinese American male suicide rate increased even more (by 122.3 percent) from 3.63 per 100,000 population in 1970 to 8.07 in 1980.

On the other hand, although Japanese American male suicide rates (11.97 per 100,000 in 1970 and 14.09 per 100,000 in 1980) have been higher than the Chinese rates, the rate of increase in suicide rates over time is not as dramatic as that found for Chinese Americans.

Given the population increases that each of the three ethnic groups have experienced over time (see Table 1), the question arises as to whether the increase in suicide rates between 1970 and 1980 may be a result of the population growth. A closer examination of the data show that the percent population increase is 13.7 percent for white male 15 to 24 year olds, 63.1 percent for Chinese American youth, and 30.6 percent for Japanese Americans. In short, the ratio of the rate of change in suicide rates to the rate of popula-

tion increase is highest for white American youth (4.3), lowest for Japanese Americans (1.7), and intermediate for Chinese Americans (1.9). This finding indicates that factors other than population growth explains the increase in suicide rate over time.

By comparison, suicide rates for white American females 15 to 24 years old have not changed significantly between the two census years. (4.21 per 100,000 in 1970 compared to 5.00 in 1980) even though the population within this age range has increased by about 10 percent. The suicide death rate for Chinese American females increased by 59.2 percent, which is less than the 63.8 percent increase in the population of females in the same age group, while the suicide death rates for Japanese American females dropped slightly from 5.51 per 100,000 in 1970 to 4.52 per 100,000 in 1980, during which time the population had actually increased by 20.3 percent.

On the basis of the age-specific death rates and the above ratios, some readers may conclude that suicide is not a major public health problem for Asian American youth, compared with white Americans. However, an examination of the proportional mortality statistics gives a different picture of the findings.

PROPORTIONAL MORTALITY FOR SELECTED DEATHS

While the age-specific rate for any cause of death is calculated using the population size of a given group as the denominator and the number of deaths from a specific cause for that particular group as the numerator; proportional mortality for any cause of death is obtained by using the total number of deaths for any given population as the denominator and the specific cause of death as the numerator. Because of the differences in the denominator, it is possible for these two rates to give apparently contradictory information.

Table 7 presents the proportional mortality rates for suicide deaths by ethnicity in 1970

compared with 1980. One notes that suicide accounts for a much larger proportion of deaths among Asian American youth in 1980 than among white Americans. Among males, for instance, suicide represents 21.3 percent of all deaths for Japanese Americans, 15.1 percent for Chinese Americans and only 12.9 percent for white Americans. Among females, it constitutes 20.8 percent of all deaths for Chinese Americans, 14 percent for Japanese Americans, and 8.8 percent for white Americans⁴.

There is another way of examining the proportional mortality data in Table 7, that is, making within-group comparisons over time. In this case, the percentage change in average annual proportional mortality for Chinese American 15-24 year olds between 1969-71 and 1979-81 is striking (200 percent for both sexes) compared to white (53 percent) or Japanese Americans (33 percent).

However, it is important to stress that, to begin with, Japanese American proportional mortality rates had been very high in 1969-71, and they remained high in 1979-81, whereas the Chinese American rates were very low in 1969-71 and they increased dramatically in 1979-81. From a public health standpoint, this increase in proportional mortality rate over time for all three ethnic groups is cause for concern. It is therefore a serious misconception to rely solely upon the age-specific suicide rate of 15-24 year olds and conclude that Chinese American youth do not have a suicide problem. What is a "high" or "low" suicide rate depends on what group or what year is used as the reference point for comparison purposes.

The high proportional mortality rates among Chinese Americans relative to their low age-specific death rates are most likely a consequence of competing causes of death. As a

rule, deaths due to accidents has always been one of, if not ~~the~~, major competing cause of death for persons in the age range of 15 to 24 years. So long as the proportional mortality rates for accidents remain very high, if not the highest, of all causes of death, the proportion of deaths from suicide can be expected to remain relatively low. This becomes apparent when one calculates the potential years of life lost for different causes of death, as shown below.

POTENTIAL YEARS OF LIFE LOST

Using the 10 leading causes of death for the United States, Table 8 represents the distribution of average-annual potential years of life lost before age 85 for Chinese and Japanese who die at age 15 or older. Potential years of life lost before age 85 are calculated by totaling the remaining years until age 85 for each person who committed suicide in his/her youth (i.e., in the age range between 15-24 years). For example, a person dying at age 20 would contribute 65 years to the total, while one who dies at age 70 contributes only 15 years. With this indicator it is possible to rank the different causes of death while including only deaths before age 85 and giving more weight to early deaths.

Of the 10 leading causes of death presented in Table 8, potential years of life lost can be calculated for only 6 of them. This suggests that for Chinese Americans, the remaining four leading causes of death (diabetes mellitus, Chronic Obstructive Pulmonary Disease, Cirrhosis of the Liver, and Arteriosclerosis) occur at such older ages that the potential years of life lost approaches, if not equals, zero.

In terms of selecting health promotion and prevention priorities, the ranking of causes of death according to potential years of life lost is more useful than ranking causes of death according to the total number of deaths. A death at the age of 20 or older has a different impact, at least to the family and to society at large, than a death at the age of

4. Unfortunately, due to the exceedingly small denominators of Chinese and Japanese Americans in comparison with white Americans, application of statistical tests of significance fails to produce a p-value of .05 or less. Strictly speaking, then, no firm conclusions can be reached regarding the statistical significance of these different proportional mortality rates despite the fact that in some instances (e.g., Chinese female youth) the proportional death rate is more than two times that of the white female rate.

80 years.

Furthermore, because calculation of the potential years of life lost is affected by the population size as well as by the age-specific death rates, it is more interesting to compare the potential years of life lost between groups for each cause of death rather than to look at the absolute figures themselves. Table 8 shows that all three ethnic groups have similar rankings of the potential years of life lost at age 15 or older for the 10 leading causes of death in the United States. Accidents head the list, followed by suicide. Thus, suicide is a serious problem in the Asian American population just as it is in the white American population.

However, the groups differ greatly in the percentage of potential years of life lost due to a particular cause of death. Accidents, for example, account for 73 percent or nearly three-quarters of the average annual potential years of life lost for white Americans who die at the age of 15 or older during 1979-81, while they account for only 45 percent for Chinese Americans and 58 percent for Japanese Americans. On the other hand, suicide accounts for a much higher percentage of potential years of life lost for Chinese (28 percent) and Japanese (25 percent) Americans, compared to only 15 percent among white Americans.

Those concerned with the identification of major public health problems are well advised to examine the distribution of potential years of life lost, as a first step to defining priorities. As a second step, rates of potential years of life lost should be considered for identifying trends over time.

Table 9 shows the average annual potential years of life lost by 10 leading causes of death for ages 15 to 24 years in 1969-71. The data indicate a higher percentage of potential years of life lost due to suicide for Japanese youth (18 percent) compared to Chinese (8.1 percent) and white Americans (10 percent). By 1979-81, it is the Chinese youth who had the highest percentage of potential years of life lost to suicide (28 percent) compared to

Japanese (25 percent) and white Americans (15 percent).

THE NATIVITY FACTOR

Nativity, or the decedent's place of birth, is an important factor in Asian American mortality analysis. It is generally taken as a proxy measure for cultural upbringing and socioeconomic lifestyle, given the limited information available from the death certificate. In addition to age and sex, nativity is an important risk factor in the analysis of Asian American mortality data because among Chinese Americans 15-24 years of age, 60 percent are foreign-born, compared with 21.4 percent for Japanese Americans and 4.3 percent for white Americans. The variability in the proportion of foreign-born raises the question as to whether there are nativity differences in suicide mortality rates for Asian American youth compared with white Americans. Unfortunately, the nativity information is not available in the national mortality data tapes for 1969-71. Analysis of the variable is thus confined only to the 1980 data set.

Table 10 shows that at each age group, the suicide death rate for foreign-born youth is consistently higher than that found for the native-born. In the 15-24 age range, the rate for foreign-born Chinese is 7.1 per 100,000 population compared with 5.2 for native-born youth. For Japanese Americans, the nativity ratio is higher--the rate being 14.3 per 100,000 for the foreign-born youth compared with 8.1 for the native-born.

Clearly, suicide is a serious problem in the Asian American population, and more foreign-born youth are at risk than the native-born. Any prevention efforts should pay strong attention to the foreign born Asian American youth if we are to reduce effectively the overall suicide rates.

DISCUSSION

The study of suicide as a socio-cultural phenomenon is a classic one, dating as far

back as Durkheim's classic work (1897, translated by Spaulding and Simpson, 1951). His innovative approach to the study of suicide involves inter-societal comparisons of suicide statistics over time and among different segments of the population--an approach which emerged as a result of his concern over societal integration and the nature of group cohesion.

Insofar as research on Asian American suicide is concerned, the work has barely begun. This paper is perhaps one of the very first efforts at exploring the National Center for Health Statistics' archival death files to analyze the inter-ethnic differences in suicide rates among Asian American youth. Previous efforts had been targeted to specific local areas, such as San Francisco (Bourne, 1973) or Hawaii, or to age groups other than age 15 to 24. It is obvious that we have barely scratched the tip of the iceberg on Asian American suicide at the national level.

What we have learned is that making inter-ethnic comparisons at one point in time has distinct disadvantages in that when the suicide rates for the reference population (in this case, white American youth) are high, Asian American rates always appear low by contrast. If one were to examine the Asian American suicide rates over time, however, one quickly discovers that these rates have increased dramatically. The reasons for their increase are not yet clearly understood, much less studied.

We must admit that, theoretically, we have no adequate explanation, as yet for the lower age-specific suicide rates for Chinese and Japanese Americans as a group, compared to white Americans. One possibility is that overall rates for the 10 leading causes of death are lower for the two Asian American groups than for white Americans (Yu et al., 1985). Similarly, their age-specific suicide statistics are also lower than that found for white Americans. Thus, any Asian-white comparison of rates would always lead to the conclusion that the former appear to have few health or social problems.

Nonetheless, as we have demonstrated in this paper, whenever proportional mortality rates are used for purposes of comparison, a different picture emerges. Proportional suicide rates are higher for Asian Americans than for white Americans, and these rates have increased dramatically over a ten-year period.

An examination of the Census data indicates that Asian American youth are characterized by high enrollment in school, and State-level data indicate that they have low drop-out rates compared with white Americans (Yu, Doi, and Chang, 1985). The media have played an important role in highlighting the academic achievements of Asian American school-age children. What has not been emphasized is the psychological pressure and emotional scars that the young have endured in order to sustain the expectations of parents and school teachers alike.

Sociologically, it is important to realize that over the last twenty years, the United States has experienced an unprecedented influx of Asian immigrants whose educational levels and professional skills are at the highest levels compared to the earlier waves of Asian immigrants and European settlers. In the United States today, the proportion of Asian Americans with four years or more college is significantly higher than that of white Americans. Although the occupational return on education has not been as high for Asian Americans as one might expect had they been white Americans, large percentages of Chinese and Japanese Americans still hold high-prestige jobs compared with white Americans. This cohort of highly-educated professionals are concentrated in the 40-55 years age range, the age of parenthood with children in school.

In interview after interview with Asian American high achievers, the public learned from the media that the children explained their drive to excel in terms of the shame that can befall their parents should they fail, and the glory they bring to their parents when they succeed. It comes as no surprise that we have a cohort of high-achieving Asian

American parents who are putting tremendous pressure on their children to become even more successful than they are. The intensified pressure, and the sudden awareness of Asian American teenagers about their self-identity problems, are likely causes for the increased suicide rates among Asian Americans between 1970 and 1980. Native-born Chinese and Japanese in particular have a certain vulnerability in their self-concept in that most of them do not speak their parents' language but are still perceived by the society at large to be non-native Americans. However, the foreign-born Asian American youth faces perhaps even more inner turmoil because of the inevitable clash of values held by their immigrant parents and the larger society, especially their American peers. The most recent U.S. Census data presented earlier (see Table 4) also show that, at least among the foreign-born Japanese American youth, a significant number (60 percent) of those who immigrated in 1975-80 are living in households with no parents--that is, they either live alone, in group quarters, or in non-family households. The comparable figure for Chinese American youth who immigrated during that same period is 26 percent, which is also significantly higher than the rate for foreign-born white Americans (21 percent). Among those who immigrated in 1970-74, some 45 percent of the Japanese American youth and 16 percent of the Chinese youth are living in households without a parental figure, compared to only 6.5 percent of the white American youth. These findings suggest that a substantial percentage of Asian American youth are living without immediate familial support--a source of social support critical during the teenage years and early adulthood, especially for the uprooted (i.e., the foreign born). Much research remains to be conducted to examine the psychodynamics of the Asian American family, and the relationship between educational achievement and suicide among the young.

RECOMMENDATIONS

To date, the only source of information on Asian American suicide comes from the death certificate data submitted by each of the 50 States to the National Center for Health Statistics. Death registration is generally regulated by State laws which conform to a 1959 Model Act developed by the State registrars of vital records under the leadership of the National Office of Vital Statistics. Since disposing of a corpse without a permit is a serious violation, the registration of deaths in all but the most isolated areas is believed to be almost 100 percent. However, having a relative who commits suicide is a shameful experience for surviving relatives. Attempts to misreport suicide as an accident or as another type of death probably exist to an unknown degree among all ethnic groups. We do not know if such misreporting of the cause of death is greater for Asian Americans than for white Americans. If it is higher, such errors have not been accounted for in our statistical tables.

We believe that a far more serious problem lies not in the registration of death itself, but in the recording of the personal particulars about the deceased. A report prepared by the National Center for Health Statistics (Woolsey, 1968) indicates that such particulars are usually filled out by the funeral director, who obtains the information from a surviving relative. The funeral director also takes the certificate to the attending physician (or in the case of an unattended or violent death, to the medical examiner or coroner) for completion of what is known as the "medical certification of cause of death." This portion of the death certificate requires the signature of the physician or medical-legal officer. There is no built-in mechanism to check the accuracy of the funeral director's identification or recording of the race item on the death certificate. Strictly speaking, questions remain as to the accuracy of the information even when such information is obtained from a surviving relative. To what extent, for example, do the survivors of

a fourth-generation Japanese American identify the decedent as Japanese in response to the "race" item on the death certificate? Although we have no empirical data to verify the accuracy of race recording, we suspect that, if there were gross errors, the unintentional misreporting of race is probably greater among the native-born than among the foreign-born. The latter have a stronger ethnic identity than the former. Besides, the more monolingual native-born Asian Americans are, the more likely their "American-ness" will lead to their being classified as white. This is of course pure speculation emboldened by the absence of data.

Additionally, the National Center for Health Statistics issues to the 50 States model forms of the U.S. Standard Certificates each decade, and the States usually, but not always, adhere to these in printing their own forms. Therefore, **not all 50 States collect sufficiently specific race/ethnic information to allow for the systematic identification of Asian American subgroups such as Chinese, Japanese, Filipino, Korean, Vietnamese, Asian Indian, and others.**

Three recommendations can be made to ascertain the accuracy, if not to help minimize the misreporting of race or ethnic information on the death certificate. First, States which have not provided sufficiently detailed information on Asian American subgroups in their death certificates should be encouraged to do so. Increasingly, Asian Americans are no longer concentrated in just a few States. Perhaps the United States National Committee on Vital and Health Statistics can be encouraged to discuss this matter in their future meetings.

Second, a special study can be made to do a follow-back mortality survey of a probability sample of suicides occurring to white, black, and Asian Americans, in order to ascertain the accuracy of the race or ethnic coding. For reasons of cost containment, such a study can be limited to States with the largest concentration of Asian Americans: Hawaii, California, New York, Illinois, Texas and

Washington. The inclusion of States which are recently experiencing the growing presence of Asian Americans--such as Illinois, Washington, and Texas--is important since the accuracy of the race/ethnic code may well vary with the density of Asian American population in a given geographic area. Methodological studies on the quality of the death certificates have been conducted by the National Center for Health Statistics for other purposes (Gittelsohn, 1982; Harris, 1980), but not for verifying the accuracy of the coding of Asian American deaths. Given the expertise available at the National Center for Health Statistics, it should not be difficult for the agency to collaborate on such a methodological study with an advisory committee which includes Asian American researchers.

Third, in the next decade when the U.S. Standard Death Certificate will again be revised, serious thought should be given to allowing a separate identification of Asian Indians, Koreans, Vietnamese, Cambodians, and Laotians in the State vital registration forms. These immigrants have arrived in large numbers as a result of the Immigration Act of 1965. Within two decades, they have grown in size to come close to the number of Chinese and Japanese who arrived over a 100-year span. The explicit identification of these ethnic groups in vital registrations will provide future investigators with a rich source of data on Asian American mortality patterns in general, and suicide in particular, at a relatively low cost.

Additionally, a nation-wide suicide register can be established, with more detailed information about the decedent's demographic and socioeconomic background, including family history of suicide and other types of mental illness, occupation, and type of work. The information obtained from the death register will greatly augment the quantity and quality of the data on suicide that are presently only available from the use of death certificates. It will also be a useful tool for monitoring deaths due to suicide, both for research and for prevention purposes.

Special in-depth studies should be encouraged through the grants and contracts mechanism, including requests-for-proposals and supplemental grants to existing minority mental health research centers, by the Federal funding agencies such as the National Institute of Mental Health, the National Institute for Child Health and Development of the National Institutes for Health, and others. Such studies should specifically encourage the examination of ethnic differences in suicide, and within each group, the analysis of at least gender and nativity differences, if not other factors as well. From our work on the 1970 and 1980 data, it is clear that even among the Chinese and the Japanese youth, the increase in suicide varies by gender and by nativity. A thorough understanding of the cultural values and social structural factors which contribute to suicide would be most helpful in guiding the work of counselling and prevention programs. In short, we need to go beyond the limits of epidemiologic methods and venture into sociological, psychological, and anthropological studies of suicide. The subject deserves to be studied using an interdisciplinary approach, rather than just an epidemiologic one. By encouraging young investigators to work closely with seasoned researchers in existing minority mental health research centers, the costs of research can be kept to a minimum and the collaboration of an interdisciplinary team of researchers assured. Proceedings of the Secretary's Task Force on Youth Suicide and other research findings on suicide that are forthcoming should be disseminated widely not only to research and prevention centers in the country, but also to school teachers and counselors alike. The latter come in close daily contact with the population most at risk of suicide. Their informed knowledge of the early signs of suicidal behavior can go a long way towards the reduction, if not prevention, of a major public health problem in the United States.

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**Total White, Chinese, and Japanese American Population and 15-24 Year Olds
1970¹ and 1980² Census**

Age and Sex	White Americans			Chinese American			Japanese American		
	1970	1980	% Change	1970	1980	% Change	1970	1980	% Change
<u>All Ages</u>									
Both sexes	177,748,975	188,371,622	+6.0	435,062	806,040	+85.3	591,290	700,974	+18.5
Male	86,720,987	91,685,333	+5.7	228,565	407,544	+78.3	271,300	320,941	+18.3
Female	91,027,988	96,686,289	+6.2	206,497	398,496	+93.0	319,990	380,033	+18.8
<u>15-24 Year Olds</u>									
Both Sexes	30,652,187	34,250,876	+11.7	89,342	146,035	+63.5	96,059	120,443	+25.4
Male	15,232,090	17,317,434	+13.7	45,572	74,332	+63.1	47,078	61,498	+30.6
Female	15,420,097	16,933,442	+9.8	43,770	71,703	+63.8	48,981	58,945	+20.3

1. Data for 1970 are based on unpublished complete count (100 %) of the 1970 U.S. Census data prepared by the Bureau of the Census for the National Center for Health Statistics. They are more reliable than the figures reported in some published 1970 Census reports which are based on only 20% or 15% count.

2. Data for 1980 are based on 100% count of the 1980 U.S. Census data supplied by the Bureau of the Census to the Pacific/Asian American Mental Health Research Center.

Table 1.

School Enrollment of 15-24 Year Olds for White, Chinese, and Japanese Americans By Nativity and Sex: 1980 Census

	Foreign Born						U.S. Born					
	Male			Female			Male			Female		
	White	Chinese	Japanese	White	Chinese	Japanese	White	Chinese	Japanese	White	Chinese	Japanese
15-24 Year Olds	(733)	(2224)	(662)	(742)	(2159)	(661)	(16484)	(1510)	(2411)	(16245)	(1397)	(2450)
Total, in percent	100.0	100.0*	100.0	100.0*	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Not enrolled	52.8	24.8	36.6	54.3	28.9	40.1	50.0	23.0	32.3	51.8	26.0	33.6
Enrolled in:												
public school	39.3	62.3	46.4	38.1	59.2	46.6	43.3	61.7	58.7	41.2	59.4	58.9
church-related sch.	3.7	4.1	7.5	4.0	4.6	6.3	3.9	5.0	4.4	4.3	5.9	2.8
other private sch.	4.2	8.7	9.5	3.5	7.3	7.0	2.8	10.3	4.6	2.7	8.7	4.7
15-19 Year Olds	(324)	(1027)	(203)	(323)	(885)	(219)	(8323)	(721)	(1155)	(7902)	(686)	(1145)
Total, in percent	100.0	100.0*	100.0	100.0	100.0	100.0*	100.0	100.0*	100.0*	100.0	100.0	100.0
Not enrolled	28.2	9.3	17.7	28.5	9.9	11.0	24.4	6.4	11.2	24.7	6.4	9.7
Enrolled in:												
public school	61.7	80.4	64.5	60.7	78.9	73.1	67.4	75.6	78.4	66.4	74.3	81.0
church-related sch.	4.9	5.5	9.4	6.2	5.1	9.6	5.4	8.0	6.6	6.1	8.5	4.1
other private sch.	5.3	4.9	8.4	4.6	6.1	6.4	2.8	9.0	3.9	2.8	10.8	5.2
20-24 Year Olds	(409)	(1197)	(459)	(419)	(1274)	(442)	(8161)	(789)	(1256)	(8343)	(711)	(1305)
Total, in percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0*	100.0	100.0	100.0	100.0	100.0
Not enrolled	72.4	38.2	44.9	74.2	42.0	54.5	76.2	38.1	51.8	77.5	44.9	54.5
Enrolled in:												
public school	21.5	46.8	38.3	20.8	45.6	33.5	18.7	48.2	40.7	17.4	45.0	39.6
church-related sch.	2.7	3.0	6.8	2.4	4.2	4.8	2.4	2.3	2.3	2.5	3.4	1.7
other private sch.	3.4	12.0	10.0	2.6	8.2	7.2	2.8	11.4	5.2	2.6	6.7	4.2

Source: Unpublished data from the 1980 Census tabulated by the authors. Data for Chinese and Japanese are based on the 5% Sample Microdata (A) tape, while data for white Americans are based on the .1% (B) sample tape.

*Percent do not add up to 100 because of rounding errors.

Table 2.

**Schooling and Employment Status of White, Chinese, and Japanese Americans 15-24 Year Olds
By Nativity and Sex: 1980 Census**

	Foreign Born						U.S. Born					
	Male			Female			Male			Female		
	White	Chinese	Japanese	White	Chinese	Japanese	White	Chinese	Japanese	White	Chinese	Japanese
Not in school, number	(387)	(552)	(242)	(403)	(623)	(265)	(8249)	(347)	(65)	(8418)	(363)	(124)
in percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 16 years ¹	—	—	—	—	—	—	—	—	—	—	—	—
Employed	81.9	76.5	73.1	52.9	66.5	57.7	79.8	79.0	85.1	64.5	83.8	80.8
Unemployed	7.2	6.3	6.6	7.9	2.3	4.5	10.8	8.9	6.0	6.3	3.0	3.8
Not in labor force	10.3	16.5	20.3	39.2	30.7	37.4	8.9	11.5	8.3	28.6	12.7	15.1
In school, number	(346)	(1672)	(420)	(339)	(1536)	(396)	(8235)	(1163)	(1631)	(7827)	(1034)	(1628)
in percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 16 years	16.8	10.0	6.2	18.3	10.1	10.3	18.8	12.7	12.8	18.5	14.6	12.5
Employed	31.5	30.2	25.7	31.0	34.4	28.3	36.2	38.8	41.9	35.2	37.7	43.4
Unemployed	2.3	2.3	1.9	2.6	1.9	1.3	3.5	2.2	2.3	3.4	1.8	2.4
Not in labor force	49.4	57.5	66.2	48.1	53.6	60.1	41.5	46.3	43.0	42.9	45.8	41.7

Source: Unpublished data from the 1980 Census tabulated by the authors. Data for Chinese and Japanese are based on the 5% Sample Microdata (A) tape, while data for white Americans are based on the .1% (B) sample tape.

1. Since data on employment status are asked only of persons 16 years or older, data on the employment status of those between 15 to 16 years of age are not available.

2. Percent do not add up to 100 because of rounding errors.

Table 3.

Household Type of 15-24 Year Olds for White, Chinese, and Japanese Americans By Nativity and Year of Immigration: 1980 Census

Household Type	Total	U.S. -Born	Foreign-Born by Year of Immigration				
			N.A.	1975-80	1970-74	1965-69	Prior to 1969
White, (number)	(34204)	(32729)	(357)	(394)	(218)	(210)	(296)
in percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Married couple	67.3	67.5	61.6	53.6	68.8	73.8	66.6
One spouse absent	13.8	13.5	18.2	25.6	24.8	15.7	11.5
Other							
Living alone	4.4	4.4	4.8	4.8	1.4	1.9	6.1
Group quarters	7.0	7.0	8.7	7.9	2.8	3.3	7.1
Nonfamily	7.6	7.7	6.7	8.1	2.3	5.2	8.8
Chinese, (number)	(7290)	(2907)	(72)	(2300)	(928)	(752)	(331)
in percent	100.0	100.0	100.0	100.0	100.0	100.0*	100.0*
Married couple	62.9	64.3	62.5	55.5	69.8	70.9	65.3
One spouse absent	13.7	10.1	12.5	18.8	13.8	12.4	12.4
Other							
Living alone	4.3	5.5	2.8	3.7	3.0	3.5	4.5
Group quarters	10.0	10.7	12.5	11.2	6.4	8.4	9.7
Nonfamily	9.0	9.4	9.7	10.8	7.0	4.9	8.2
Japanese, (number)	(6184)	(4861)	(294)	(585)	(108)	(81)	(255)
in percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Married couple	61.2	65.4	58.8	34.7	47.2	62.3	50.6
One spouse absent	11.7	12.1	16.0	5.3	8.3	8.6	16.1
Other							
Living alone	5.6	4.4	5.1	13.5	13.0	3.7	7.5
Group quarters	10.8	9.0	9.8	26.3	17.6	11.1	10.2
Nonfamily	10.7	9.1	12.2	20.2	13.9	13.6	15.7

Source: Unpublished data from the 1980 Census tabulated by the authors. Data for Chinese and Japanese are based on the 5% Sample Microdata (A) tape, while data for white Americans are based on the .1% (B) sample tape.

1. These are persons who cannot be said to have "immigrated" to the U.S. because they were born in U.S. Territories or possessions (and therefore not native-born). A small number of foreign-born persons for whom year of immigration information is missing may also be included in this category but the precise number cannot be ascertained.

*Percent do not add up to exactly 100 because of rounding errors.

Table 4.

Average Annual Age-specific¹ and Age-adjusted (1940 U.S. Standard) Death Rates² for Suicide, Per 100,000 Population, by Specified Race: United States, 1980

Age Group	White			Chinese American			Japanese American		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
All ages, crude	13.31	20.57	6.43	8.27	8.26	8.28	9.08	12.57	6.14
Age-adjusted	12.54	19.41	6.20	7.97	7.93	8.02	7.84	11.08	5.00
5 - 14 years	0.52	0.75	0.28	0.30	-----	0.61	0.86	1.69	-----
15 - 24 years	13.55	21.91	5.00	6.39	8.07	4.65	9.41	14.09	4.52
25 - 34 years	17.48	26.99	7.98	7.13	8.59	5.72	12.18	16.72	7.82
35 - 44 years	17.03	24.27	9.93	9.01	8.94	9.09	9.10	12.68	6.39
45 - 54 years	17.69	24.55	11.18	12.28	10.77	13.89	8.75	9.81	8.22
55 - 64 years	17.54	26.52	9.59	12.34	9.37	15.52	9.93	12.38	7.78
65 - 74 years	18.28	32.41	7.45	24.35	25.85	22.61	6.61	11.17	2.17
75 - 84 years	20.91	46.18	6.03	33.51	21.82	44.32	25.01	39.56	15.75
85 years & over	19.45	53.28	4.92	56.13	64.10	49.93	62.59	139.76	19.50

Source: Division of Vital Statistics, National Center for Health Statistics, unpublished data calculated by the authors.

1. The numerator consists of 1979-81 cumulative number of deaths, the denominator is based on the total enumerated of the 1980 United States Census.

2. Excludes deaths of nonresidents of the United States.

Table 5.

**Average Annual Age-specific¹ and Age-adjusted (1940 U.S. Standard) Death Rates²
for Suicide, Per 100,000 Population, by Specified Race: United States, 1970**

Age Group	White			Chinese American			Japanese American		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
All ages, crude	12.29	17.75	7.09	10.89	12.06	9.60	9.24	10.68	7.99
Age-adjusted	12.28	17.90	7.22	11.60	12.48	10.45	8.55	10.01	7.22
5 - 14 years	0.35	0.52	0.17	—	—	—	—	—	—
15 - 24 years	8.97	13.79	4.21	2.98	3.63	2.92	8.70	11.97	5.51
25 - 34 years	13.94	19.33	8.68	10.61	11.91	9.26	14.88	16.91	13.29
35 - 44 years	17.79	22.86	12.90	14.62	13.94	15.37	10.42	11.23	9.95
45 - 54 years	21.18	29.00	13.83	19.47	20.00	18.80	11.52	11.61	11.44
55 - 64 years	22.89	34.80	12.21	20.74	25.15	15.03	6.40	7.25	5.54
65 - 74 years	22.09	38.03	9.81	39.00	49.54	24.88	9.62	13.89	6.36
75 - 84 years	23.03	46.67	7.42	56.17	54.19	58.75	30.75	26.66	33.61
85 years & over	19.42	46.70	4.38	175.09	84.71	271.74	86.11	162.82	—

Source: Division of Vital Statistics, National Center for Health Statistics, unpublished data calculated by the authors.

1. The numerator consists of 1969-71 cumulative number of deaths, the denominator is based on the total enumerated of the 1980 United States Census.

2. Excludes deaths of nonresidents of the United States.

Table 6.

**Proportional Mortality Rate for Suicide Among White, Chinese,
and Japanese American 15-24 Year Olds, by Sex: 1970 and 1980**

Race and Sex	1970	1980	% Change
<u>White Americans</u>			
Both Sexes	7.8	11.9	52.6
Male	8.1	12.9	59.3
Female	6.8	8.8	29.4
<u>Chinese Americans</u>			
Both Sexes	5.6	16.8	200.0
Male	4.9	15.1	208.2
Female	7.1	20.8	193.0
<u>Japanese Americans</u>			
Both Sexes	14.3	19.0	32.9
Male	14.2	21.3	50.0
Female	14.5	14.0	-3.4

Source: Unpublished data from the National Center for Health Statistics, calculated by the authors.

Table 7.

Average Annual Potential Years of Life Lost, in Percent and Rate Per 100,000 Population By 10 Leading Causes of Death at Ages 15-24 Years, 1979-81									
10 Leading Causes	White			Chinese			Japanese		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
10 Leading Causes, total	2,024,922	100.0		2,189	100.0		2,948	100.0	
Accidents	1,479,963	73.1	4321.0	975	44.5	667.6	1,712	58.1	1421.1
Suicide	301,708	14.9	880.9	607	27.7	415.4	737	25.0	611.6
Cancer	139,555	6.9	407.4	390	17.8	267.1	282	9.6	233.9
Heart Disease	51,090	2.5	149.2	152	6.9	103.9	65	2.2	54.0
Cerebrovascular Disease	18,633	0.9	54.4	43	2.0	29.7	65	2.2	54.0
Pneumonia and Influenza	16,553	0.8	48.3	22	1.0	14.8	43	1.5	36.0
Diabetes Mellitus	7,215	0.4	21.1	--	--	--	22	0.7	18.0
C.O.P.D.	5,655	0.3	16.5	--	--	--	22	0.7	18.0
Cirrhosis of the Liver	4,550	0.2	13.3	--	--	--	--	--	--
Arteriosclerosis	87	--	0.3	--	--	--	--	--	--

Source: Unpublished data from the National Center for Health Statistics, calculated by the authors.

Table 8.

**Average Annual Potential Years of Life Lost, in Percent and Rate Per 100,000 Population
By 10 Leading Causes of Death at Ages 15-24 Years, 1969-71**

10 Leading Causes	White			Chinese			Japanese		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
10 Leading Causes, total	1,858,698	100.0		2,145	100.0		2,948	100.0	
Accidents	1,372,497	73.8	4477.6	1,408	65.6	1576.3	1,625	54.8	1697.0
Suicide	178,642	9.6	582.8	173	8.1	194.0	542	18.3	565.7
Cancer	163,107	8.8	532.1	390	18.2	435.5	303	10.2	316.8
Heart Disease	48,252	2.6	157.4	65	3.0	72.8	130	4.4	135.8
Cerebrovascular Disease	29,055	1.6	94.8	65	3.0	72.8	173	5.8	181.0
Pneumonia and Influenza	41,557	2.2	135.6	22	1.0	24.3	108	3.8	113.1
Diabetes Mellitus	11,895	0.6	38.8	--	--	--	--	--	--
C.O.P.D.	6,782	0.4	22.1	--	--	--	65	2.2	67.9
Cirrhosis of the Liver	6,803	0.4	22.2	22	1.0	24.3	22	0.7	22.6
Arteriosclerosis	108		0.4	--	--	--	--	--	--

Source: Unpublished data from the National Center for Health Statistics, calculated by the authors.

Table 9.

**Average Annual Age-Specific¹ and Age-Adjusted Deaths
(1940 U.S. Standard Population) By Suicide, in Rate per 100,000, for
Specified Asian American Groups, by Nativity: United States, 1980**

Age in years	Chinese		Japanese	
	Native-born	Foreign-born	Native-born	Foreign-born
All ages, crude	2.9	11.2	5.5	17.1
Age-adjusted	3.5	9.5	5.2	14.0
0-4	--	--	--	--
5-14	0.5*	--	1.1*	--
15-24	5.2	7.1	8.1	14.3
25-34	5.9	7.5	7.9	18.7
35-44	4.1*	9.9	5.7	13.6
45-54	5.4*	14.2	5.5	13.6
55-64	2.4*	15.1	5.6	42.6
65-74	2.3*	37.3	5.4*	11.8*
75 and over	--	45.2	6.8*	41.5

Source: Division of Vital Statistics, National Center for Health Statistics, unpublished data calculated by the authors.

1. The numerator consists of 1979-81 cumulative number of deaths, the denominator is based on the total enumerated of the 1980 United States Census.

* The rates are obtained with numerators which consist of less than 5 persons.

Table 10.

BLACK YOUTH SUICIDE: LITERATURE REVIEW WITH A FOCUS ON PREVENTION

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ABSTRACT

The national rates of completed suicide in the black population between 1950 and 1981 are presented including age-adjusted rates. Specific studies of suicide attempts and completed suicides by blacks in several cities, e.g., New York, Philadelphia, Newark, Rochester (New York), and New Haven, are discussed. Methodological problems with existing studies and national suicide statistics are presented. Proposed theories of black suicide are reviewed. Based upon a summary of the characteristics of black suicide attempters reported in the literature, specific primary, secondary, and tertiary preventive strategies are suggested.

INTRODUCTION

Data from the National Center for Health Statistics (NCHS) have documented the increase in suicides by black Americans. Between 1950 and 1981 the suicide rates for black Americans increased: 114 percent for black males in the 15-24 age group and 33 percent for black females in the 15-24 age group (1). NCHS data also document the higher and increasing rates of suicide in white Americans (1). Other authors address this issue in another volume of the Report of the Secretary's Task Force on Youth Suicide (2). This author will focus only on black suicide attempters and completers in this paper.

By the 1980 census (3) blacks comprised 12 percent of the United States population with 41 percent of the black population between ages 16-39, the ages of highest risk for suicide among blacks (4,5,6). The increase in suicide by both black and white youth have resulted in the National Institute of Mental Health's establishing suicide as one of its priority areas for 1986.

But what specific information exists concerning the precipitating events, the psychosocial stressors, and interpersonal stressors that result in suicidal acts by black youth? Are there specific psychological theories which suggest etiology or mechanisms behind suicidal behavior in young Afro-Americans? To answer these questions and to identify specific primary, secondary, and tertiary preventive strategies, a literature review was conducted. The majority of the studies of black suicide attempters were completed in response to the work of Hendin (7) and the Black Revolution of the 1960s. The studies varied from theoretical papers which summarized mortality data and attempted to hypothesize an etiology for the observed increased rates of black suicide, through comparative studies of black and white suicide attempters in several cities. Only one case-control study was identified and only two studies conducted a longitudinal assessment of a population during a period of four or

more years. Although the majority of these studies are descriptive and I have some concerns with the methodological designs, I will review the known information in order to identify specific areas on which research should focus, as well as suggest various levels of preventive strategies.

UNITED STATES BLACK POPULATION IN 1980

To understand the magnitude of suicidal behavior within the black community, it is important to review the demographic characteristics of Afro-Americans in the United States in 1980. The inaccuracies of the United States Census have been attributed to the failure of black persons to respond to the census as well as to the enumerators' fear of urban neighborhoods. Acknowledging these imperfections, specific data are presented to provide a context for our discussion.

In 1980 (2) 12 percent of the United States population was black--26.5 million persons. Fifty-three percent of blacks were females and 47 percent were males. Forty-four percent of black females were in the child-bear-

ing years, between ages 15 and 44. The percentage Afro-Americans in each age category by sex is shown in Table 1. Forty-one percent of black males and 41 percent of black females are between ages 16 to 39. Although black males outnumber black females through age 19, the loss of black males begins in the 20 to 24 age group with a significant difference noted in the 40 to 49 age group. Causes of premature death in black males ages 16 to 39 include homicide, suicide, accidents, and substance abuse (8,9,10). In fact, homicide is the leading cause of death for black males of ages 15 to 44 (8). This sex difference is sustained throughout the latter years of the life cycle. Approximately 30 percent of the black population is below the poverty level compared to 9.4 percent of the total population. Table 2 shows the percentage of individuals below the poverty level by race and age group. The average number of persons per black family is 3.7 and in white families, 3.9. In the black population 1,568,417 households were headed by a female without a husband present, with their own children under age 18. For whites, 3,166,397 households were headed by a female without a husband present, with their own children under age 18.

DISTRIBUTION OF THE BLACK POPULATION BY AGE AND SEX

AGE	% of TOTAL BLACK MALES	% of TOTAL BLACK FEMALES	% of TOTAL BLACK POPULATION
0-4	9.81	8.64	9.19
5-11	14.26	12.57	13.36
12-15	8.90	7.90	8.37
16-19	9.50	8.58	9.02
20-24	10.39	10.19	10.28
25-29	8.66	8.85	8.76
30-39	12.25	12.97	12.63
40-49	8.64	9.39	9.04
50-59	7.76	8.55	8.17
60-64	3.08	3.48	3.29
65-74	4.52	5.54	5.02
75-84	1.82	2.57	2.22
85+	0.42	0.76	0.60

SOURCE: U.S. Census, 1980. Detailed Population Characteristics, U.S. Summary Section A.

Table 1.

NATIONAL STATISTICS ON COMPLETED SUICIDES

In *Health, United States, 1984* suicide rates were presented for blacks and whites by sex for the years 1950 through 1981 (11). Table 3 presents the rates per 100,000 population for ten year age groups. Figures 1-8 (Figures appear at end of chapter.) present graphic comparisons of white and black suicides by sex for each ten-year age group. In this 31-year period, suicides in white males increased 3.2 fold in the 15-24 age group and in the 25-34 year age groups they nearly doubled. In all age ranges white males continued to have a steady increase in completed suicide.

The increase in suicide by black males was also documented by national statistics. From 1950 to 1970, there was a 114 percent increase in the black male rate in the 15-24 age group and 106 percent increase in the 25-34 age group. By 1981, the suicide rate for black males showed a 134 percent increase in the 25-34 age group. During the thirty-one year period, 1950-1981, suicide declined sharply in black males beginning in the 35-44 age group and continued throughout the life cycle.

The suicide rates for black females remained low in comparison to white females. Suicide rates in black females increased 111 percent for the 15-24 age group between 1950 and 1970. By 1981, this rate had declined to 33 percent greater than the 1950 rate. For black females, the 25-34 and 35-44 age groups had the highest suicide rates during the 1950 through 1981 period with peak rates occurring in 1970, a 119 percent and 85 percent increase respectively. For this 31 year period, white female suicide rates peaked in 1970 in the 25-54 age groups. By 1981, the suicide rate for white females in the 45-55 age group peaked, but only by 6 percent above the 1950 rate. The rate for the 15-24 age group had increased 81 percent and for the 25-34 age group, 50 percent.

The Afro-American population of the United States is a younger population with a broader based population pyramid. The white population is older with a population pyramid that is more evenly distributed in all age groupings. Age-adjustment is a method that corrects for these age differences in the population of each race. Table 4 presents the age-adjusted suicide rates for the years 1950 to 1981. The age-adjusted rates (direct

PERCENTAGE OF PERSONS BELOW THE U.S. POVERTY LEVEL BY RACE

Age Group	% Of Total Black Population	% Of Total White Population
under 16	38.6	11.6
16-21	33.1	12.0
22-24	26.9	11.1
25-34	22.0	7.5
35-44	20.5	6.4
45-54	20.5	5.5
55-59	23.1	6.6
60-64	27.4	8.4
65-69	31.0	9.5
70-74	35.4	12.0
75+	39.8	16.6

SOURCE: U.S. Census, 1980. Detailed Population Characteristics, U.S. Summary Section A.

Table 2.

SUICIDE RATES BY SEX AND AGE PER 100,000 RESIDENT POPULATION

	1950		1960		1970		1979		1980		1981	
	White	Black	White	Black	White	Black	White	Black	White	Black	White	Black
MALES												
15-24	6.6	4.9	8.6	4.1	13.9	10.5	20.5	14.0	21.4	12.3	21.1	11.1
25-34	13.8	9.3	14.9	12.4	19.9	19.2	25.4	24.9	25.6	21.8	26.2	21.8
35-44	22.4	10.4	21.9	12.8	23.3	12.6	22.4	16.9	23.5	15.6	24.3	15.5
45-54	34.1	10.4	33.7	10.8	29.5	13.8	24.0	13.8	24.2	12.0	23.9	12.3
55-64	45.9	16.5	40.2	16.2	35.0	10.6	26.3	12.8	25.8	11.7	26.3	12.5
65-74	53.2	10.0	42.0	11.3	38.7	8.7	33.4	13.5	32.5	11.1	30.3	9.7
75-84	61.9	6.2	55.7	6.6	45.5	8.9	48.0	10.5	45.5	10.5	43.8	18.0
85+	61.9	6.2	61.3	6.9	50.3	10.3	50.2	15.4	52.3	18.9	53.6	12.7
FEMALES												
15-24	2.7	1.8	2.3	1.3	4.2	3.8	4.9	3.3	4.6	2.3	4.9	2.4
25-34	5.2	2.6	5.8	3.0	9.0	5.7	7.8	5.4	7.5	4.1	7.7	4.6
35-44	8.2	2.0	8.1	3.0	13.0	3.7	10.1	4.1	9.1	4.6	9.5	4.2
45-54	10.5	3.5	10.9	3.1	13.5	3.7	11.6	2.9	10.2	2.8	11.1	2.5
55-64	10.7	1.1	10.9	3.0	12.3	2.0	9.9	3.8	9.1	2.3	9.4	2.9
65-74	10.6	1.9	8.8	2.3	9.6	2.9	7.8	2.6	7.0	1.7	7.3	3.0
75-84	8.4	2.4	9.4	1.3	7.2	1.7	6.7	2.5	5.7	1.4	5.5	1.0
85+	8.9	2.4	6.1		6.1	3.2	5.0	1.0	5.8		3.7	1.8

SOURCE: National Center for Health Statistics: Health, United States, 1984.

Table 3.

method of adjustment using the 1940 United States population) show a 57 percent increase in completed suicide by black males, a 4 percent increase in white males, a 47 percent increase in black females, and a 13 percent increase in white females.

LITERATURE ON BLACK SUICIDE

In 1938, Prudhomme (12,13) addressed the issue of suicide among blacks in the United States population during the pre-World War II period at a time of black migration and legalized segregation. He emphasized restricted economic opportunities, rural living, and group solidarity facilitated by racism as factors contributing to the lower rates of suicide in blacks.

The Civil Rights movement began in 1954 and evolved into the Black Revolution of the 1960s. Several major national leaders were assassinated in the late 1960s including Dr. Martin Luther King, Jr. and Malcolm X. In 1969, Hendin (14) reported on his sample of 25 black suicide attempters in New York who were identified through hospitalization. He emphasized the role of tenement living and concluded that black suicide was precipitated by the frustrations of ghetto life, discrimination by whites, and aberrant black family patterns. In this psychoanalytic study Hendin discussed the attempters' families which

were characterized by absent, physically violent fathers and mothers who were brutal or left their children in the hands of others who were brutal to them. Self-hatred and intense rage characterized these suicide attempters, particularly the black males.

In 1978, Hendin (15) described the mixture of despair and violence that characterized the struggle of ghetto-residing black suicide attempters who represented the poorest socioeconomic group among the black population. Hendin looked at a sample of black college students who were part of a sample of black suicide attempters that he studied for five years. He found that although they lived with their parents, they were involved in a link of "emotional deadness" which bound them to their parents. These students were absorbed and preoccupied with their own extinction as an ongoing part of their adaptation and used work (dull, demanding mental labor) "as a way of maintaining a distanced, uninvolved state to conceal that they had no right to live." (16)

The high rates of homicide among black males and the increasing rates of suicide noted through the 1970s stimulated many comments and studies in the literature which attempted to explain these rates in the context of the Black revolution. Wolfgang (17) reviewed Philadelphia police records and concluded that there was a disproportionate-

AGE-ADJUSTED DEATH RATES FOR COMPLETED SUICIDE PER 100,000 U.S. RESIDENT POPULATION

	1950 ¹	1960 ¹	1970	1979	1980	1981
White males, all ages, age-adjusted ²	18.1	17.5	18.2	18.6	18.9	18.9
Black males, all ages, age-adjusted ²	7.0	7.8	9.9	12.5	11.1	11.0
White females, all ages, age-adjusted ²	5.3	5.3	7.2	6.3	5.7	6.0
Black females, all ages, age-adjusted ²	1.7	1.9	2.9	2.9	2.4	2.5

1. Includes deaths of nonresidents of the United States.

2. Age-adjusted by the direct method of the total population of the United States as enumerated in 1940, using 11 age groups.

SOURCE: National Center for Health Statistics: Health, United States, 1984.

Table 4.

ly high number of "victim-precipitated" homicides in "which the victims have acted in such way as to bring about their deaths at the hands of others, often by being the first to use or threaten physical violence."

In 1970, Seiden (18) reviewed the stresses on young, urban, black men: 1) excessive and consistent unemployment, 2) the resulting incapability to be useful to others and competent to make their own way, and 3) the potential for an increase in suicides as job opportunities open up in a period of rapid, forced, and unequal change (resulting from the impact of the Black Revolution upon society). Seiden suggested that the expectations and hopes created more rapidly than they could be fulfilled, resulted in intensified frustrations and despair.

Bagley and Greer (19) criticized the 1969 work of Seiden for its small sample size, the absence of controls, and commented that if patterns of suicide in blacks reflected black alienation, then black suicide rates in New York City should be higher than white rates for all ages. Although these authors identified 25 "black" suicide attempters from a medically treated, emergency room (ER) sample, their study was not comparable to any other studies completed in the United States. In addition to reporting a sample which mixed two cases of completed suicide with 23 cases of attempted suicide, these authors had a broad definition of "black" (economically disadvantaged and oppressed) and included Africans, Caribbean, Indians, Pakistanis, and persons from Cyprus in their "black" sample. All were recent immigrants to England. Although they used a control group of white suicide attempters matched for age, sex, and marital status, the applicability of their data to a black United States sample is questionable. Bagley and Greer found that 48 percent of "black" suicide attempters compared to 12 percent of white suicide attempters were diagnosed as an acute situational reaction. Only 8 percent of "black" cases compared to 24 percent of white controls had brain damage or were psychotic. Although none of the "black"

suicide attempters were diagnosed as sociopaths or addicted to drugs, 12 percent of white controls were. "Black" suicide attempters in this sample were younger than the white controls.

In 1973, Pederson, Awad, and Kindler (2) reported a sample of suicide attempters identified from the Monroe County Psychiatric Case Register. The Case Register recorded all psychiatric contacts including ER visits, public and private psychiatric hospitalizations, and visits to private psychiatrists. From 1964 through 1967, 1345 persons were seen as the result of a suicide attempt, an average of 336 suicide attempts per year representing 0.8 percent of all ER visits. Nonwhite (predominately black) and white attempters were compared.

Nonwhite attempters were younger; 47 percent of nonwhite attempters were of ages 15-24 compared to 36 percent of the white suicide attempters. In all age cohorts for this 1960s sample, the attempt rates for nonwhite females were higher than those of nonwhite males by an average of 4-5 percent. When nonwhite females were compared with white females, only in the 45 and older age groupings were the percentage of nonwhite attempts less (5%) than the white attempts (15%). The majority (84%) of nonwhite suicide attempters were in the lowest socioeconomic group. In this sample of suicide attempters, 67 percent of white females and 78 percent of white males had some prior psychiatric contact (not specified). This contrasted with 49 percent of nonwhite females and 50 percent of nonwhite males having some prior psychiatric contact (not specified). When marital status was assessed, 28 percent of nonwhite females were separated compared to 9 percent of white females. Fifty-four percent of the nonwhite males were single, significantly greater than any other group.

When the diagnoses of this Rochester, New York, sample of suicide attempters were reviewed, 25 percent of white male attempters and 13 percent of white female attempters were diagnosed as psychotic in

contrast to only 10 percent of nonwhite male and female attempters. Thirty-six percent of nonwhite male attempters in comparison to all other groups were diagnosed as having a neurosis. In this sample, the ratio of nonwhite male to nonwhite female attempters was 1:6 in contrast to a ratio of 1:3 among white suicide attempters. Only in this study were suicide attempters followed longitudinally from 1964 through 1968. Thirty-five attempters completed suicide by 1968; 31 were white and 4 were nonwhite. Of the white suicide attempters who completed suicide, 16 were male and 15 were female. In the nonwhite sample, 1 male and 3 female suicide attempters completed suicide. The white suicide rate for Monroe County (Rochester, New York) was calculated as 10.51 per 100,000 and for nonwhite as 8.98 per 100,000 per year.

In 1974, a case-control study of suicide attempters was published by Stein, Levy, and Glasberg (21). White and black suicide attempters were identified from psychiatric admissions to a large municipal hospital in New York City. White and black controls were matched for age (within 3 years), race, and the time of admission nearest to that of the suicide attempters. The controls were hospitalized, psychiatric patients who denied suicidal ideation and had no recent or past suicide attempts. The authors focused on the role of a history of separation from close figures in the individual's life as a risk factor for attempting suicide. They defined childhood separation as "a physical separation from a parent, parent surrogate, or sibling, of six months duration occurring from birth to 17 years of age." Early childhood separation was defined as a separation occurring from birth to 7 years of age. The 48 white female suicide attempters and controls, the 49 white male suicide attempters and controls, the 48 black female suicide attempters and controls, and the 20 black male suicide attempters and controls comprised the total sample of 330. Black male and female suicide attempters in this study were younger than white suicide attempters; the mean age for males was 24.1 and for female, 25.6. Using

education as an index of social class, all suicide attempters and controls in this study were of the same, lower social class. The authors found that only white male and white female suicide attempters had a greater number of childhood and antecedent separations than controls. Black male and black female suicide attempters had significantly more ($p < .100$) early childhood separations compared to black controls. In this sample, black female suicide attempters had significantly more ($p < .001$) separations between 7-17 years of age than the controls. Further, a history of antecedent separations was highest among white female suicide attempters followed by black female and black male suicide attempters, and, lastly, white male suicide attempters. When interaction between antecedent and childhood separation and suicide attempt was assessed, this study found no significant interaction. These authors suggested that the interaction between suicide attempts and antecedent and childhood separations may involve a variety of factors including type of separation experiences prior to and following separation, and the effect of threatened or psychological separations. Finally, the authors questioned whether childhood separation predisposed to maladaptive responses to separations in the adult. The role of the extended family (22) and the "adoption" mechanism of black families (23) were not addressed.

Monk and Warshauer (24) compared completed and attempted suicides in three ethnic groups in New York City for the years 1968 through 1970 for completed suicides and June 1971 through June 1972 for attempted suicides evaluated by the hospitals serving the target populations in East Harlem. Ninety-six suicides were completed between 1968 and 1970 and 359 suicide attempters were evaluated between 1971 and 1972.

When age-adjusted suicide rates were compiled for New York City for the 1960-1961 period, black males had a higher rate, 20.7 per 100,000 for persons age 15 and over, compared to a white rate of 17.1 per 100,000 for persons age 15 and over. Similar figures

for the period of 1967-1968 found a black, age-adjusted rate of 16.8 and a white age-adjusted rate of 18.5. The authors suggested that part of the difference in white and black suicide rates reported elsewhere could reflect differential reporting in the classification of deaths for the two groups.

Specific problems with suicide statistics were discussed by Warshauer and Monk in 1978 (25) in a subsequent paper based on this study. Data on deaths from four New York City Health Districts with a significant ethnic minority population were compared with the records of the Office of the Chief Medical Examiner. Reports of suicidal deaths were received by the Health Department from the Office of the Chief Medical Examiner and were classified according to the International Classification of Disease (ICD) codes. The Office of the Chief Medical Examiner of New York City divided deaths into definite suicides and assigned suicides (deaths which could not be signed out as suicide) and deaths shown to be suicide upon investigation, but which were not signed out as such because no final determination was requested. As the unconfirmed black suicides in this sample used unusual methods twice as often as whites, blacks were classified as assigned suicides and did not appear in the Health Department statistics which were forwarded to the National Center for Health Statistics. Because of incomplete histories and less frequently used methods such as jumping, all black suicides were not classified in the definite suicide category. A further factor invalidating the New York City suicide figures was the impact of the change in the ICD coding which resulted in the failure to code deaths which had been classified as suicide before the change in ICD coding. The change differentially affected black suicides. Thus, these authors demonstrated how the statistics on completed suicides by blacks could be underreported, locally and nationally. As assigned suicides may not be finally categorized until the toxicology report was returned, these cases would be delayed and the correct figures would not be reported to the Health Department. The extent to which

these problems exist in other municipalities across the nation is unclear.

Lester and Beck (26) reported a sample of 124 white and 115 black suicide attempters admitted to a metropolitan Philadelphia hospital. Only subjects ages 40 and younger were included for comparison with the prior work of Hendin. Each suicide attempter was seen within 48 hours of admission by an experienced clinician to obtain a history, clinical evaluation, and to review the patient's state of mind. In a second interview a psychological technician obtained a detailed psychosocial history and administered the Beck Depression Inventory and the Generalized Expectancies Scale. When white and black suicide attempters were compared, five significant differences were identified from the 54 tests: black males were more likely to be Protestant, less likely to be living with others, more often had been separated from their fathers, scored lower on a test of vocabulary, and (if diagnosed as schizophrenic) were more likely to be diagnosed as paranoid. When white and black female suicide attempters were compared, significant differences were identified in 12 tests: black females had not completed as many grades, had more unofficial marital arrangements (cohabitation and separation versus marriage and divorce), had worse physical health, used more alcohol, had made fewer previous suicide attempts, were more often Protestant, lived more often in a low rent district, had experienced more separations from their fathers, and (if separated from their mothers) had experienced the separation at an earlier age. Black female attempters had poorer vocabulary scores, lower suicidal intent scores, and (if diagnosed as schizophrenic) were more likely to be diagnosed as paranoid. When black male and black female attempters were compared, black females were more often living with others, more often unemployed, more likely to attempt suicide at home, and were less psychiatrically disturbed. The authors noted that the lower educational level of blacks, the differences in religious affiliation, and the high incidence of absent fathers among black

suicide attempters was probably reflective of socioeconomic status. Lester Black concluded that they did not find evidence of black self-hatred and rage in the psychological measures that were used in their Philadelphia sample. The authors summarized their results as showing more similarities between black and white suicide attempters than differences.

In 1976, Kiev and Anumonye compared black suicide attempters in Newark, New Jersey with a sample of white suicide attempters in New York City (27). They reported a male to female ratio of 1:1, higher than ratios reported by studies in other settings. Although these authors commented about significant alcohol abuse by black suicide attempters in their sample, this was not quantified.

In 1977, Steele reported a sample of 275 suicide attempters who were identified from the ER of a general hospital in New Haven, Connecticut (28). Twenty-two percent (N=62) of these suicide attempters were black. Overall, this author found few differences between black and white attempters on 42 variables assessing mood, motivation, etc. Although white suicide attempters appeared to be more motivated to influence others by their suicide attempt, were more depressed, and tended to show more deliberation in their suicide attempts, the clinical significance of these statistical differences was questioned. Although white suicide attempters were found to be more deliberate in their attempts than black attempters, both groups were impulsive and the majority of both groups deliberated about their suicide attempt for only an hour or less. In view of these findings, Steele questioned whether a separate psychology was needed for black suicide attempters and stressed the need to review the belief in mental health circles that blacks were less likely to engage in suicidal behavior.

Baker (29) conducted a descriptive study of black suicide attempters evaluated in an ER setting in a New Haven general hospital which she contrasted with prior studies in this

setting. Her 1980 sample of 56 black suicide attempters was compared with prior studies of suicide attempters in this setting by Steele, (28), Weissman, Pakal, and French (30), Weissman (31), and Fox and Weissman (32).

Previous studies in this ER setting described a population of suicide attempters who were predominantly white, single females who impulsively took an overdose in the context of an argument with a significant other. Although diagnoses were not reported in Weissman's three studies, the attempters studied had no prior psychiatric history. In 1980, blacks comprised 18 percent of the total suicide attempter population of 315. The 1980 sample of black suicide attempters was significantly different from those of previous studies. Sixty-four percent of the black female attempters had a prior psychiatric history; 54 percent had made a previous suicide attempt or gesture. Their primary diagnoses were 33 percent with affective illness and 31 percent with adjustment disorders with depressive features. Only 20 percent of black females had used alcohol prior to their attempt. In the 1980 New Haven sample, black male suicide attempters were markedly different from prior studies in this setting. Seventy-six percent had a previous psychiatric history, 35 percent had made a previous suicidal gesture or attempt, and 59 percent were diagnosed as psychotic (bipolar or schizophrenic). Twenty-nine percent of the black male suicide attempters had used alcohol prior to their attempt.

The primary method of attempt by the black suicide attempters in the 1980 study was drug overdose: 74 percent in black females and 71 percent in black males. The agents used had changed to include not only sedative-hypnotic medications (methaqualone) and anti-anxiety agents (diazepam and chlordiazepoxide), but also over-the-counter medications (Sominex, Mydal, Nytol, Humphrey's 11), and prescription medication (insulin, penicillin G procaine, furosemide). All attempters were in Hollingshead-Redlich social class IV and V, the lowest socioeconomic groupings. The male

to female ratio in this sample was 1:2.3.

In contrast to other studies of suicide attempters, Baker focused on the person who accompanied the attempter or came later to the ER. Sixty-four percent of black female and 35 percent of black male attempters were accompanied to the ER by a family member, usually the mother, a sibling or spouse, or children in declining order of frequency. In each case, the accompanying significant other was involved in or was aware of the psychosocial stressors that precipitated the suicidal act. Of the 31 patients referred to outpatient treatment, 22 percent entered treatment, 10 percent made one appointment and dropped out, and 55 percent did not followup on their referral. In a 1968 sample of New Haven suicide attempters, Paykel, Hallowell, and Dressler (33) reported that of 38 percent of their sample of white and nonwhite attempters who were referred for outpatient treatment, only 16 percent showed up for their appointment. Baker suggested that greater focus on couple or family crisis intervention in the ER with the attempter and the accompanying person(s) could have two important benefits. First, it could identify outpatient psychiatric resources that could be used for future conflict resolution so that the person would not have to attempt suicide to communicate distress. Second, involvement of the significant other(s) at the time of initial ER or crisis center contact could facilitate the entry of the attempter into outpatient treatment.

THEORIES OF BLACK SUICIDE

Before turning to a discussion of preventive strategies, let us review the various theories developed to explain black suicide. In 1897, (34) Durkheim discussed the sociological dimensions of suicide. He related the rising suicide rate in the civilized world to a functional failure of State, church, and community as the forces for social integration that they had been prior to the Industrial Revolution. Durkheim saw vulnerability to suicide as existing in people who were not integrated into any religious, communal, or

family group. Even more vulnerable were individuals who suffered a disturbance in the balance of their social integration: the single, widowed, and divorced having higher suicide rates than the married.

Hendin (15) pointed out that Durkheim's theory did not explain the high rates of suicide in Austria, a Catholic country. Nor did it explain the strikingly high suicide rates in Denmark and Sweden compared to the low suicide rate in Norway. He emphasized the need for a psychosocial approach to understanding the differences in suicidal behavior across cultures. Hendin stated that the Freudian construct (35) which sees suicide as a response to loss or abandonment of a loved object as insufficient in itself. Psychodynamically, rebirth, return, or reunion fantasies with the lost object may be seen as an attempt to undo or deny loss. Freud's instinctual frame of reference did not lead him to be concerned with the psychological impact of the social institutions of particular cultures or with psychosocial questions such as why suicide was very high in one country and low in another. Hendin suggested that more than an amalgam of Freud and Durkheim was needed to understand the varying motivations for suicide in different cultures and subcultures, the differences between genders and different age groups, and differences in ways of coping with love and loss, life, and death.

More recent theories address the current context of black suicide attempters. Specific explanations of black suicide include: 1) urban stress, 2) the status-integration theory, 3) the black family deficit theory, and the 4) external restraint theory. The urban stress (frustration-aggression) hypothesis (Seiden, 16) proposes that compounded urban stresses associated with migration, poverty, unemployment, racism, poor housing, and poor education result in violence which often, though not always, takes the form of suicide. The status-integration theory suggests that as blacks work their way into the middle and upper-middle classes they inherit the economic, social, and psychological tensions

of their white counterparts. Davis (36) suggests that the more upwardly mobile blacks are, the more intense are the problems of adjustment and assimilation into the American mainstream. These tensions produce a corroding sense of internal alienation which may result in self-destruction. The absence of higher suicide rates in black females provides some evidence against this theory. But, the greater probability of private care for this population may prevent its identification from ER statistics. A further bias involving completed suicide in middle-class black persons may be a collusion to prevent a diagnosis of suicide by the medical examiners office. These are methodological concerns in all studies of suicide attempters.

The black family deficit theory presents the black family as being unable to meet the fundamental needs of its members for survival, socialization, and the transmission of a viable cultural heritage. Pinderhughes (37), in discussing the impact of poverty and racism on black families, described the result as the "victim system." The work of Lewis and Looney (38) illustrated that working-class black families, just above the poverty level, were well-functioning units. These authors suggest that sufficient economic insecurity can destabilize and then perpetuate dysfunctional patterns of family function.

The external restraint theory of Henry and Short (39) suggested that suicide varied inversely with horizontal restraining factors (social relationships with others) and vertical restraining factors (social class and/or social status). These authors and Maris (40) suggested that the strength of the relational system of the individual defined by marital status, urban-rural residence, and ecological distribution serve as buffers; the stronger the relational system, the lower the number of suicides. Davis (36) viewed this external restraint theory as more relevant to black suicide. He questioned whether the decrease in overt racism and discrimination, which in the past had fostered group solidarity, as noted by Prudhomme (12,13), would decrease the strength of the relation-

al system for young black persons in the 1980s. If this did occur, family ties would be left as the major insulation against the psychosocial stressors of daily living for the urban resident black youth. By this theory, if the family was disorganized, over-stressed, and/or dysfunctional, the black youth would have no ameliorating or buffering factors and would become a higher risk for suicidal behavior.

SUMMARY OF THE LITERATURE

This review of the literature on black suicide has shown some divergent results across a variety of studies in several different cities. Several points of consensus as well as specific points of intervention follow.

1. Black suicide rates peak for both sexes between ages 25 and 44.
2. Black suicide rates decline in both sexes after age 45.
3. Black males have a "double risk of death" due to their high rates of death from homicide and suicide.
4. Rates of completed suicide have remained consistently low in black females in comparison to all other groups.
5. During a 31 year period the increase in the race-sex specific rates of completed suicide have been highest among black males (57% increase) and in black females (47% increase) in age-adjusted national statistics.
6. In specific States in specific years, suicide rates for black males exceed those for white males and white females in contrast to the overall national statistics.
7. Evidence of municipal and regional differences in the rates of black suicide attempts and completed suicides is provided by the Los Angeles data of Christian (41) and the data of Pederson et al. (20) from Rochester (NY), the only studies which reported higher rates of suicide attempts in black females compared with white females.

8. The accuracy of national suicide statistics may be flawed if black suicides are not coded as suicide due to administrative procedures, the use of alternative methods of suicide, and delayed reporting due to pending laboratory studies.

9. Only theories of suicide which have emphasized interpersonal conflicts, familiar discord, financial concerns, and the impact of poverty and racism upon the individual and the family, have stood the test of time and repeated observations in suggesting specific etiologies of suicide attempts and completed suicide by Afro-Americans.

10. Initiating crisis intervention techniques which include the person who accompanies the suicide attempter to the ER or crisis setting may: a) improve followup on referral to outpatient treatment and b) prevent future suicide attempts by making everyone in the attempter's network more sensitive to the cues of distress in the system and aware of the resources to use to seek help.

11. Although the literature suggests that suicide attempters and persons who complete suicide are different populations, there have been no published studies to date that have contrasted black suicide attempters and blacks who completed suicide in the same geographically defined area in the same defined time period.

12. The population of black suicide attempters evaluated in some ERs in 1980 appears to be changing: an increased proportion of attempters have a history of psychiatric treatment and a greater severity of psychiatric diagnoses.

PREVENTIVE STRATEGIES

Three levels of prevention are discussed in textbooks (42). Primary prevention involves actions which prevent disease as exemplified by vaccination. Secondary prevention focuses on the treatment of illness, e.g. hospitalization of a psychotically disorganized individual. Tertiary prevention focuses on the rehabilitation of an individual

to facilitate return to productive function, e.g. postventive work with the surviving family members of a person who has completed suicide.

Primary preventive strategies involving black suicidal youth should focus upon conflict resolution in the family and the clarification of expectations in various relationships. Helping black adolescents and youth to understand the factors that they can control and the factors which are controlled by society may aid in clarifying the sources of frustration in the 1980s. As noted by Davis (43), high "in-group" stress may result from an individual's family relationships, friendships, and personal relationships. The "extra group" stresses resulting from work relationships with other people and financial difficulties may be modified by support from the extended family and community groups such as churches or social clubs. Aiding black youth in sorting out the locus of stress and identifying effective action, should prevent a build-up of frustration to the point of impulsive action. These educational activities could be centered in schools, churches, and adolescent drop-in centers and could be sponsored by black church groups, black businesses, and black fraternal organizations.

Although New Haven represents only one study site, the population of suicide attempters has been studied over a 32-year period. With deinstitutionalization and the increased utilization of community mental health centers and general hospitals for inpatient psychiatric treatment, the population of psychiatric patients coming to the general hospital ER has included an increasing proportion of patients with prior psychiatric histories. Patients with affective illness (Tsuang, 44, Tsuang and Woolson, 45), schizophrenia (Roy, 46, Brier and Astrachan, 47), and substance abuse--particularly alcohol (Motto, 48, Murphy, Armstrong, and Hermele, 49) are at increased risk for attempting suicide. Informational programs organized for the families of patients with psychiatric illness are important primary preventive strategies. Improving the family's

knowledge of symptoms and behavioral changes characteristic of psychotic decompensation will enable the family to seek help before a frank psychotic episode occurs. The distressed and distraught youth can be brought to a crisis intervention setting for help before a suicide attempt signals that something is wrong.

Another primary preventive strategy involves the removal of all out-of-date and unnecessary medication from the home. As overdose remains a major method of suicide attempt for some black populations, removing medications from the home would decrease the availability of medications to a distraught individual making an impulsive act. Prescribing non-lethal amounts of medication to patients in active psychiatric treatment who have diagnoses associated with an increased risk of suicide would be helpful, also.

Secondary preventive strategies should focus upon the initial evaluation of the black suicide attempter, whether in the ER of a general hospital or the crisis unit of a community mental health center. As noted by Baker (29), the person who accompanies the suicide attempter or comes later to the ER is usually aware of and involved in the events which precipitated the suicidal act. By initiating family and/or couple crisis intervention at the time of initial evaluation, conflict resolution can be facilitated and the possibility of followup and entry into treatment can be improved. Further, the suicide attempter and his/her family can be provided with alternatives for help at a time of future crisis to prevent future suicide attempts through de-escalation of crises by the family seeking help and services at a crisis facility. Initially, the presistantly suicidal patient who presents repeatedly with suicidal gestures/attempts and does not follow through on referrals to treatment should be involuntarily hospitalized. Involuntary psychiatric hospitalization is recommended in order to break the cycle and initiate the treatment process.

Tertiary preventive strategies have focused

on the surviving significant others of the attempter. Fortunately the literature in this area is increasing (50,51,52).

FUTURE RESEARCH DIRECTIONS

As described in the above literature review, various studies have looked at suicide attempters and at those who complete suicide, sometimes in the same study. Only one case-control study compared black and white suicide attempters and childhood separation and only one study looked at the precipitating events as well as the persons who accompanied the attempter to the hospital. In order to detect the possibility of changing patterns in black suicide attempters which are indicated by increased psychiatric history, increased severity of psychiatric diagnoses, and the presence of psychosocial stressors such as those existing in the 1980s, more carefully designed studies are needed.

Although studies of black suicide attempters and completers have been conducted in New York City, Rochester (NY), Los Angeles, Detroit, Philadelphia, and New Haven, they were conducted in different years, they assessed different populations of suicide attempters, and emphasized the collection of different data. I suggest that the research efforts include a multi-site, prospective, descriptive study of black suicide attempters in at least five cities with large black populations, to be completed in the same calendar year, with a sample selected by the same method in each site. The research protocol should collect data on: demographics, method of attempt, prior history of suicide attempt, history of prior ER contacts, history of prior psychiatric treatment, specific precipitating events, evidence of substance use, the person who accompanied the suicide attempter to the crisis setting, information about self-perception, family constellation, and the network of interpersonal and social relationships--particularly those changing or stressed in the period before the attempt. From this established data base, similarities and differences across the nation could be

identified. Subsequently, case-control studies using the identified sample of suicide attempters in the five cities could define specific risk factors and determine whether these risk factors varied in the five cities. Completed suicides in the same five cities could be reviewed for the same study period. Psychological autopsies as well as proxy interviews of the surviving next-of-kin to assess the precipitating events, current relationships, and self-image of the black persons who completed a suicide would aid in clarifying the specific differences between the attempter and completer suicide populations. Where possible, an attempt should be made to identify suicide attempters and completers in all socioeconomic classes.

CONCLUSION

Specific strategies which can be implemented at the local/community level by societal institutions and through federal research initiatives have been suggested to address the national problem of black suicide. The implementation of these strategies has the potential to save lives and provide important data from which to develop future, more specific, preventive strategies.

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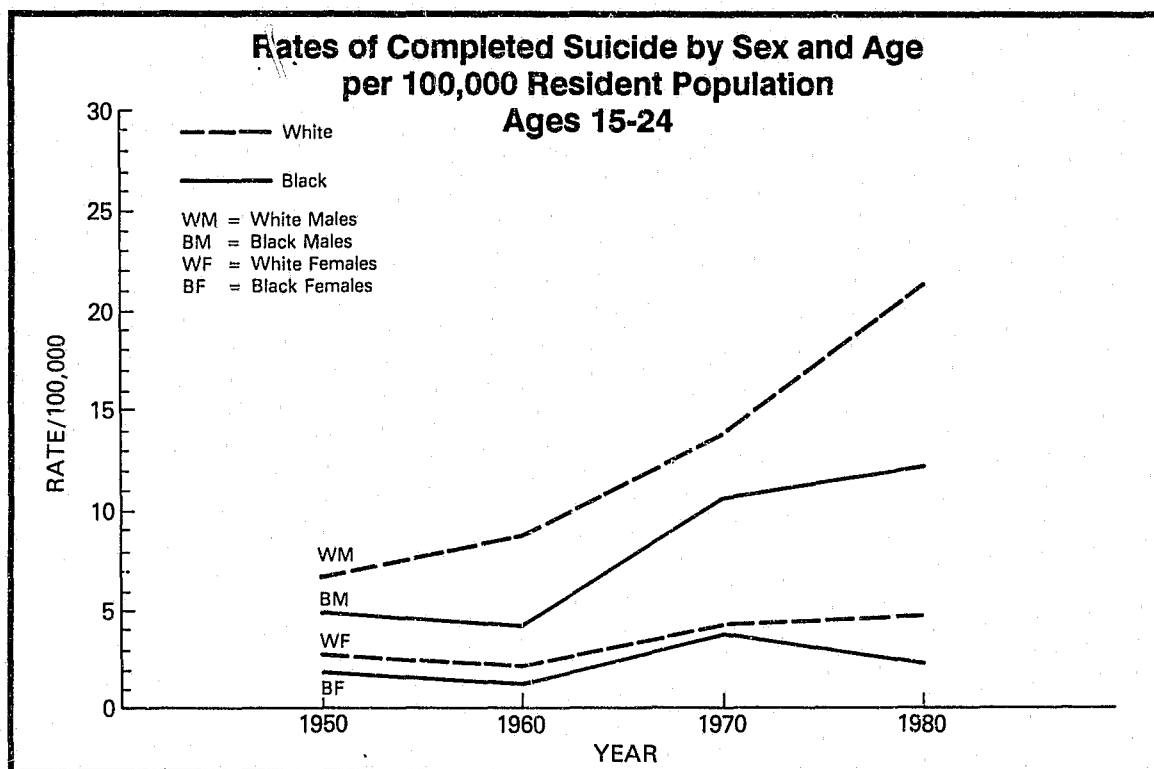


Figure 1.

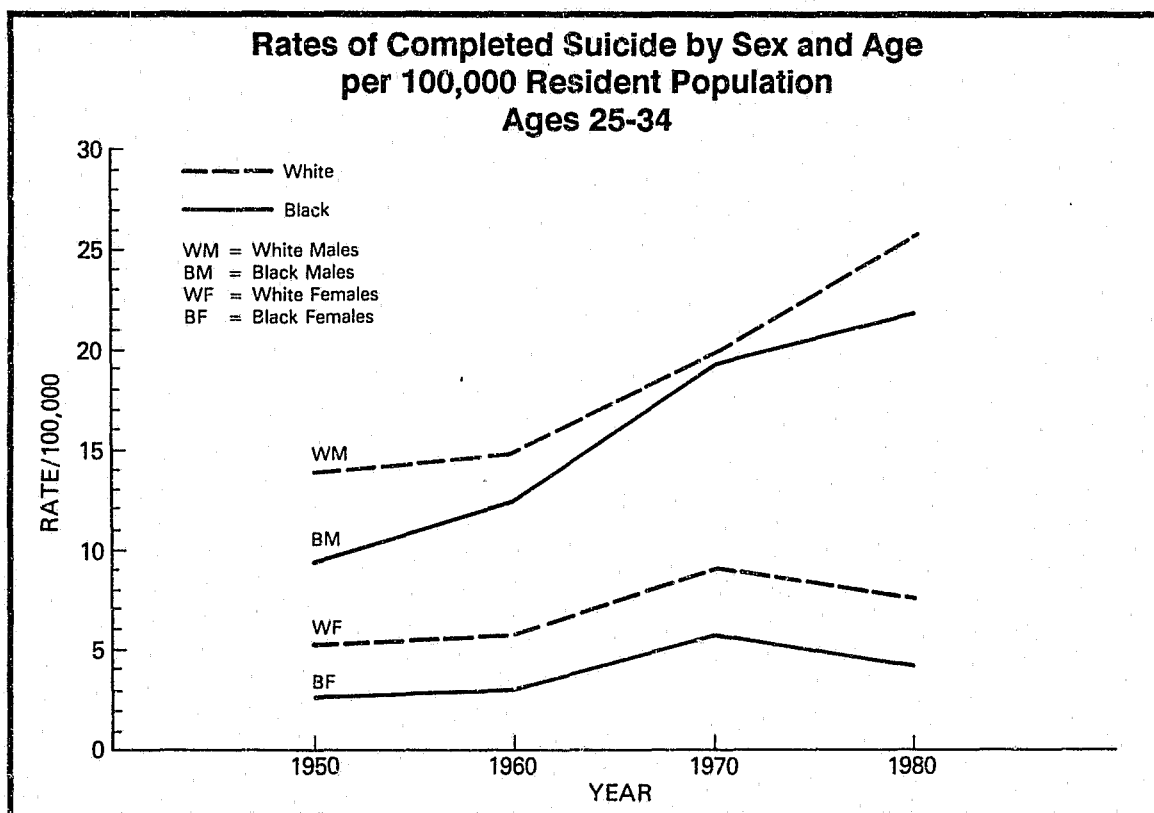


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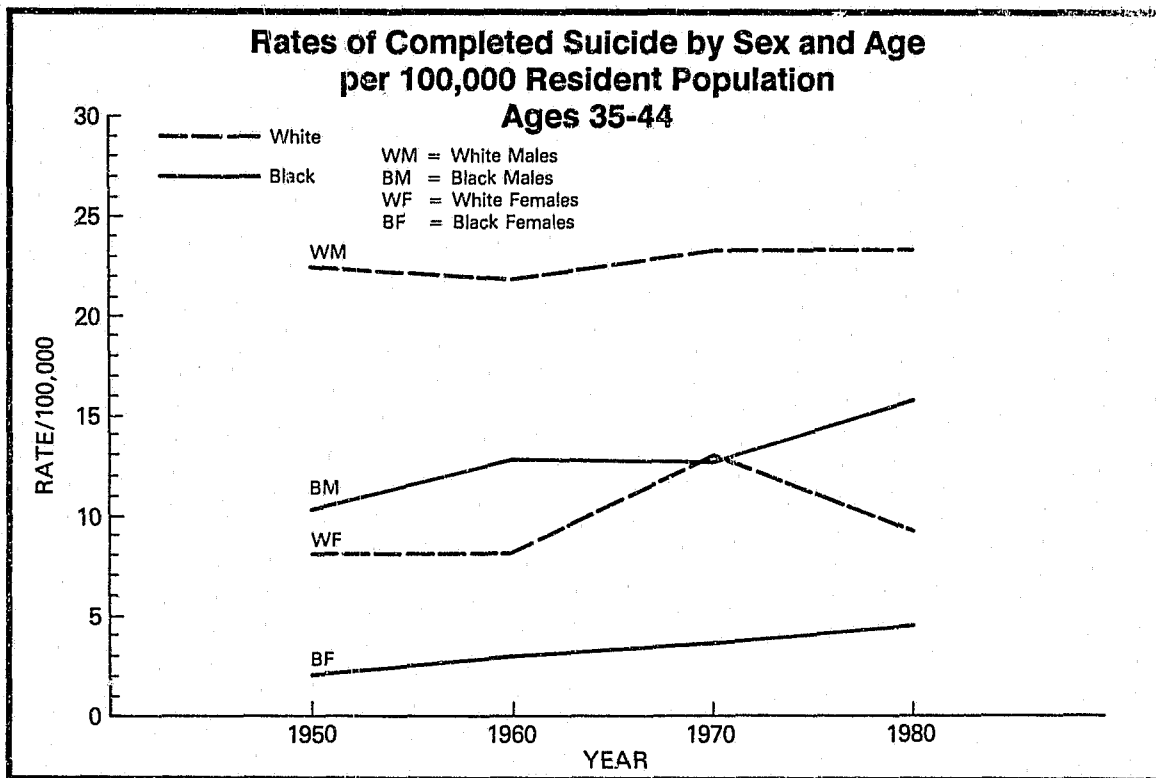


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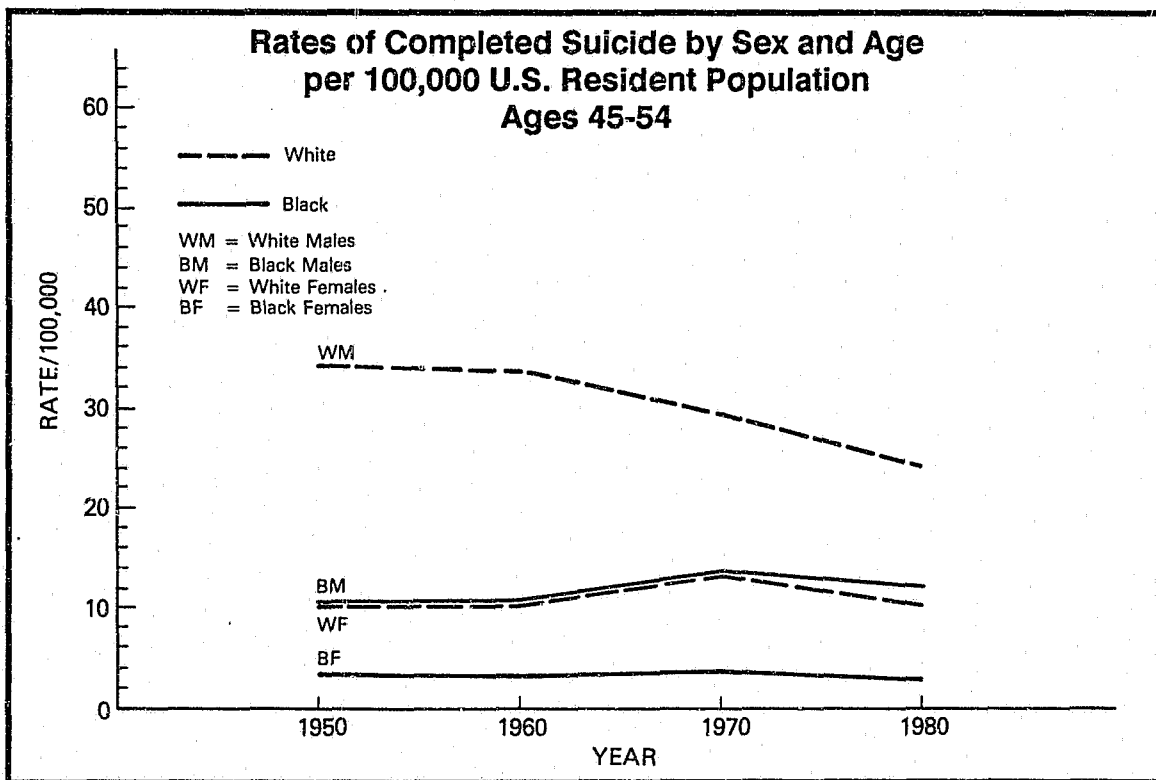


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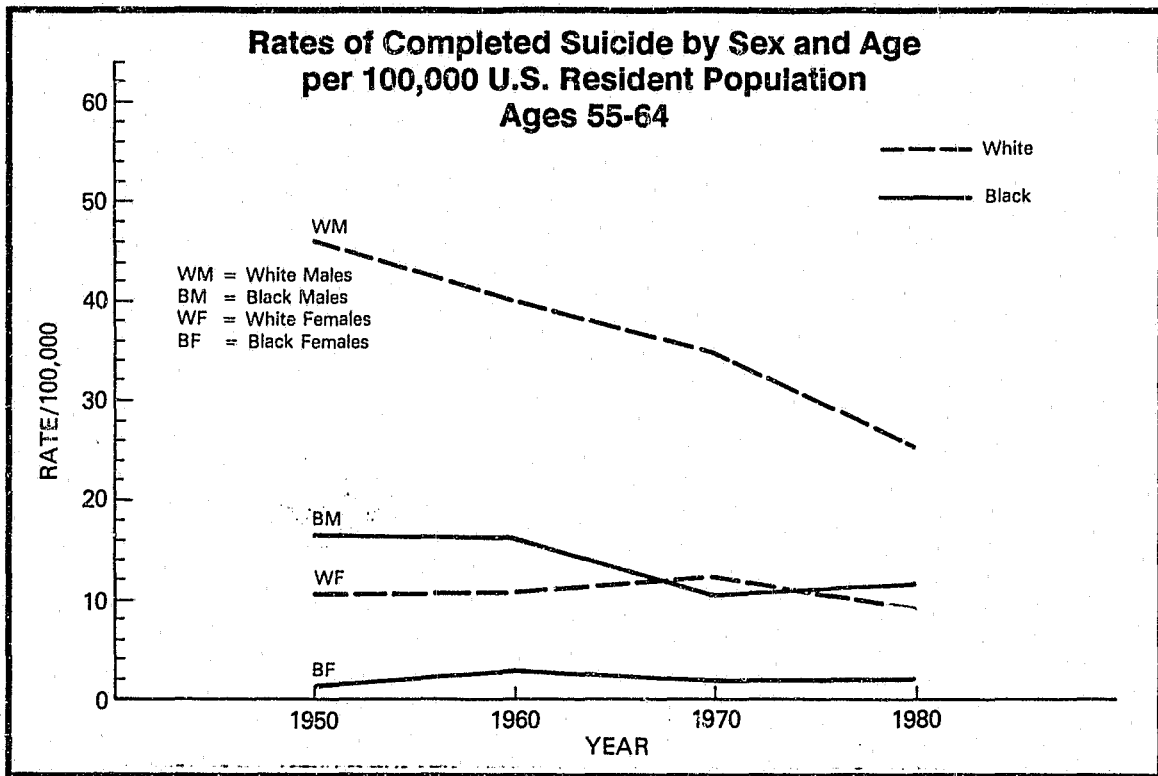


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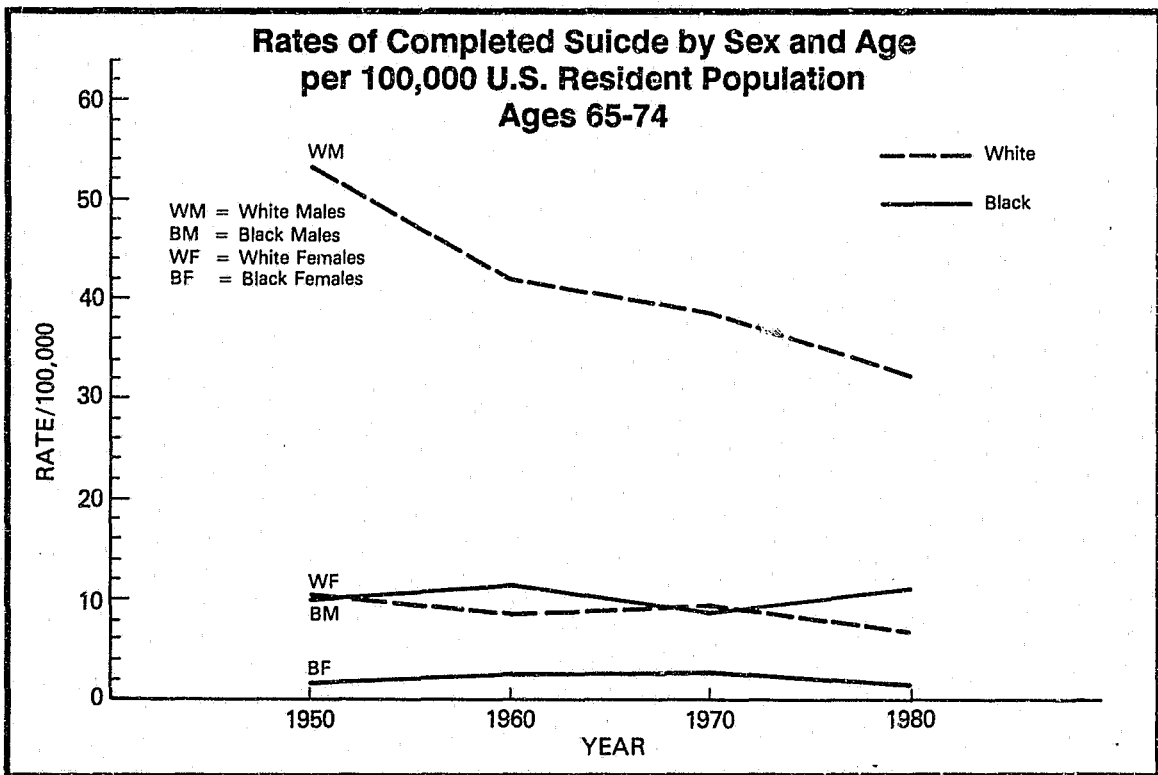


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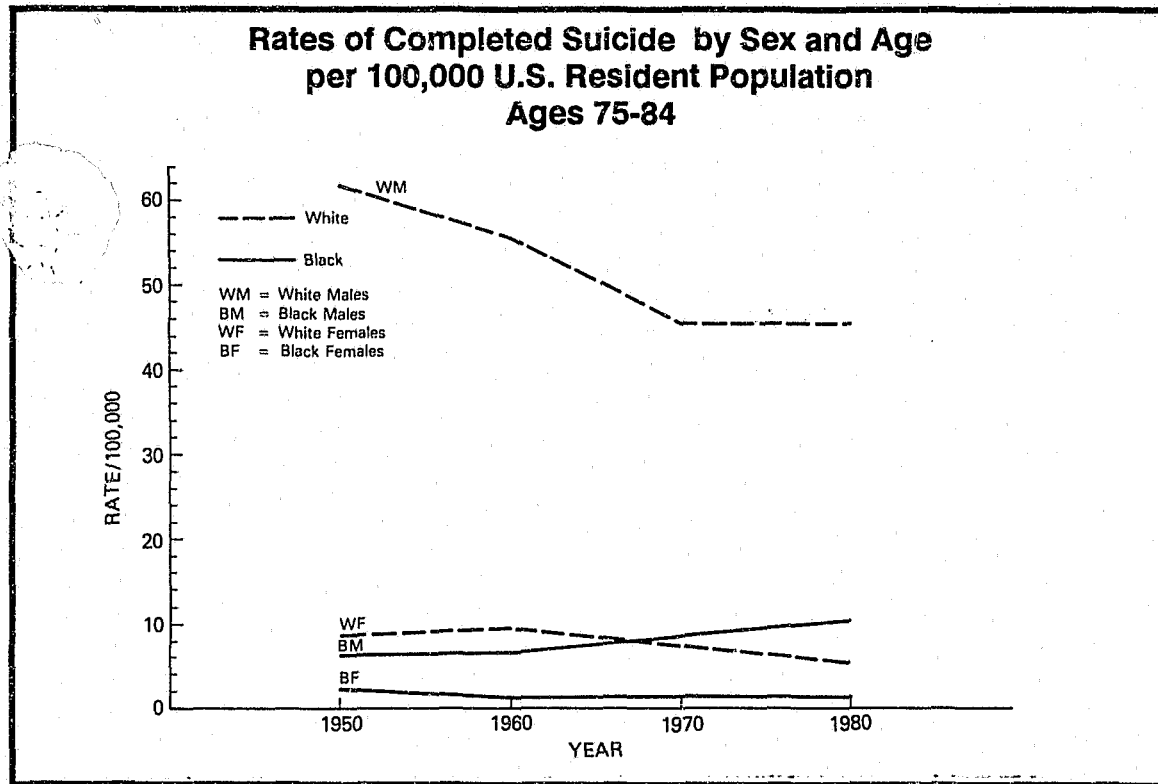


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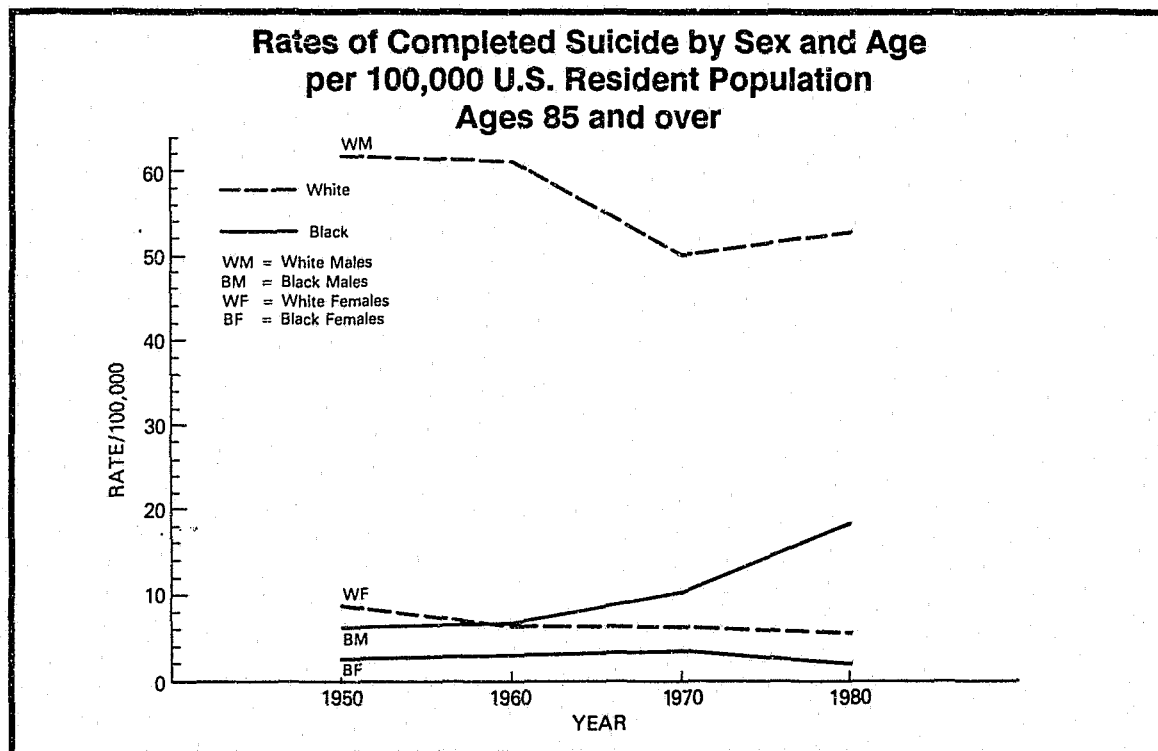


Figure 8.

HISPANIC SUICIDE IN THE SOUTHWEST, 1980-1982

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SUMMARY

Little is known about suicide among Hispanic Americans. We studied suicides among Hispanics of Mexican origin (Mexican Americans) in five southwestern States (Arizona, California, Colorado, New Mexico, and Texas) where more than 60 percent of all Hispanics in the United States reside (86% of whom are Mexican American). We obtained data on the number of suicide deaths in the white population with Hispanics and Anglos (white, non-Hispanic) identified separately. Suicides of Anglos were used as a comparison group. The suicide rate for whites in the five southwestern States was almost one-fourth higher than the rate for whites nationally. Suicide rates for the two ethnic groups, however, showed the rate for Hispanics to be less than the national rate for whites and one-half that of Anglos residing in the same area. The lower suicide rate for Hispanics relative to Anglos is seen for both males and females. The ratio of male to female suicides for Hispanics was greater than for Anglos (4.3 to 1 for Hispanics and 2.7 to 1 for Anglos). Proportionately more suicides occur among young Hispanics than among young Anglos.

More than one-third (34.6%) of Hispanic suicides occurred to persons less than 25 years of age compared to one-sixth (16.5%) of Anglo suicides. The 1990 health objective for the United States for suicide identifies young persons 15 to 24 years of age as the population on whom to focus national suicide prevention and intervention efforts. This objective is appropriate for the Hispanic population since, from our findings, the highest suicide rates for Hispanics are in the 20-24 year age group (17.1%).

INTRODUCTION

In 1978, suicide was the ninth leading cause of death for the white population in the United States with a rate of 13.4 deaths per 100,000 population (1). Although much suicide data for whites have been collected, analyzed, and reported in official publications and scientific literature (2,3,4), very few studies have examined suicides specifically among Hispanics, the largest ethnic subgroup within the white population (5,6,7,8). Furthermore, no study has compiled a large data set to analyze and compare suicide

among Hispanics of Mexican origin with Anglos (white, non-Hispanics) living in the same geographic area.

This paper updates data from a previously reported study (9) of suicide among Anglos and Hispanics in five southwestern States where more than 60 percent of the nation's Hispanics reside.

METHODS

The Hispanic population of the United States is composed of three major and culturally diverse subgroups: Mexican Americans, Puerto Ricans, and Cubans. We studied the incidence of Hispanic suicide in the largest of these subgroups, Mexican Americans.

Death certificates in each of the five southwestern States (Arizona, California, Colorado, New Mexico, and Texas) allow for identification of Anglos and Hispanics separately; 86 percent of Hispanics in the five-State area are Mexican American (10). However, the States vary in the amount of mortality data they produce and publish on racial and ethnic groups in their annual vital statistics summaries. No State published suicide data for Anglos and Hispanics by the variables used in our study, namely, age, sex, and method of suicide.

The Office of Vital Statistics of the respective State health departments cooperated in this study by providing the Centers for Disease Control (CDC) with either special tabulations or computer data tapes for all suicides of Anglos and Hispanics between 1977 through 1980. Classification of suicide as the cause of death was based on the Eighth Revision of the International Classification of Disease Adapted (ICDA-8) for 1977-1978 (11), and based on the Ninth Revision (ICD-9) for 1979-1982 (12). The titles for the cause-of-death category for suicide are identical under the Eighth and Ninth Revisions and the comparability ratio between the two revisions is near 1.0 (13). The classification of suicide by method was based on cause of death codes E950-E959 in the International

Classification of Disease (11,12).

We produced population data for calculating suicide rates for Anglos and Hispanics in the five southwestern States by using computer tapes from the Current Population Survey (CPS) (14). The population statistics from CPS were estimates based on a weighted national sample. This sample was considered too small to provide reliable population estimates at the State level by ethnicity, age, and sex. Therefore, suicide rates were centered for the selected time periods 1977-1979 and 1980-1982 by using the mean number of suicides for each 3-year period as the numerator and the mean population according to CPS data for each 3-year period as the denominator.

Hispanic ethnicity from State health department suicide data in general is determined by the name of the decedent appearing on the death certificate. That is, if the decedent's surname corresponds to a name on a list of Spanish surnames used by the State Office of Vital Statistics, then that person is categorized in the State mortality statistics as Hispanic. Hispanic in the Current Population Survey data is defined as a person of Hispanic origin who reported himself/herself as Mexican American, Chicano, Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish origin (15). It is not possible to determine from State mortality data using Spanish surnames whether Hispanic suicide victims were Mexican American, Cuban, Puerto Rican, or of other Spanish origin. However, because population statistics (10) show that 86 percent of Hispanics in the five southwestern States are Mexican American, we may reasonably assume that the preponderance of Hispanics in our study who committed suicide were Mexican American. Less than 1 percent of persons in the five southwestern States who were self-identified as Hispanic in the CPS surveys were nonwhite.* Our study assumes that the number of persons of nonwhite races who were identified as Hispanics by having a Spanish surname is equally small. Anglo is defined as white, non-Hispanic.

*Special CDC tabulations of CPS data

RESULTS

The suicide rate for whites in the five southwestern States was higher than the national suicide rate for whites for both the 1977-1979 period and 1980-1982 period (Table 1). However, when we separated the suicide rate for whites in the five southwestern States into rates for Anglos and Hispanics, we see that the higher rate for whites for both time periods was a result of a high rate for Anglos--a rate that was approximately twice the rate for Hispanics. However, the difference between the rates for Anglos and Hispanics narrowed slightly between the two time periods. For the period 1977-1979 the rate for Anglos was 2.1 times higher than the rate for Hispanics compared with 2.0 times higher for the period 1980-1982.

In both ethnic groups, more males than females committed suicide (Table 2). However, the ratio of male to female suicides was higher for Hispanics than Anglos. This higher sex ratio for Hispanics was consistent for all age groups.

Suicides occurred at younger ages among Hispanics than among Anglos. Table 2 shows that 34.6 percent of all Hispanics who

committed suicide were under age 25 compared with 16.5 percent of Anglos who committed suicide under age 25. More than half (52.1%) of Anglos who committed suicide were over age 40, while about one-fourth (26.2%) of Hispanics who committed suicide were over age 40. The data for males show an even more pronounced difference between the age of suicide for Anglos and Hispanics. More than half (53.5%) of the Hispanic men who committed suicide were under age 30. On the other hand, less than one-third (30.9%) of Anglo men who committed suicide were under age 30.

Three-year suicide rates for the period 1980-1982 show that the age-adjusted overall rate for Anglos is 1.7 times the rate for Hispanics (16.9 and 10.0, respectively) (Table 3). The age-adjusted suicide rate for Anglo men was more than one and a half times the suicide rate for Hispanic men (25.9 and 16.8, respectively), while the rate for Anglo women was more than twice the rate for Hispanic women (8.9 and 3.6, respectively). Suicide rates for Anglos were higher than rates for Hispanics in every age group, both male and female, with one exception--young Hispanic males (15-19 years of age) had a suicide rate slight-

Three-Year Suicide Rates* for the Periods 1977-1979 and 1980-1982 by Race, Ethnicity and Geographic Area**				
Time Period	United States ¹	Five Southwestern States ²		
		White	White	
			Anglo	Hispanic
1977-79	13.8	17.4	19.4	9.2
1980-82	13.2	15.9	17.8	8.8

*Rates per 100,000 population

**Five Southwestern States: Arizona, California, Colorado, New Mexico and Texas

1. Source: Number of suicides from National Center for Health Statistics mortality tapes. Population from Current Population Survey data tapes.

2. Source: Number of suicides from State health departments' offices of vital statistics. Population from Current Population Survey data tapes.

Table 1.

ly higher than Anglo males in the comparable age group.

The pattern of suicide rates by age group is shown for Anglo men and Hispanic men in Figure 1. Clearly, Anglo males (with one exception) have the highest rate in all age groups, with almost uniform rates from the twenties through the sixties, then a marked

increase to the peak rate in the 70+ year age group. Hispanic males have a somewhat different pattern: the rates peak in the 20-24 year age group and again, but lower in the oldest age group. The patterns for women in both ethnic groups have a somewhat similar unimodal curve with the lowest rates at the extremes of the age groups (Figure 2).

**Number, Percentage Distribution and Sex Ratio of Suicides
by Race/Ethnicity, Age Group, and Sex, in Five Southwestern States*
1980-1982**

Ethnicity & Age Group	Male			Female			Total			Sex Ratio
	No.	%	Cum. %	No.	%	Cum. %	No.	%	Cum. %	
Anglo										
<15	69	0.6	0.6	24	0.6	0.6	93	0.5	0.5	2.9
15-19	642	5.4	6.0	191	4.3	4.9	833	5.1	5.6	3.4
20-24	1436	12.0	18.0	338	7.7	12.6	1774	10.9	16.5	4.2
25-29	1542	12.9	30.9	459	10.4	23.0	2001	12.2	12.2	3.4
30-39	2257	19.0	49.4	883	20.0	43.0	3140	19.2	47.9	2.6
40-49	1499	12.5	62.4	738	16.8	58.8	2237	13.7	61.6	2.0
50-59	1544	12.9	75.3	776	17.6	77.4	2329	14.2	75.8	2.0
60-69	1342	11.2	86.5	518	11.8	89.2	1860	11.4	87.2	2.6
70 +	1617	13.5	100.0	473	10.8	100.0	2090	12.8	100.0	3.4
Total	11948	100.0		4400	100.0		16348	100.0		2.7
Hispanic										
<15	20	1.1	1.1	4	1.0	1.0	24	1.1	1.1	5.0
15-19	237	13.2	14.3	45	10.9	11.9	282	12.8	13.9	5.3
20-24	390	21.8	36.1	68	16.4	28.3	458	20.7	34.6	5.7
25-29	313	17.4	53.5	66	16.0	44.3	379	17.2	51.8	4.7
30-39	387	21.6	75.1	99	23.9	68.2	486	22.0	73.8	3.9
40-49	166	9.3	84.4	61	14.8	83.0	227	10.3	84.1	2.7
50-59	130	7.2	91.6	43	10.4	93.4	173	7.8	91.9	3.0
60-69	76	4.2	95.8	18	4.4	97.8	94	4.3	96.2	4.2
70 +	75	4.2	100.0	9	2.2	100.0	84	3.8	100.0	8.3
Total	1794	100.0		415	100.0		2207	100.0		4.3

*Five Southwestern States: Arizona, California, Colorado, New Mexico, and Texas.

Table 2.

**Three-Year Suicide Rates* by Ethnicity, Age Group, and Sex
Five Southwestern States**, 1980-1982**

Age Group	Anglo			Hispanic		
	Male	Female	Total	Male	Female	Total
<15	0.8	0.3	0.5	0.5	0.1	0.3
15-19	17.1	5.4	11.4	17.7	3.5	10.8
20-24	34.0	8.0	20.9	29.4	5.1	17.1
25-29	35.1	10.4	22.7	25.8	5.3	15.4
30-39	31.5	12.7	22.2	23.3	5.6	14.2
40-49	30.8	15.1	23.0	15.8	5.3	10.4
50-59	32.1	15.5	23.6	17.4	4.9	10.8
60-69	34.4	11.2	21.8	17.9	3.5	9.9
70+	57.8	11.1	29.7	25.9	2.6	13.3
Total	26.5	9.5	17.8	14.4	3.2	8.8
Age-Adjusted						
Total	25.9	8.9	16.9	16.8	3.6	10.0

*Per 100,000 Population

**Five Southwestern States: Arizona, California, Colorado, New Mexico, and Texas.

Table 3.

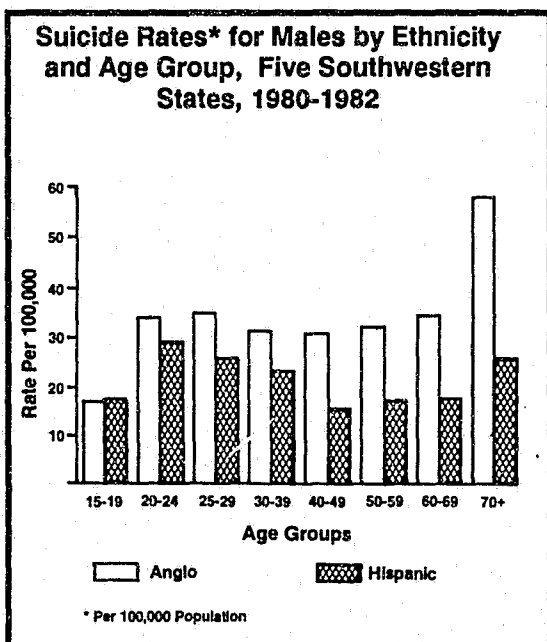


Figure 1.

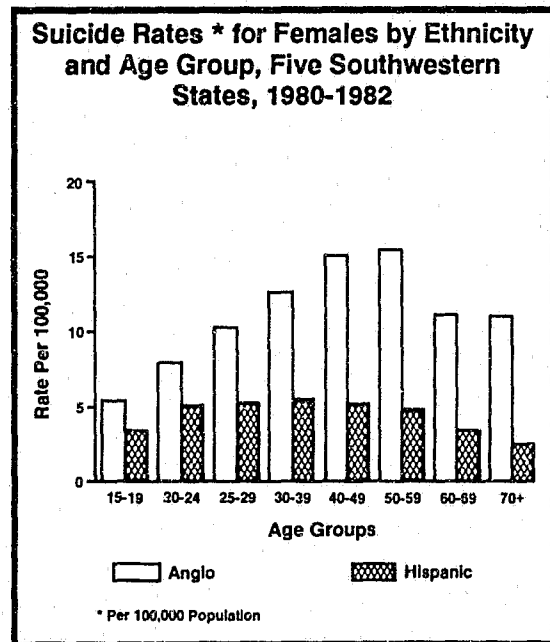


Figure 2.

Methods of suicide are shown in Table 4. The primary method of suicide for Anglos and Hispanics was the same. More than half the persons in both ethnic groups who committed suicide used firearms or explosives (59.8% of Anglos and 59.2% of Hispanics). The second and third most frequently used methods of suicides were reversed for the two ethnic groups. Poisoning (22.5%) was the second most frequently used method for Anglos, and hanging, strangulation, and suffocation (10.8%) were the third most frequently used methods. The reverse was true for Hispanics (20.7% of suicides by hanging, strangulation, and suffocation and 12.8% of suicides by poisoning).

The patterns of suicide by method were similar for females in both ethnic groups, namely, both Anglo and Hispanic females had equally high percentages of suicide by firearms and explosives (42.8% and 44.4%, respectively). Poisoning was the second most frequently used method for both Anglo and Hispanic females (41.5% and 34.5%, respectively) and hanging, strangulation, and suffocation was the third most frequently used method (7.9% and 13.5%, respectively). While Anglo and Hispanic males had equal-

ly high percentages of suicide by firearms and explosives (66.0% and 62.6%, respectively), Anglo males had almost twice the percentage of poisoning (15.5% and 7.8% for Anglo and Hispanic males, respectively) and almost half the percentage of hanging, strangulation, and suffocation (11.9% and 22.3% for Anglo and Hispanic males, respectively).

DISCUSSION

In interpreting the data, three possible data limitations should be kept in mind. First, suicide, to an unknown extent, is understated as a cause of death in vital statistics (16). This understatement is a result of difficulty in establishing suicidal intent, practical considerations (such as a loss of insurance benefits), and the social stigma associated with suicide (which seems to be particularly important among youth).

Although it has been suggested that suicide rates for Mexican Americans may be underestimated, it is unlikely that underreporting alone is responsible for the low rate of suicide among Mexican Americans relative to Anglos (19). An investigation of the validity of reported suicide rates in eleven western

**Percentage Distribution of Suicides by Ethnicity, Sex, and Method
Five Southwestern States*, 1980-1982**

Method**	Male	Anglo Female	Total	Male	Hispanic Female	Total
Firearms and explosives (E955)	66.0	42.8	59.8	62.6	44.4	59.2
Poisoning (E950-E952)	15.5	41.5	22.5	7.8	34.5	12.8
Hanging, strangulation, suffocation (E953)	11.9	7.9	10.8	22.3	13.5	20.7
All other (E954, E956-E959)	6.6	7.8	6.9	7.2	7.5	7.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

*Five Southwestern States: Arizona, California, Colorado, New Mexico, and Texas

**UCDA-8 codes shown in parentheses..

Table 4.

States (four of which are in our study) did not reveal any evidence of systematic bias in reporting specific to any race or ethnic group (18). We investigated the possible effect that misclassification of suicide deaths as deaths due to undetermined causes might have had on the difference in the incidence rate of suicides for Anglos and Hispanics. We found that the difference could not be explained by a large number of Hispanic deaths being classified as "cause undetermined". Even if we assumed the most extreme case, that is, no suicides by Anglos were misclassified as "cause undetermined", and all deaths of Hispanics classified as due to undetermined causes were actually suicides, the rate of suicide would still be two times greater for Anglos than for Hispanics.

A second possible data limitation is the unknown extent to which undocumented aliens in the Hispanic population are underrepresented in the CPS sample. The CPS is a sample of housing units and includes all persons who occupy a housing unit, without regard to residency status. No evidence indicates a differential enumeration of Anglos and Hispanics in the CPS data we used. Furthermore, if an underenumeration of Hispanics in the CPS data does occur, then the true Hispanic suicide rate is lower than reported in this paper, and hence, even more disparate from the Anglo suicide rates.

A third possible data limitation is the unknown extent to which different methods of determining Hispanic ethnicity affect the rates, namely, Spanish surname (for vital statistics) and self-identification (for population statistics). Self-identification as used by the U.S. Census Bureau has been suggested as an important way to establish a consistent and uniform definition for Spanish ethnicity (19). Vital statistics, however, continue to rely on Spanish surname for ethnic identification because of problems encountered with self-reporting of ethnicity on the death certificate**.

**Personal communication with persons in the Office of Vital Statistics in the five southwestern States.

The statistical patterns of suicides by Anglos in the five southwestern States were similar to the statistical patterns of suicides by age, sex, and method for whites nationally (20). However, Hispanics in the same five southwestern States had some important differences in patterns of suicide when compared with Anglos, and hence, with whites nationally.

Perhaps the most important difference in suicide patterns for Anglos and Hispanics was that the incidence of suicide for Hispanics was approximately half the incidence for Anglos. Very few studies cited in the literature have looked at the incidence of suicide for Hispanics (5,6,7) and these studies report only local data. Two of these studies (in El Paso (6) and Denver (7)) focused on Mexican Americans and can be compared with our findings because population statistics (10) indicate that almost 90 percent of Hispanics in the five southwestern States are Mexican American. As in our study, both of these studies found suicide rates for Mexican Americans to be approximately half the rates for Anglos.

A second major difference in the patterns of suicide for Anglos and Hispanics was the comparatively small proportion of suicides by Hispanic females compared with the proportion of suicides by Hispanic males. Our study found that the sex ratio for suicides by Anglos was similar to the sex ratio for suicides by whites nationally (21). We found, however, that among Hispanics, the ratio of male to female suicides was greater than that for Anglos in every age group. Overall, the suicide rate for Hispanic males was more than four times greater than the rate for Hispanic females. The higher Hispanic sex ratio was consistent with findings from the studies of suicides by Mexican Americans previously cited (6,7), and with a similar analysis of local area suicide data in Los Angeles (8). A study of age- and sex-specific suicide rates for Mexico City for the period 1975-1978 shows higher suicide rates for males than females in every age group, with an overall sex ratio of 3.7:1 (22).

A third and important difference in suicide patterns among Anglos and Hispanics was that suicide by Hispanics appears to be primarily a youthful phenomenon. Much attention has been focused on the increasing rate of suicide among persons under age 25 (23-32). During the period 1962-1972, the suicide rate for whites 15 to 25 years of age increased by almost 75 percent, while the suicide rate for whites of all ages increased by less than 10 percent (28). The finding that Hispanic victims were younger than Anglo victims in the five southwestern States is similar to the findings of other local area studies (6,7,8).

The 1990 health objective for the United States for suicide identifies young persons 15 to 24 years of age as the population on whom to focus national suicide prevention and intervention efforts (33,34). It appears from our findings that the 1990 objective which focuses on youth suicide is quite appropriate for the Hispanic population, since the higher suicide rates for Hispanics are in the 20-24 year age group. Furthermore, our study shows that while the overall suicide rate for Hispanics is half the rate for Anglos, suicide rates are equally high for both Anglo and Hispanic teenage males (15-19 year age group) (17.1 and 17.7, respectively).

There were some notable similarities in suicide patterns among Anglos and Hispanics. First, in both ethnic groups, more suicides occurred among males than females in every age group. Second, the distribution of age-specific suicide rates was bimodal for both Anglo and Hispanic males and unimodal for Anglo and Hispanic females which is similar to the national patterns for white males and females (35). Third, the sex-specific patterns of methods used for suicide were similar for the two ethnic groups and consistent with sex-specific patterns for whites nationally (35).

Differences in the patterns of Anglo and Hispanic suicide probably reflect an interplay between the effects of the diminishing influence of Mexican cultural traditions, the increasing influence of American culture, and

the marginal socioeconomic status of Mexican Americans. Horowitz (36), in a study of culture and identity in a Chicano community in Chicago, identified two values heavily stressed in Mexican cultural tradition which are likely to protect against suicide: the concept of family honor and an emphasis on close family ties. A cultural incentive not to dishonor one's family with a suicide and the ability of close family ties to decrease the risk of social isolation may work together to diminish an individual's risk of suicide. Whether the incidence of suicide increases in the Mexican American population in the future may depend in part on the extent to which these cultural traditions continue to be held within Mexican American communities.

The assimilation of Mexicans into the American culture has undoubtedly diminished the power of cultural traditions to influence behavior, particularly among Hispanic youth (36). This may be reflected in the younger ages of Hispanic suicide victims uncovered in this study. Suicide rates among younger Hispanics were more similar to those for younger Anglos than rates for older Hispanics were when compared to those for older Anglos (Figures 1 and 2). Hispanic youths may be caught between the influence of traditional values and norms and their experiences in the larger social order which are likely to be heavily influenced by their marginal socioeconomic status.

Psychiatric illness is most likely an important contributor to suicide among Anglos and Hispanics. In the general population, it has been estimated that 47 percent of all suicides occur in persons with serious depression or major affective disorders (37). The patterns and differences presented in this paper suggest that cultural and social variables may modify the expression and/or course of psychiatric illness in very important ways.

Few data are available to analyze and explain the differences and similarities between suicide rates for Anglos and Hispanics. Regarding the availability of data for Hispanics, we agree with Braucht, et al: "Unfortunately, the entire group of Hispanic

heritage Americans of Mexican, Puerto Rican and Cuban origin are buried within the 'white' group in nearly all available reports of data from the national vital statistics system and are not available for separate analysis. This state of affairs has resulted in an appalling lack of knowledge about the mortality of the Hispanic population in this country" (38). Further, Petzl pointed out that the meager amount of research done on suicide among minorities has largely focused on blacks and American Indians (28). This is because blacks and American Indians represent racial rather than ethnic categories, and can be studied through existing published vital statistics data.

Although the lack of data on the health status of Hispanics is recognized (39) and better data is promised for the future (40), we are left for the present without sufficient data to examine why suicide patterns for Anglos and Hispanics differ in incidence and by age and sex.

To explore reasons for differences and similarities between suicide rates of Anglos and Hispanics, it would be useful to have data on such variables as employment, education, family composition, and length of residence in the United States. With these data, one could begin to test hypotheses related to interactions between the cultural, socioeconomic, and experiential factors of the two ethnic groups and perhaps explain the differential incidence of suicide.

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THE ROLE OF VOLUNTEER WORKERS IN SUICIDE PREVENTION CENTERS

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Lay volunteers have been called the most important single discovery in the history of suicide prevention. Eighty percent of the suicide prevention centers in the United States operate with non-professional volunteers as their primary staff (3). These centers represent the only wide scale use of trained lay volunteers for the delivery of clinical services which have traditionally been provided by professionals (4).

Volunteers in the 1980s

Volunteerism is a uniquely American phenomenon. Throughout our history, visitors to this country have observed and remarked upon the resourcefulness of Americans in organizing themselves and giving of their time, their money, and their talents to address their common problems. It has been estimated that today, more than 37 million volunteers actively participate in community programs and services throughout the United States (2).

The stereotypical view of volunteers as non-professional suburban housewives--which perhaps was accurate twenty years ago--is well out of date in 1986. Since 1975, the number of women employed outside the home has exceeded the number of full-time homemakers. Organizations such as the Junior League, Girl Scouts, PTA, and the League of Women Voters, whose work had for years depended upon an apparently inexhaustible supply of suburban homemakers, contracted severely during the past decade.

At the same time, organizations directed at solving specific community problems such as drug abuse, mental retardation, physical handicaps, and suicide have generally been able to recruit enough volunteers to staff their programs. The gap left by homemakers entering the workforce has been filled largely by single working professionals, retired professionals, and disabled people (6).

Given the demands upon their time as well as their professional experience, today's volunteers tend to be highly selective about the programs with which they become involved. They actively pursue their own interests and often look for opportunities that are directly relevant to their professional careers or which will reflect favorably upon them in a career context. This kind of pragmatic altruism--as opposed to altruism for its own sake--has produced a new breed of volunteers who are educated, skilled and highly motivated.

In the past decade, many corporations began to support their employees' volunteer pursuits both by allowing employees reasonable amounts of time away from work to engage in approved volunteer activities and by encouraging and even underwriting the formation of in-house volunteer organizations which participate in various community service programs. While these corporations are certainly not unmindful of the public relations value of their efforts, they are also aware that many, if not most, of these activities deal with issues and problems that

directly effect employees' lives and health. When the cost of absenteeism, impaired productivity, and health insurance is taken into account, corporate support of volunteerism may reasonably be viewed as good business practice as well as good public relations.

It should also be noted that departments and agencies of the United States government, as well as the United States military and many State and local government organizations, endorse many employee volunteer activities and support participatory volunteer programs.

Development of Suicide Prevention Services

In 1960, there were fewer than half a dozen suicide prevention centers in the United States. By the end of the 1960's, there were more than 100 centers; by the end of the 1970's, approximately 200. Approximately 200 centers are still in operation. During the three decades, 1950-1980, the overall suicide rate in the United States remained roughly static. Therefore, it may be inferred that the growth of suicide prevention centers correlates to increased awareness of the problem, the technology (telephone) to respond to it, and the mobilization of concerned citizens who were willing to undertake action to deal with it (3).

Suicide prevention centers are sometimes controversial undertakings within a community. Such controversy may have a negative impact on a center's ability to win community endorsement, recruit volunteer workers, and raise funds which are vital to its existence since the services it provides are free.

Part of this controversy is rooted in the stigma still associated with suicide in western society. Many people are uncomfortable discussing the subject and seek to avoid it altogether. Others may even deny that the problem exists in their community. Still others believe that discussion of suicide and the advertisement of prevention services will

actually cause or inspire suicidal acts. While empirical data do not support the latter view, facts do not necessarily reverse emotionally derived opinions.

Because there had been no consensus of expert professional opinion on the operation and ethical conduct of suicide prevention centers until recently, some centers have found themselves inadvertently in conflict with local medical societies, social service agencies, law enforcement authorities, courts, churches, or other community organizations and institutions. In the early 1980s, the American Association of Suicidology (AAS) promulgated operating standards for crisis intervention centers as well as training and performance evaluation criteria for volunteer crisis workers. An accreditation program, under the aegis of AAS, has made significant progress in alleviating public distrust and professional skepticism about crisis intervention techniques and volunteer crisis workers.

Organization and Structure of Suicide Prevention Centers

The organization and structure of suicide prevention centers is determined by the services offered. The minimum service is usually a telephone hotline whose basic mission is to respond to people in crisis. This response might involve sympathetic listening and "talking things through," referral to professional counseling services, or initiating emergency intervention in the case of immediately life-threatening circumstances. Depending on their financial and staff resources, some centers have expanded their services to include public awareness and education programs, extensive contact and followup programs with callers to the center, and grief counseling services for families of victims.

A center's organizational structure typically includes an advisory board and/or board of directors, executive director, consulting staff, administrative and clerical staff, and lay volunteer staff. The center could also be expected to have ongoing working relationships with community emergency services,

social service agencies, mental health services, hospitals, and private health care providers.

Distinction should be made among three categories of personnel and levels of involvement with the center's operations:

1. Paid staff: Usually the executive director and at least a portion of the full-time administrative and clerical staff.

2. Professionally-trained volunteers (e.g., mental health professionals): Usually members of the advisory board and the consulting staff who donate their professional expertise and services in support of the center.

3. Lay volunteers: Non-professionals who have been trained to provide those crisis intervention services which have traditionally been provided only by professionals.

While crisis intervention workers are typically lay volunteers, it is not unusual for professionally trained people to volunteer to answer hotlines and serve on crisis intervention teams. Both Motto and McGee emphasize that all crisis intervention staff, regardless of their professional training, as well as all consulting staff, should be required to go through the same training programs as lay volunteers and should be subject to the same monitoring and evaluation procedures. Further, Motto and McGee both concluded that people with professional training are not demonstrably more effective than lay volunteers as crisis intervention workers (3,4).

McGee goes on to say that conflicts between lay volunteers and professionals who become directly involved in delivery of crisis intervention services can present a significant challenge to center management. He urges that all crisis workers be measured exclusively against the center's overall performance standards, irrespective of any individual's professional credentials or lack thereof.

Recruiting and Screening of Volunteers

Volunteer recruiting is probably a full-time job at most suicide prevention centers. Sources of volunteers include the general public, college students (especially graduate students), faculty members, corporations, government entities with active volunteer programs, and community volunteer bureaus.

Unpaid advertising is the most usual method of volunteer recruiting. This may take the form of notices in newspaper columns, public service announcements, and flyers and posters distributed to target groups and organizations. A public relations campaign involving media interviews and speeches by a center spokesperson before local civic groups and professional organizations may also be incorporated into the overall recruiting effort.

Paid advertising, such as classified newspaper advertisements, is another alternative. However, since suicide prevention centers often operate on tight budgets, paid advertising may be viewed as less effective than a resourceful volunteer recruiter.

The initial screening process begins with an interview at the center. Upon arrival, the volunteer may be asked to complete a personal data sheet which includes general background information. The respondent is then interviewed by two or three designated interviewers. These interviewers might be some combination of consulting staff, mental health professionals, center administrators, and active volunteer staff. Psychological testing may reasonably be incorporated into the screening process. Initial screening may involve two or three visits to the center, which is in itself a method of screening.

The objective of the screening process is to elicit information regarding past and present life patterns and to provide evidence of emotional stability, integrity, receptivity to learning, perceptiveness, and responsiveness to human needs. Incidence of prior suicide attempts would almost certainly disqualify the

applicant for direct crisis intervention work although the person might be assigned to other tasks within the center at the interviewers' discretion (4).

Applicants who pass screening interviews and testing are accepted into the center's training program. Training may be viewed as an extension of the screening process since some applicants will drop out or show themselves to be unqualified for crisis intervention work as they are exposed to the real world conditions of the center's operations.

Training

Training programs in suicide prevention centers ideally combine theoretical information with practical experience in crisis intervention. A thorough training program requires 18 to 25 hours of concentrated sessions extending over a three to six week period plus concurrent parallel reading.

Elements of a good training program include:

- orientation to the center's methods of operation, record keeping procedures, performance criteria, and ethical standards.
- lectures by mental health professionals and suicidologists.
- films, video tapes, selected reading.
- listening to audio tapes of actual calls to hotlines (with all personal identification information removed).
- role playing.
- observing actual phone calls to the center.
- working on the phones under close supervision.

By the end of the training period, volunteers have been gradually introduced into their roles as crisis intervention workers and there has been ample opportunity to discover individuals who are obviously unsuited for the job.

McGee reports some instances in which lay volunteers were given no formal training but

were put directly to work on the telephones and trained on the job, as it were, after they had been interviewed. In other cases, volunteers were put through marathon two and three day training sessions and began work immediately thereafter. While the results of the short but intensive training sessions have not been evaluated in comparison with the longer sessions, it is thought that one object of the marathon sessions was to produce a large number of volunteer workers very quickly while the longer, more deliberate sessions were aimed at producing genuinely dedicated volunteers who were likely to remain with the center over a long period of time (3).

Some centers do not use lay volunteers at all but depend upon psychiatrists, psychologists, nurses, clergymen, and other professional counselors to serve as crisis workers. Training may be bypassed altogether in the belief that these people are already sufficiently trained to counsel people in crisis. Experience indicates, however, that crisis intervention and suicide prevention work require unique and special skills. Specialized training for all who are engaged in suicide prevention should be considered mandatory (4).

Regular and systematic in-service training is also highly recommended. Extended training may take the form of lectures, seminars, or free-for-all discussion sessions. Opportunities for the exchange of information, experiences, ideas, and even complaints are vital to the success of the center's work and to maintaining staff morale in a highly stressful environment. It should be remembered that volunteers-- particularly those who work late night and weekend shifts--may have little or no face-to-face contact with center personnel, consulting staff, and other volunteers unless such sessions are deliberately initiated and scheduled.

Equally necessary is regular evaluation of the crisis worker's performance. Observation of the worker taking calls and review of written case records prepared by the volunteer are an essential part of center management and can constitute the basis for performance

evaluations as well. When these procedures are combined with regular personal discussions with consulting staff and center administrators, performance evaluation can become a part of the volunteer's continuing in-service training (4).

Program Implementation

The programs of a suicide crisis center can be divided into three broad categories:

1. **prevention**, which includes education and awareness programs;
2. **intervention**, which includes telephone hotlines and emergency services; and
3. **postvention**, which includes followup, outreach, and counseling for the families of victims.

As a practical matter, chronology does not reflect the evolution and focus of the crisis center. Intervention is the center's initial and principal "reason for being," while prevention and postvention programs, and services are later outgrowths and extensions of a successful center's basic service.

Intervention

The telephone is the basic tool of crisis intervention. Some centers limit their service exclusively to hotlines, while others have walk-in facilities and/or crisis intervention teams which go to the caller's location in extreme emergencies. In 80 percent of all suicide intervention centers, the people who answer the phones and respond to emergency situations are volunteers.

As back-up resources, volunteer workers may have access to the center's consulting staff, private practitioners who take referrals from the center, law enforcement and emergency medical personnel, and community social service and mental health agencies.

The basic job of the crisis worker is first, to establish communications with the caller and second, to make an assessment of the caller's condition (lethality assessment). In the case

of an immediately life-threatening situation—which is a relatively infrequent occurrence—the first priority is to determine the caller's location and dispatch assistance.

More usually, the crisis worker's role is to establish a rapport with the caller, to listen to the person's description of his problems, and to work with him in setting a course of action. Shneidman has suggested that the role of a therapist is that of ombudsman for the patient; the same can be said of the crisis worker vis-a-vis his client. The worker's objective is to increase the options available to the caller, to reduce the caller's sense of pain and isolation, to listen, to offer hope and help, to suggest alternatives, to play for time, and with the caller's permission, to involve others (7).

Some centers actively discourage any face-to-face involvement between crisis workers and clients. On the other hand, many centers allow workers, at their own discretion, to meet callers away from the center's premises while cautioning against over-involvement in any particular case. Other centers train selected workers to follow the progress of clients through individual personal visits.

Crisis teams are another alternative. Usually comprised of two people, teams are carefully selected and trained to go out into the community and intervene directly in life-threatening situations. There may be some risks to the worker's personal safety in these circumstances, and there is certainly a greater likelihood of a worker's becoming over-involved with a particular case (4). Nevertheless, crisis teams have proven to be highly effective in many instances.

Once a crisis center has established its reputation in the community, it is not unusual for police, fire-rescue services, and hospitals to request that a crisis intervention team be sent to a location where a suicide emergency is in progress. This represents acknowledgement by law enforcement and emergency services personnel that crisis intervention is indeed highly specialized work and best undertaken by those who are specifically

trained for it.

The variety of approaches and techniques used in crisis intervention are limited only by the center's financial resources and the time constraints of its volunteer crisis workers.

Prevention

Many suicide prevention centers assume the responsibility for community awareness and education. While the responsibility for these initiatives and programs is largely within the purview of the professionals affiliated with the center, volunteer crisis workers may be included in a particular program designed for a particular group. For example, college-age crisis workers have been shown to be especially effective in working with teenagers, presumably because their proximity in age engender a natural rapport (1).

Again, methods and approaches vary widely and are limited only by the center's resources and the ingenuity of its staff.

Postvention

Postvention refers to followup and outreach activities directed to individuals following a suicide attempt and to counseling services for families of suicide victims.

In addition to following up at regular intervals the progress of callers to the center, outreach may also involve responding to referrals from hospital emergency rooms, law enforcement authorities, social service agencies, clergy, teachers, and other concerned individuals. In these cases, the center initiates contact, either by telephone or by personal visit, with people who have attempted suicide and extends an offer of help.

Ross describes another approach called "Befrienders" in which volunteers who were able to give large amounts of time were selected to befriend and work with particular individuals who had attempted suicide. Befrienders were carefully matched to clients on the basis of personality, attitudes, sex and age, and were thoroughly briefed in advance on the details of the case to which they were

assigned. They were required to be available for personal visits several hours each week and to be available by telephone as much of the remaining time as possible. Obviously, this involves a substantial time commitment on the part of the volunteer befriender; however, results of the program as an alternative means of post-episode care were considered encouraging (5).

Outreach programs directed toward providing support to families of suicide victims during the bereavement process may be initiated in response to a family's request for help in coping with their grief. In other instances, the center might be contacted by coroners, hospital emergency room staff, funeral directors, or concerned friends who are aware of the circumstances and the family's need for assistance.

In some grief counseling programs, the center serves as facilitator in establishing contact and networks among families who have suffered the same tragedy. The center may also provide referrals to professional counselors and offer seminars and discussion programs dealing with the particular problems of survivors. Special attention is paid to siblings of adolescent victims who are known to be a particularly high risk. Volunteer crisis workers are, of course, involved in the delivery of all of these services.

As a corollary to postvention programs, some crisis workers are trained to conduct psychological autopsies. This involves gathering information from those closest to the victim which may shed light on the external events and family dynamics leading up to the suicide. Because of their training, crisis workers often recognize the significance of information that may have been ignored or overlooked by family, friends, and others involved in the case. Such information is often valuable to researchers and therapists who are trying to understand and deal with self-destructive behavior.

CONCLUSION

Volunteerism is a time-honored custom, in-

deed almost an obligation of American life; but to equate volunteerism with amateurism is to do an injustice to volunteers everywhere. In no case is this more evident than in volunteer crisis workers. Crisis intervention workers are skilled and talented people who take their work very seriously. Most of them have undergone extensive training and devote a minimum of six hours per week to their "volunteer" work. Their contributions to suicide prevention have been recognized by the American Association of Suicidology which, since 1972, has admitted qualified volunteers to full AAS membership.

To call crisis intervention workers lay volunteers and non-professionals detracts from their level of training, skill and commitment. They have earned the respect of their professional colleagues and they have earned the right to be called para-professionals.

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PREVENTING SUICIDE BY IMPROVING THE COMPETENCY OF CAREGIVERS

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SUMMARY

All caregivers should be competent in the tasks needed to make direct, personal, and immediate interventions with persons-at-risk for suicidal behaviors, especially when a person is actively considering suicide. The core tasks of **recognition, risk rating and resource referral** define the role of a "gatekeeper" in the intervention process. A review of caregivers' competency in this role emphasizes the need for better learning and training experiences in suicide. Available learning resources are summarized. The curriculum of a program that aims to prevent suicide by improving the gatekeeping skills of all caregivers is described, along with the infrastructure for delivering a two-day presentation to large numbers of caregivers. The Foundation Workshop described in this paper has successfully involved more than 4,000 participants. Prospects and pitfalls for its expansion to a larger, perhaps national, level are briefly discussed.

INTRODUCTION

Even in the most ideal of situations, not all suicides are preventable. The belief that some, and probably the majority, are preventable sustains the efforts of helpers to persons-at-risk for suicide. But the continuing and apparently increasing rate of suicide implies that helping efforts of all kinds are not as successful as might be hoped.

Before discarding the accumulated experiences of efforts in suicide prevention as unworkable and demanding a new direction with innovative prevention strategies, it is important to realize that the impact of helping efforts has always been difficult to evaluate accurately. Only the outcomes of unsuccessful interventions, which result in suicide attempts or completed suicides, are recorded and the difficulties in obtaining accurate and reliable statistics are well known. In addition, few studies claim to have sufficiently controlled all of the many environmental, personal, and historical variables which lead to a decision for suicide. In defining the directions for suicide prevention activities, we are still in an age of empiricism. The choice of effective prevention strategies must derive from the rationale and the rationality of the proposals themselves.

THE RATIONALE FOR "PREVENTION BY INTERVENTION"

An episode of suicidal behavior is initiated when a person actively considers suicide as a problem-solving behavior, usually as a result of some precipitant stressor. An episode is usually time-limited and persons may experience one or more during their lifetime. Every episode demands therapeutic attention. Self-destructive behavior is not a prerequisite in the definition of an episode,

although it offers the best index or marker of the experience. We suggest that the time immediately proximal to the suicidal behavior, a prelude phase, is a focal point for rational, effective, and high impact suicide prevention activities by any caregiver (Figure 1).

A number of similarities have been recognized in persons-at-risk during this prelude to suicidal behavior. Ringel (48) described it as the pre-suicidal state. Shneidman characterized the thought process during this time as one of constriction, and more recently he has described a number of other commonalities (53). If the thoughts, feelings, and actions of those contemplating suicide share some common features, then caregivers can devise intervention responses and activities applicable to any episode and any person-at-risk, whatever the origins, predisposing factors, or immediate precipitants. The interactions between a person at risk and the caregiver's planned activities together make up the process of suicide intervention. The process can be described and modelled, and roles, tasks (and accompanying skills), assigned to both partners in the interaction (34).

The duration of this pre-suicidal or prelude phase is variable, but it is estimated that 80 percent of persons-at-risk warn of their movement towards self-destruction during this time (14,24,33,49,62). These cries for help communicate distress and ambivalence as well as statements about suicidal intent. Because the outcome too often is suicidal behavior, we must conclude that many of these "care-eliciting behaviors" (28) are unsuccessful.

Why is this so? It must not be assumed that the directed communications of the suicidal person are ambiguous, unclear, or directed to the wrong person. They are often repeated and directed towards more than one potential helper or resource (12,49). Some 23 different studies confirm that medical caregivers have significant amounts of direct contact with persons-at-risk in the time preceding suicidal behaviors (references available). Though less exact, similar data indicates that other helpers are also approached (13,24,33). To understand why these directed communications apparently fail to generate caring and helping from others, we must look to the helpers--those

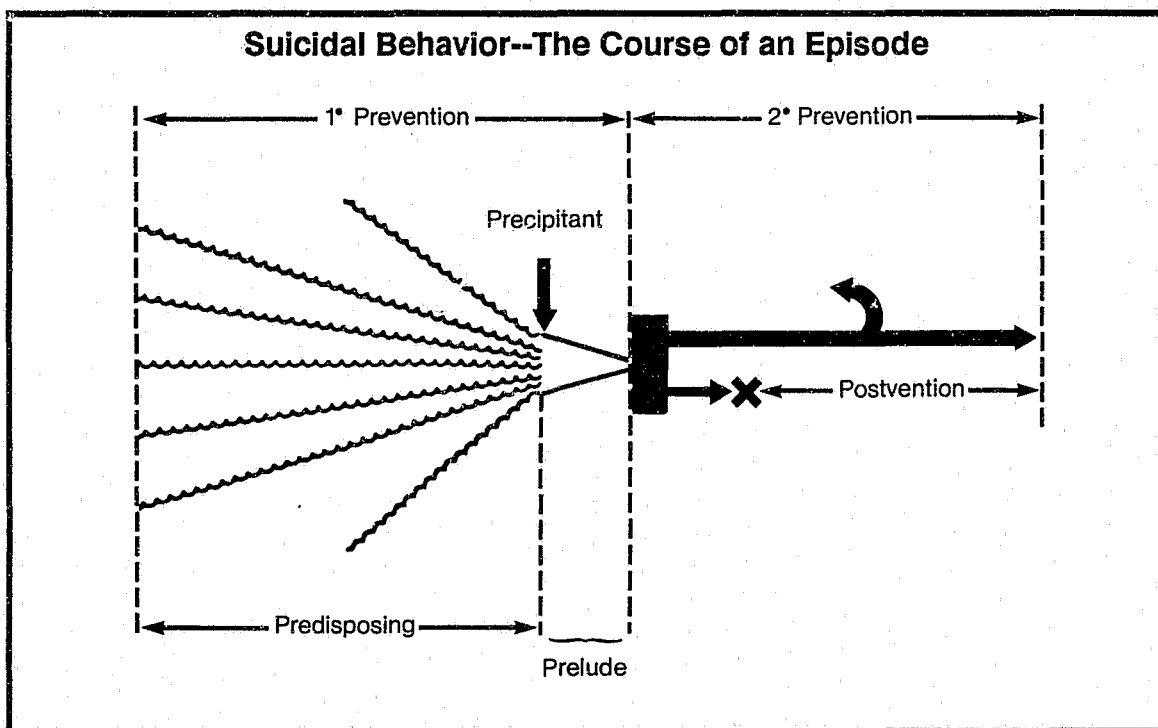


Figure 1.

who receive the messages of distress. Who are these helpers? A medical doctor is the first choice of those who seek formal help for suicidal or mental health crises (13,26,51,56) although many and diverse other caregivers are also approached. The caregivers available for help and support during a suicidal behavior episode can be defined as emergent or designated (45). Designated caregivers have received training to act in a specific helping role to suicidal persons. Emergent caregivers do not have this background, but may have the opportunity to prevent suicidal behavior as the person to whom a person-at-risk turns for help.

What is the helper's role? Some caregiving persons offer support to the person-at-risk while others work directly to resolve the suicidal situation. The aim for all caregivers is to prevent suicide as the outcome of the episode. Terminating the episode by closing the door to suicide and opening or re-opening alternative actions and solutions is an active process of intervention and involvement. The caregiver in this process has been called a "helper of the first instance" (6) or a frontline worker, but the role itself is well described as that of "gatekeeper" (56). The gatekeeper's role includes specific competencies in suicide prevention activities as well as effective use of interpersonal and communication skills. Not all of the neces-

sary skills have been defined, but the role-related tasks include: 1) recognizing the risk of suicide (Schapira's "spotter" 52); 2) rating the degree of suicidal risk; 3) referring to appropriate resources. We call these the 5 R's: Recognition, Risk Rating, and Resource Referral. If competence in these tasks were expected of all caregivers, we believe that many episodes ending in suicidal behaviors would be effectively prevented.

THE PRESENT STATUS OF CAREGIVERS AS GATEKEEPERS

A. Prior Education and Training Experiences

Professional schools and clinical disciplines offer few organized courses in the study of suicidal behavior (44). Presentations during clinical practicum experiences review suicide risk factors, but virtually ignore therapeutic, clinical, personal, and professional issues. In two studies, 90 percent (62) and 48 percent (50) of physicians surveyed recalled no instruction in suicidal behaviors during their professional medical training. Boldt (6) found that more than 90 percent of 143 reporting agencies had no workers with any significant training in this area. More than 50 percent of caregivers participating in our program recalled no prior learning experiences in the area of suicide. (See Table 1.)

B. Self-Perceptions

Forty-four (58) and 58 percent (50) of physicians surveyed indicated a desire or willingness to learn more about the area of suicide. In a membership survey of the Canadian Association for Suicide Prevention (8) these caregivers already involved in the field clearly expressed a need for more information and training in dealing with persons-at-risk.

C. Reports and Recommendations

Throughout this century, the need for better education and preparation of caregivers has

Exposure to Learning Experiences About Suicide in Some Community Caregivers

Caregiver Group (n)		No Exposure
Education	(193)	56%
Clergy	(47)	51%
Child Care	(87)	49%
Medicine	(7)	43%
Social Work	(280)	36%
Nursing	(248)	36%
Psychology	(140)	27%

Table 1.

been emphasized by both educators and suicide researchers. The first recommendation of a World Health Organization Working Group (10) stated that training in the detection and management of suicidal persons should be a requirement in the education of all professional helpers in the field of public mental health.

D. Knowledge and Skills

Three of four studies (7,27,20,47) assessing family physicians' responses to a multiple choice questionnaire about suicide produced disappointing scores. Three studies involving different groups of designated caregivers (29,30,47) found that their medical practitioners achieved the highest score of any of the groups tested. Other studies reported a better response to major clinical issues involved in the recognition and management of suicidal persons than to strictly factual or statistical items (30,35,40,50). In commenting on the knowledge and skill competence of caregivers, there was repeated concern with the apparent failure of these caregivers to apply the awareness they do possess to their work with suicidal persons (38). Twenty percent of Steele's (57) medical students and the same percentage of Whittemore's 78 physicians (62) specifically avoided the issue of suicide in clinical situations.

E. Caregiver Attitudes Towards Suicide and Persons-at-Risk

In working with persons at risk for suicide, medical caregivers may be not only unresponsive (55) or passive (4), but also overtly hostile. In retrospective chart reviews of completed suicides, (5,19,31,61) the caregiver's rejection of the patient (attributed to feelings of hate, hostility, anger, and anxiety) is a regular finding. Surveys of caregivers utilizing questionnaires (21,39), semantic differentials (2,22), objective checklists (15), or the rating of clinical vignettes (2,25,43) consistently reflect this negative attitude (Table 2).

Two studies of caregiver's responses to

suicidal persons support the general finding that a therapist's initial attitude and emotional reactions are of crucial significance to his clinical decision-making (15,25). Although positive and supportive attitudes appear to develop with increased contact with suicidal persons (22,23,39,62), the majority of caregivers do not regularly encounter suicidal persons in the course of their clinical practices. There is also disagreement about the congruency between personal and professional attitudes toward suicidal persons (22,42). If caregivers' attitudes, both personal and professional, can be the source of significant resistance to their becoming effective agents for suicide prevention, it is important that training experiences ensure the opportunity for open discussion of these issues (17).

These observations about caregiver competence in preventing suicide are disquieting. There is a definite and recognized deficiency in the abilities and attitudes of caregivers to undertake this helping role. If caregiver interventions are to be a successful strategy for suicide prevention, additional training is needed to upgrade the competencies of caregivers in the tasks that ensure successful intervention.

AVAILABLE LEARNING MATERIALS

Training programs, curricula, and learning

Caregiver Attitudes/Feelings About Suicidal Persons	
Negative	Anxiety
Unfavorable	Uncomfortable
Hostile	Contempt, not satisfying to treat
Unsympathetic	Denial, avoidance
Aggressive-avoidant	Passivity
	Rejection
	Betrayal
	Guilt
	Failure

Table 2.

materials are part of the ephemeral literature. The support of the Suicide Information and Education Center enabled a review of these materials, which included the opportunity to view more than 150 audio-visual productions. Additional information was gained in an informal survey of trainer/educators active in delivering suicide prevention learning experiences.

A. Content

A recognizable body of "core knowledge" (36, p.23) needed for the gatekeeping role and a scientific literature supportive of this content is readily available and well documented. For example, cues and clues to recognizing the person-at-risk have changed little since the suggestions made by Sym (59) and Fairbank (18). In the curriculum content of virtually all training/education programs reviewed, mastery of the tasks of the gatekeeping role (5 R's) is included in the participant objectives. The content of audio-visual productions intended for caregiver audiences is more restricted with major emphasis on the task of rating suicidal risk. Only one audiovisual attended to caregiver attitudes (11) and fewer than a half dozen specifically deal with the intervention process (3,9,32,41). A similar emphasis on the risk rating task was noted in the curriculum and program outlines.

B. Formats for Learning Materials

Written text (books, papers, or monographs) continue to be the major format for presenting materials on suicidal behavior to caregiver audiences. Some variant of the "Facts and Myths" questionnaire (54) is the most standardized and widely used learning aid available. Although often not developed for caregiver audiences, the number of audio-visual productions related to suicidal behaviors has doubled in the past decade. The most modern incorporates video disc and computer technology in a self-directed learning experience (20).

C. Learning Experiences

A comprehensive review of issues concerning education and training in suicidology stressed the need to develop "imaginative dissemination programs" (36, p.23). A learning experience in suicide prevention should include: 1) a curriculum outlining content, objectives, and the schedule of learning experiences; 2) available learning materials in different formats that are supportive of and integrated with the content and process of learning and; 3) available background materials which adequately prepare the trainer or educator presenting the program. There are many learning experiences in suicide prevention that meet these standards. Although their curriculum content may be remarkably similar, most programs were uniquely developed for a particular and homogeneous audience of caregivers usually defined by the group to whom their helping services are directed; for example, crisis or distress center workers, correctional institution personnel, school board employees.

Curriculum developers and trainers both agree that one day (7 hours) of caregiver participation is a minimum requirement and the inclusion of practicum and/or simulation activities often lengthens participant commitment to two or more days. Few experienced "disseminators" (36) support the development of presentations that are individualized for a particular caregiver group. Experienced trainers/educators virtually all present a core or foundation of similar material to all caregivers with some tailoring of situations and examples to the experiences of the participants.

A program in suicide prevention is more than an organized learning experience. In addition to meeting all of the criteria for an effective learning experience described above, it must have: 1) an organizing infrastructure that monitors, evaluates and modifies both the program and the presentation itself, and 2) a mechanism for ensuring optimal delivery of the learning experience to its intended audiences. Two programs that offer standardized learning materials intended for

caregivers of different disciplines and varying levels of expertise are available. Although not fully meeting the standard defined above, the Suicide Prevention Training Manual (1) has been used widely for almost a decade. The other program (9) intended for distribution to a broad audience is technically superb in content and curriculum materials. Unfortunately, it was never aggressively marketed or promoted, and the materials are no longer available from the copyright holder.

Deciding whether an educational/training experience will succeed in improving caregiver competency requires consideration of learning materials, learning activities, and curriculum organization. Rating of suicidal risk is the major content focus of most available experiences, with almost no attention to ensuring caregiver effectiveness in the overall intervention process. There is no program presently available and appropriate for use by all caregivers that offers integrated learning materials and activities in its curriculum.

THE FOUNDATION WORKSHOP

Over the past five years, we have developed,

piloted and successfully implemented a program which offers a standardized learning experience in the foundations of suicide prevention (46). The workshop presentation assumes that increasing the competencies of caregivers in dealing with persons-at-risk during an episode that might end in suicide is an effective suicide prevention strategy. The intended audience of the program includes caregivers of any disciplinary and theoretical orientation or level of expertise. To our knowledge, it has been delivered to more caregiver participants than any integrated standardized program on suicide prevention ever available in North America.

A. Descriptive Summary

Development team (disciplines): Psychiatry, social work, psychology; with input from clergy, education, counseling, nursing, and family medicine.

Intended audience: Any group of emergent or designated caregivers.

Aim: To provide all caregivers with the competencies to intervene in an episode of suicidal behavior until either the immediate danger is alleviated or further assis-

Content and Learning Activities of the Foundation Workshop							
Module / Hours	Learning Activity						
	Audio-visual	Discuss	Survey	Worksheet	"Discovery" Learning	Simulations	Lecture
Introduction / 1			x				x
Attitudes / 3	x	x	x				
Knowledge / 3			x	x	x		x
Skills:Model / 2	x	x					x
Skills:		x				x	
Simulations / 4.5							
Resourcing:					x		
Networking / 0.5							
	14*	0.75	3.25	1.75	1.25	3.25	1.5
(* Includes 4 breaks of 0.25 hours)							

Figure 3.

tance/resources can be obtained.

Curriculum:

Model: adult learning as inservice or continuing professional education.

Learning Experience: structured skills (16,37), workshop.

Formats: large and small groups (maximum 15 participants/trainer) with team teaching (two trainers minimum).

Learning Activities: audiovisuals (2); surveys, questionnaires (3); simulation; worksheet exercises; discussion group; discovery learning (30+ visuals); lectures (maximum 15%) with participant handouts.

Content: modular.

B. Developmental History

In the pilot phase, the workshop was presented eight times to a total of 434 participants. The audiences for these presentations were caregiver groups, both homogeneous and heterogeneous in composition, and included helpers in urban and rural communities, childcare workers, staff of a psychiatric institution, and native counselors. Evaluation at the end of the presentation by these diverse groups of caregivers supported both the curriculum organization and the content focus.

The development phase required the preparation of trainers who could present the Foundation Workshop. This preparation, to be discussed later, included the presentation of the workshop by a co-leader or apprentice with a more experienced trainer. These apprenticeship presentations, involving 27 workshops and 1250 participants, were also used to continue the development of the workshop learning experience.

C. Program Evaluation

At the conclusion of the development phase, three experienced trainers in different centers across North America were con-

tracted to review and critique the program materials and curriculum. Later, three other caregivers reviewed the entire program by considering its potential use as a training vehicle for a State-wide mental health delivery system (60).

Participant evaluations are completed at the end of the workshop. Fewer than 1 percent of participants drop out during the two day experience. There are more requests for an extra day or added time than there are dropouts. Fewer than 1 percent of participants fail to recommend this workshop to other colleagues and caregivers. All modules of the workshop receive positive comments, with the practical experiences involving both large and small group simulations garnering the most positive support. It is notable that the evaluations of the workshop with respect to its value, strengths, and deficiencies are remarkably uniform across the different groups of participant caregivers. Evaluation of the Foundation Workshop's impact on caregivers over an extended time span has been proposed.

At present, end of workshop evaluations from all participants are centrally reviewed by a group of experienced workshop presenters. Feedback from this ongoing audit is used continuously to adapt and update the program materials and learning activities.

Delivery of the Foundation Workshop to All Caregivers

The Foundation Workshop is suitable for presentation to any group of caregivers interested in mastering a lifesaving task. To sustain this amount of program activity and to ensure that the quality of the workshop experience is maintained, requires an infrastructure that must be sponsored and supported. At the most practical level in this structure, the essential component is the trainer or educator who delivers the workshop presentation. A training program which offers certification to trainers, who can then conduct the Foundation Workshop, has been developed.

The Training for Trainers program involves experience as a workshop participant, followed by a two or three day training experience in effective use and understanding of the curriculum. Because the standardization of both content and process of the Foundation Workshop is quite rigorous, a 300 page curriculum manual (45) emphasizing theory, content, and practical process is provided. An apprenticeship program in which more experienced trainers assist the newly qualified in the presentation of their first full workshop is also encouraged. Seven presentations of the Training for Trainers program have, to this time, involved more than 150 potential trainers.

The model for program delivery requires considerable effort and expense before any caregivers actually participate in the workshop itself. With this large front-end expenditure, cost-effectiveness increases with the involvement of more candidates at a Training for Trainers session, and with every workshop that is delivered by the certified trainers. It is vitally important to minimize trainer drop-out. This is accomplished by an initial screening procedure, by the evaluation of readiness for apprenticing at the conclusion of Training for Trainers, and by the apprenticing process itself. For certified trainers, an active network keeps them up-to-date with developments and modifications to the workshop information and materials. We have been gratified by the entrepreneurial spirit that has developed within the network of trainers and believe that it reflects their ownership, investment, and identification with the quality of the workshop experience.

Despite the enthusiasm, it is apparent that active sponsorship of this program is required because of both the heavy initial investment and the objective of delivering the workshop to a large number of caregivers. Several avenues for development are available. The development of competency as a basic "Rescuer" in cardiopulmonary resuscitation (CPR) is a similar task, and this program has attracted many organizing spon-

sors. Its success affords a useful model for the delivery of a basic learning experience to large and diverse groups of caregivers. In the area of suicide prevention, the American Association of Suicidology could adopt this program as part of its objective to certify individual caregivers. Professional organizations of designated caregivers (physicians, nurses, clergy, social workers, psychologists) or the administrators of human resources systems could make a commitment to offer the Foundation Workshop to all of their caregivers. Although such support would resolve many organizational hurdles, their endorsement should only be offered to a program of proven excellence.

While awaiting the support for large-scale implementation, it is useful to summarize the successes of the Foundation Workshop program. Following its original development for caregivers in Alberta, Canada, presentation of the Foundation Workshop using the Training for Trainers delivery model has been extended into two other caregiving systems, one geographical and the other system-based. In addition, pilot presentations to special audiences have been offered. These included selected inmates of a medium security correctional facility who were developing a peer support model, and lay persons in a number of rural communities where the formal network of caregiving support resources is diffuse and less important than the support provided by family and friends. Although unplanned, materials and activities from the Foundation Workshop appear in courses offered in professional schools at three Canadian universities. As of April 1986, more than 4000 persons have participated in the Foundation Workshop, and two workshops per week are being conducted by a network of more than 80 certified trainers.

DISCUSSION

As a model program for upgrading the competencies of caregivers in effective suicide prevention, the experiences of the Foundation Workshop point to two major issues

which require further consideration. One addresses program content, and the other concerns the process of delivering the learning experience to large numbers of caregivers. Both issues have been a focus for some resistance to the widespread use of this program.

The content issue questions the effectiveness of a general and basic experience in suicide prevention/intervention for audiences of caregivers who work almost exclusively with a specific at-risk population (adolescents, inmates, crisis center clients). This concern is surprising because similar content and objectives can be identified across many of the programs available for specialized target audiences. Besides discouraging costly duplication, we believe that it is very important to encourage a common learning experience for all caregivers. A shared baseline of competencies across disciplines, caregivers, and agencies facilitates communication between caregivers. Confidence in other professionals at this personal level strengthens the network of available resources and improves the continuity of care for persons-at-risk. In several communities and institutions, workshop participants who took part in simulations dealing with referral to appropriate resources within their systems, later reported making a similar referral in a real-life situation, with the very same caregivers in the referring and resource roles. Finally, in presenting the Foundation Workshop to participants with widely diverse formal qualifications and experiences, we were struck by a remarkable similarity in both the process and the content of the group discussions and learning activities across the different types of caregivers.

The support for a basic or Foundation program does not imply that learning activities for specialized or targeted caregiver groups are not valuable. Paralleling the CPR model, it is most appropriate to present these materials at a secondary or advanced level which can be added after the basic Foundation curriculum has been delivered. The availability of advanced or specialized

learning experiences which further develop caregiver competencies only increases the likelihood of effective suicide prevention.

Before suggesting any further extension of this strategy beyond the basic learning experience, it is important to emphasize again that improving the competencies in suicide intervention of all caregivers is a large and daunting task. The program requires a large front-end loading in terms of dollars, time, and human resources involvement. This requires the continuing support of organizations which can maintain and nourish an active network of trainers.

In our efforts to encourage the large-scale delivery of the Foundation Workshop, two possible sources of resistance by potential sponsors have been identified. The first concerns the scope and size of the program itself. It is possible that the organization required to deliver and maintain this program is seen as a task too large to handle. There is, admittedly, some reality to this concern. The alternative explanation is a much more difficult and onerous one. Different disciplinary or professional groups may have a sense of investment or ownership in being the designated agents of suicide prevention. They would have much difficulty accepting or supporting a program which aims to develop the same baseline of competencies in all caregivers. This limitation broaches the larger question of the relationship between the many different professions, institutions, and agencies which affirm some interest and investment in the issues of suicide prevention.

SUMMARY

1. Persons-at-risk for suicidal behaviors continue to ask for help. Their caregivers of all disciplines and levels of expertise need and want to improve their abilities as successful agents of suicide prevention.
2. Intervening in an episode during the prelude to suicidal behavior deploys caregiver resources at a focused point of potentially great impact. The process of

intervention can be modelled and understood by assuming that a helping caregiver and person-at-risk are identifiable roles. Effective intervention is possible for any caregiver competent in the tasks of the gatekeeping role: recognition, risk-rating, and resource referral.

3. Training opportunities to develop these competencies are available, but many learning experiences are too limited in their content or their intended audience. The Foundation Workshop offers a model program for the development of basic intervention competencies that has been successfully presented to more than 4000 caregivers.
4. The successful experience of the cardiopulmonary resuscitation program can be adapted to deliver a training experience that enhances skills in suicide intervention to large numbers of different caregivers. The basic requirement for large-scale delivery involves the availability of an adequate number of certified trainers. Although a rigorous Training for Trainers experience produces trainers who are committed to and invested in the workshop experience, the need for active sponsors to develop and maintain the network that organizes and monitors program delivery remains an unresolved problem.

CONCLUSION

The need for innovative training and education programs directed to caregivers active in suicide prevention has repeatedly been recognized and recommended. Our experiences in the development and delivery of the Foundation Workshop afford a successful model of one such program. With appropriate support, a large-scale training program for caregivers that ensures their basic competencies in suicide intervention is a rational and workable suicide prevention strategy.

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THE SAMARITANS AND THE PREVENTION OF YOUTH SUICIDE

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SUMMARY

Samaritans U.S.A. is a network of 14 branch hotlines in the eastern United States bound together by a common set of principles and practices. The primary purpose of the branches is to provide a 24-hour crisis line for the lonely, despairing, and suicidal, employing a method called "befriending".

Seven branches have outreach programs for intervention and prevention of youth suicide. Two exciting new models have been developed by Samaritans branches in Boston, Massachusetts and Providence, Rhode Island.

In Boston, the Samaritans are implementing a special hotline staffed by trained teenagers called "Samariteens."

In Rhode Island, the Samaritans have developed a suicide awareness curriculum to be taught by high school teachers that has recently been made part of the required high school curriculum Statewide.

INTRODUCTION

To understand the Samaritans and their role in the prevention of youth suicide, one must first understand the Samaritans themselves. Founded in 1953 in Great Britain by Chad Varah, the Samaritans now have 275 branches worldwide--180 branches and more than 22,000 volunteers in Great Britain alone. In the United States there are 14

branches with more than 700 volunteers.

The Samaritans represent a unique approach to the prevention of suicide. Samaritans branches are non-professional services which offer "befriending" rather than counseling. While the Samaritans have the back-up services of professional counselors and consultants, the telephones are always answered by volunteers who have been carefully chosen for their ability to make an equal-level relationship, to listen, and to befriend the troubled person without offering judgments, unwanted advice, or unsolicited intervention. The Samaritans do not trace calls or take any other unrequested action, thus insuring that the service is completely confidential.

HISTORY

This model differs in some ways from most other suicide prevention agencies in the United States. To appreciate the Samaritans commitment to confidentiality and befriending, it is useful to understand the history of the Samaritans movement and the development of befriending as an approach to the prevention of suicide.

In 1935, Chad Varah's first duty after ordination as an Anglican priest was to officiate at the burial of a fourteen year old girl who killed herself when her menstruation started, not understanding menstruation and having

no one to ask. Moved by this experience, Varah began to counsel his parishioners about human sexuality. Soon he developed a reputation as a sex therapist and clients sought him out in great numbers--many of them suicidal. Over the years, he was moved to expand his ministry and his counseling activities to include outreach to the suicidal.

On the first of November 1953, Varah opened both a telephone and walk-in counseling service for the suicidal at St. Stephen Walbrook. Within a short period of time, both the number of callers and the number of people coming in for counseling far exceeded Varah's ability to respond. Publicity for Varah's services had attracted not only people in need of help but also a large number of people who felt they could give help. While some of these people offering assistance were professionals, most were ordinary people and instinctively Varah began to involve these volunteers in his work. These people did not see themselves as counseling the suicidal but merely as helpers who could pour tea or lend an ear to others as they waited for Varah. In just a few weeks, Varah began to notice that the number of people he was seeing personally began to diminish; those who did come to him for counseling were easier to help because of the time they had spent with the volunteers. He also noted that the people he was seeing were rightly judged to be in need of the kind of professional attention the volunteers could not give. This fascinated him and he began to try to discover what the volunteers were doing and why was it so successful.

By both interviewing and observing the volunteers he realized that they were providing a new kind of listening therapy. They provided an ear, but not advice. They provided sympathy and love, but no judgments. They avoided discussions of religion and God and just listened to what a caller or visitor had to say. They were "befriending."

Befriending, as developed by Chad Varah's experience with these volunteers became his new work. He met with the volunteers regularly, recruited and screened new volun-

teers, and dismissed volunteers whom he thought were not providing "befriending". The name Samaritans came out of a headline describing Varah as the "Samaritan Priest"--a compliment he passed on and ascribed to the volunteers. For the next five years, Varah experimented with and perfected the Samaritans' particular approach to the suicidal and in 1959 he began to support and encourage the development of other branches in Great Britain. In 1960, the approach went worldwide as Samaritans opened new branches in Hong Kong and Bombay.

Samaritans are "...themselves and what they have to give--namely, their personal concern, their time, attention and friendship. The Samaritan listens, accepts, cares; and this can make all the difference for those who feel that no one has time for them, that they are rejected, and that nobody cares" (1). This simple statement by Chad Varah describes the heart of the Samaritans movement and why the approach of befriending spread so quickly and so far.

In 1974, the Samaritans movement was brought to the United States by Monica Dickens who founded the first U.S. branch, the Samaritans of Boston. The second U.S. branch, the Samaritans on Cape Cod, initially shared a board with the Boston Samaritans. In 1980, Samaritans USA was incorporated to set standards for new branches, to support the development of new branches in the United States and to fundraise for the Samaritans on a national scale.

PRINCIPLES AND PRACTICES

The Seven Principles and Practices, as agreed upon by the Council of Management at its meetings in June and November 1981, are the standards by which Samaritans branches operate in the United States and worldwide. They are:

Seven Principles

1. The primary aim of the Samaritans is to be available at any hour of the day or night to

befriend those passing through personal crises and in imminent danger of taking their own lives.

2. The Samaritans seek to alleviate human misery, loneliness, despair, and depression by listening to and befriending those who feel that they have no one else to turn to who would understand and accept them.
3. A caller does not lose the freedom to make his/her own decisions, including the decision to take his/her own life, and is free to break contact at any time.
4. When a person asks help of the Samaritans, the person's identity and everything he/she has said is completely confidential within the organization unless permission is freely given by the caller for all or part of such information to be communicated to someone outside the organization. A Samaritan volunteer is not permitted to accept confidences if a condition is made that not even the Director should be informed of them.
5. Samaritan volunteers, in befriending callers, will be guided and actively supported by experienced leaders who will have the advice, when required, of professional consultants.
6. In appropriate cases the caller will be invited to consider seeking professional help in such fields as medicine and social work, and material help from other agencies.
7. Samaritan volunteers are forbidden to impose their own convictions or to influence callers in regard to politics, philosophy, or religion.

Seven Practices

1. Samaritan volunteers are carefully selected and prepared by the local branch in which they are to serve.
2. The Samaritans are available at all hours to callers, and may be contacted (anonymously if desired) by telephone or personal visit, or by letter.
3. When a caller is believed to be in danger

of suicidal action, the Samaritan is particularly encouraged to ask the caller's permission to maintain contact during the crisis.

4. Samaritans offer longer-term befriending of callers where appropriate, while recognizing that the Branch may, from time to time, have to set limits.
5. Samaritans listen to those concerned about the welfare of another person, and, if satisfied that the third person is despairing, depressed, or suicidal, may discreetly offer befriending.
6. Samaritans are normally known to callers only by a forename and contacts by callers maybe made only through the branch center.
7. Samaritan branches are banded together in a legally constituted association whose Council of Management represents all the branches and reserves to itself the appointment of the person in charge of each branch (2).

While the primary purpose of all Samaritans branches is to provide a 24-hour crisis line for the lonely, despairing, and suicidal, almost all the branches have outreach programs pertaining to suicide and its prevention. Like many other suicide prevention agencies, the Samaritans have been involved in the schools as their primary outreach--speaking to classes and assemblies, holding workshops for parents and educators, and befriending survivors after a suicide has taken place. While the principles and practices remain constant throughout the Samaritans branches in the United States, the outreach programs of the various branches differ greatly.

SAMARITANS OF BOSTON

The oldest of the Samaritans branches in the United States, in operation since 1974, the Samaritans of Boston receive almost 250 calls or visits daily. Noticeably more and more of these callers are young people who are seriously depressed or suicidal. Since 1982, the Samaritans of Boston have focused spe-

cial attention on the problem of teenage suicide through their Youth Outreach Project.

Instead of waiting for young people to call or visit, the Samaritans focused their efforts on prevention through education. They thoroughly researched the extent of the problem in Massachusetts and designed educational materials based on the results of that research. They began their outreach by distributing their pamphlets to all schools and colleges in the State of Massachusetts. They followed this with an offer to provide a speaker for any class or staff group that was interested.

Both the oral and the written information was divided into two sections one for the students themselves and one for teachers and counselors working with those students. For the professionals, the booklet, "Teens: Depression and Suicide", delineated the problem, identified warning signs of depression and suicide risk in children, offered suggestions on how to help, and provided information on where to go for help. The information is presented in a clear and direct manner, viz.:

Parents, teachers, and friends of depressed or suicidal young people often ask the Samaritans what they can do to help. The important thing is to pay attention. Encourage them to talk. Listen. Be on their side. Reassure without dismissing.

Don't panic. Remember that no one is suicidal all the time. Thoughts of self destruction arise at times of crises, but lives can be saved by understanding and support.

Learn to recognize the signs of serious depression and suicide risk. Eight out of ten suicides give definite warnings, verbal or behavioral, of their intentions...These signs of depression do not invariably mean that young people are contemplating suicide, but they alert you to the need to explore more carefully their state of mind....

Don't be afraid to ask, "Do you some-

times feel so bad you think of suicide?"Discussing suicide openly is one of the most helpful things you can do. It shows that you are taking the person seriously, and that you care.

If the answer is "yes," follow through by asking, "Have you thought about how you might do it?"It is vital not to underestimate the danger by not asking for details.

If you think there is immediate danger, **DO NOT LEAVE THE PERSON ALONE.** Stay with him until the crisis passes or help arrives....The Samaritans are always available to help you or the person in danger....

If the person is hallucinating, affected by drugs or alcohol, if an attempt has begun or is imminent, do not try to go it alone. Stay with the person, and contact any of the following: an ambulance service in your town, your local police, emergency room of a local hospital, a trusted adult, the Samaritans (3).

The Samaritans also designed pamphlets geared to young people themselves, offering much of the same information in an easily understandable style. These pamphlets include the warning signs of depression and suicide risk but are presented in question form. Myths and facts about suicide are also included, places to turn for help, and guidelines for handling an emergency.

The Youth Outreach Project of the Samaritans of Boston has been a tremendous success. Now coordinated by a full-time person, the materials described above have been mailed annually since 1982 to 1500 schools and colleges. In addition, Samaritans have given more than 500 talks on the subject of teenage suicide and have followed-up on more than 2500 requests for additional information. The number of teenagers contacting the Samaritans of Boston has increased over the life of the program from 10.8 percent of the total client volume in 1982 to 16.6 percent in 1985 (4).

In 1985, the program was expanded to include information on the relationship of alcohol to youth suicide. Two pamphlets, one oriented to teenagers and the other to their parents, were published in 1985, both entitled, "Drinking and the Teenager."

In 1986, the Youth Outreach Project of the Samaritans of Boston made an additional commitment to the prevention of adolescent suicide through the creation of a special and separate telephone hotline for teenagers, staffed by teenagers themselves who are called SAMARITEENS.

SAMARITANS ON CAPE COD

The Samaritans have developed multiple relationships with the schools in Cape Cod, Massachusetts. They have provided workshops for teachers, both for credit and not for credit, on befriending and suicide awareness. They also make presentations to student groups and church youth groups, usually about once a month that often include a screening of the film, "Urgent Messages." They are often called into a school after a suicide to provide postvention services.

In addition, this group consults with an active chapter of Students Against Drunk Driving (S.A.D.D.), a relationship that not only supports the activities of that organization, but provides access and legitimacy for the Samaritans among a large population of students.

SAMARITANS OF RHODE ISLAND

The unique small size of Rhode Island is conducive to Statewide activities and interventions. The Providence branch of the Samaritans serves the whole State of Rhode Island, both in its telephone service as well as its outreach programs. In 1985, the Rhode Island Samaritans conducted almost 200 suicide information seminars in the schoolrooms of Rhode Island. Realizing that this approach only began to meet the need that

existed in the schools, the Samaritans of Rhode Island began work on a model that would institutionalize the teaching of suicide awareness Statewide in the schools.

Merely believing that the education of students in the classroom is an effective tool in suicide awareness and prevention is not enough to garner the kind of support necessary to implement a new Statewide program. With an issue as emotional as adolescent suicide, documentation and evaluation are necessities.

The Samaritans of Rhode Island first developed a manual to be used in the teaching of suicide awareness in the classroom. The author of the manual, George J. Fincik, is both a Samaritan and a secondary school English teacher. The manual consists of five lessons:

1. Developing a compassionate attitude toward suicide and its victims.
2. Acquiring knowledge about suicide.
3. Developing an awareness of the signs signalling suicide.
4. Developing befriending skills.
5. Building a support system.

Through these five lessons the manual intends to focus the attention of the teaching community on adolescent suicide, to involve teachers in a realistic way in suicide prevention, and to introduce befriending as a skill and approach. Fincik, in his introduction to the manual, states this intent most eloquently:

We can no longer perceive our roles only as dispensers of knowledge. The students sitting in front of us are not mere receptacles for ideas, facts, values, trends, data, or events. Those sitting in front of us are caught up in the pressure-cooker of modern life. These human beings are sometimes seething with feelings that are incomprehensible, with a sense of helplessness, hopelessness and futurelessness that is emotionally debilitating, with ideas that confuse

rather than clarify, and with demands that would defy a Hercules. Such human beings are hardly in a condition to take our classroom activities seriously.

And who but teachers are in the best position to observe students individually or in groups, to sense the emotions seething under the surface, to monitor subtle changes in behavior, and to realize that the student in reality might be a hurting human being?

But if the teacher lacks knowledge about suicide--its causes and its warning signs--the teacher very well could be unaware that a life and death drama might be developing. **It is too late to rewrite the lesson plans of life once the student rips up the original copy (5).**

With the help of a grant from the National Conference of State Legislatures, the Samaritans of Rhode Island embarked on a pilot program to assess the effectiveness of the manual and its awareness program in four Rhode Island schools. Four corresponding, non-participating schools were used as controls. Both the experimental schools as well as the control schools represented a sampling of teenagers in the State: urban, suburban, rural and suburban/rural mixed.

In October 1985, baseline data were collected at all eight schools. Following that, the Samaritans held a two day workshop for the participating teachers from the four experimental pilot schools. Four sessions were developed by the Samaritans to help the teachers confront their feelings and attitudes about suicide and to inform them further about youth suicide. The sessions were:

1. Suicide information, statistics, studies, and programs.
2. Attitudes toward death and suicide.
3. Befriending: the art of active listening.
4. The manual, crisis intervention protocol, and school protocols.

Samaritans staff reported that teachers participating in these sessions were extremely

positive in their evaluations, and felt more skilled and knowledgeable. Following this training, the teachers implemented the curriculum model from the manual.

Followup assessments were done at all eight schools with four different measures employed as assessment tools: knowledge about suicide, student attitudes toward suicide, personal knowledge of suicide, and feelings of hopelessness.

The pilot program based on both participant evaluation and external evaluation was considered a success.

The Samaritans, in collaboration with the Rhode Island Department of Education, the Rhode Island Department of Health, and the Rhode Island Task Force on Adolescent Suicide Prevention developed a plan to ensure that this model was implemented Statewide. The Rhode Island Department of Education has incorporated suicide prevention into their mandatory health curriculum. In conjunction with Rhode Island College, the Samaritans will offer a two credit graduate course in suicide education so that teachers can learn the new mandated curriculum. The Rhode Island Department of Health has set an internal objective for 1990 that states "...that greater than 60 percent of young people, ages 15 through 24, should identify a suicide prevention hotline." And the State legislature through a bill introduced on behalf of the Task Force on Adolescent Suicide Prevention, has made an appropriation of \$35,000 to the Samaritans of Rhode Island to coordinate the implementation of the Statewide suicide curriculum through the continued refinement of the manual and the training of health teachers Statewide in its use.

The preliminary results of the Samaritans of Rhode Island study were presented at the American Association of Suicidology meeting in April 1986 and will appear in the Rhode Island Journal of Medicine in September 1986. A followup study is scheduled for June 1986.

SAMARITANS OF THE MERRIMACK VALLEY

Located in Lawrence, Massachusetts, the Samaritans of the Merrimack Valley integrate their outreach efforts with the efforts of other agencies in the Merrimack Valley. They consult with a high school peer counseling project, "The Connection," that produces an improvisational theater program on adolescent suicide. They participate in the Town of Andover's Assessment-Support-Knowledge (A.S.K.) Program, providing wallet cards with hotline numbers to all the school children in the area as well as integrated and coordinated prevention and intervention programs.

Their outreach efforts also include visits to 20 to 25 schools in the Lawrence/Haverhill/Lowell area, direct mailings of suicide related articles, showings of the video "Teen Suicide--What Can We Do?", and postvention services to communities that have experienced a suicide.

SAMARITANS IN KEENE

Like all Samaritans branches, the Samaritans in Keene, New Hampshire, reach out to the schools, youth groups, and colleges in their area with brochures and offer to present on-site programs. Last year the presented almost 35 programs to groups of young people.

The Keene Samaritans are also taking advantage of the experiences of other Samaritans branches in the United States, both in their current efforts as well as in their plans for new outreach activities and programs. They currently distribute a brochure entitled "Suicide Prevention--A Guide for Students" developed by the Samaritans of Rhode Island. In addition they are in the process of writing a grant proposal that would fund both a Samariteens line such as that developed by the Boston branch as well as an improvisational youth theatre group similar to the one supported by the Merrimack Valley branch.

SAMARITANS OF SOUTH MIDDLESEX

Serving the Framingham, Massachusetts area, the Samaritans of South Middlesex direct-mail a brochure to all schools in their locale. Similar to the other Samaritan branches, they offer a followup visit including a showing of the film "Urgent Message." One unique aspect of the outreach of the Samaritans of South Middlesex is that they emphasize to their young audiences that they can call collect. This, the Samaritans believe, encourages more young people to use the service who might otherwise fear the Samaritans number appearing on the parents' telephone bill.

SAMARITANS OF FALL RIVER/NEW BEDFORD

The Samaritans of Fall River/New Bedford is the newest full branch in the Samaritans USA network, having opened in the spring of 1984. Similar to the other full branches of the Samaritans, the Fall River/New Bedford group has reached out beyond the hotline and walk-in service to the schools and colleges in its area. Two schools have videotaped the Samaritans' presentation and copies are available in their school libraries whenever anyone wants to see them.

In addition, the Samaritans have been invited to produce and plan a workshop on "befriending" for all guidance counselors in the Fall River, Massachusetts system. The Fall River/New Bedford Samaritans are particularly interested in sharing the model of befriending--acceptance without judgment--with key professional people in the schools.

OTHER BRANCHES

The other seven branches that currently make up Samaritans USA are considered either probationary or preparatory branches, still working at meeting all the guidelines and standards for full status. Located in Chicago, New York City, Albany, Hartford, Washington, D.C., the South Shore of Mas-

sachusetts, and South Central New Hampshire, these branches are focusing on providing 24 hour befriending services to their areas. Major outreach activities by Samaritan branches are prohibited prior to attaining full status.

Samaritans USA is still a relative newcomer to the field of youth suicide prevention in the United States. Until recently located primarily in New England, Samaritan branches are now opening in a wider geographical area as indicated in the list of probationary and preparatory branches.

As the number of branches spreads throughout the United States, so does the impact of the Samaritans approach to youth suicide. The Samariteens program in Boston and the suicide awareness curriculum in Rhode Island are quite possibly models for the entire country. And the heart of the Samaritans, befriending, is an approach that has worked and is working worldwide.

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EVALUATION AND MANAGEMENT OF SUICIDAL RISK IN CHEMICALLY DEPENDENT ADOLESCENTS

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SUMMARY

The chemically dependent youngster who becomes suicidal appears to be characterized by a strong family history of chemical abuse, obvious signs of depression and hopelessness, a stated desire to die, and a recent loss or separation, most commonly, parental separation or divorce.

Recognizing the crisis and providing care and protection is the most crucial aspect of the prevention of suicide in these cases. However, the underlying illness is chronic and requires long term treatment with continued alertness to the possibility of a recurrence of suicidal risk.

INTRODUCTION

The correlation between heavy drug use and suicidal behavior is evident to a wide range of clinicians (1,6,7,9). According to Frances (4), half of all suicides are associated with alcohol use. In recent years, large scale studies of mortality in psychiatric patients show that a history of alcoholism or drug dependency greatly increases the likelihood of untimely death among both psychiatric outpatients and inpatients (1,6). Much of the increased mortality in these patients can be attributed to suicide. Recent studies of adolescent populations have confirmed these trends in young people, a finding that does not surprise therapists who treat adolescents and are familiar with this phenomenon in their clinical

practices.

The strong relationship between severe depressive illness and suicidal behavior has also been widely recognized (7,8,9). A high rate of depressive symptomatology is also obvious in chemically dependent patients. Indeed, Robins and Alessi (9) have theorized that drug abusing depressives are a special subpopulation with an exquisite sensitivity to dysphoric affects and a very limited capacity to tolerate them. Thus they would be more likely to use chemicals in an effort to ameliorate depression and more likely to be tempted to turn to suicide as a permanent solution to their painful state. In spite of considerable interest and research, however, the relationship between the syndromes of depression and the syndromes of addiction is not completely clear. For example, recent literature suggests that addictive behavior and the depressive syndromes are two separate illnesses with some degree of overlap. It is also clear that a great deal of depression encountered in chemically dependent individuals is a result of addiction rather than its cause (2,5,10).

Many elements of the addictive experience increase the likelihood of depression with attendant feelings of helplessness, despair, and suicidality. These factors are enhanced in adolescents because of the young person's relative lack of a time perspective, the ten-

dency to be action oriented, and the heightened impulsiveness characteristic of immaturity.

Even if drug-using, depressed adolescents do not represent a specific high risk population as suggested by Robins and Alessi, many, almost inevitable effects of habitual drug use increase the likelihood of suicidal behavior. As mentioned earlier, many of the drugs themselves produce central nervous system depression which is often accompanied by subjective dysphoria. Alcohol, for example, is notorious for producing a morose and irritable mental state when the blood alcohol level begins to diminish. Other drugs produce a depressive frame of mind on withdrawal, particularly cocaine (5).

Most of the depression produced by chemical dependency, however, results from its impact on overall life style. The inability to control one's actions creates a sense of helplessness and demoralization. In addition, the adolescent heavily involved with drugs amasses a constantly increasing load of guilt. This guilt is related to alienation from family and other responsible adults, accumulating failures and disloyalties, and personally unacceptable behaviors which the adolescent had to perform in order to get drugs, or did them because his/her judgment and self control were impaired by intoxication. This increasingly heavy mental baggage of regret and remorse is held just out of consciousness by denial, projection, minimalization, and heavier use of drugs. It looms behind the adolescent as a monstrous shadow, however, ever growing and ever closer to overwhelming the youngster's self-esteem and pleasure in life.

The problems produced by a lifestyle of heavy drug use are accentuated during times of withdrawal because of the physiological depression and irritability which accompany the process of detoxification from many of the psychoactive drugs. The withdrawal from cocaine is frequently accompanied by suicidal ruminations (5), although actual suicidal behavior has not been as frequently reported during withdrawal as it has been

during the state of intoxication itself. For example, many alcoholics who commit suicide are discovered to have high blood alcohol readings at death.

There is considerable agreement that suicidal behavior in drug-involved individuals is frequently triggered by experiences of loss. Very often these losses are the direct result of drug use. For example, the patient may get into serious legal trouble, face major disruptions of family life, be dropped from an athletic team or experience some other loss or life failure clearly resulting from drug use. On the other hand, these individuals seem to be vulnerable to losses that are unrelated to the drug problem, such as the death of a parent or geographic move which disrupts support networks. It is as though the chemically dependent individual is more likely to experience loss than the average person, but may also be less able to deal with the psychological consequences of loss experiences.

CLINICAL PROFILE OF HIGH RISK ADOLESCENTS

Evidence of Depression

According to Robins and Alessi (9) the most accurate indicator of the likelihood of a serious suicide attempt is the adolescents' stated sense of hopelessness and a definite statement that they "wish to die." The author's clinical experience supports the observation that this information is best obtained in an individual interview with the adolescent which should include empathic listening and very direct and persistent questioning regarding the adolescent's true feelings.

Diane was a 17-year old girl with a history of periodic rage outbursts, periods of depression, marijuana, alcohol and cocaine abuse, and difficulty in making and keeping friends. She was hospitalized following a suicide threat which was judged to be serious although it was not accompanied by any attempt. The patient had a stormy early hospital ex-

perience but was gradually able to discuss her feelings about her mother's death by suicide and her own difficulty in maintaining a positive mood. She improved and was discharged to her home. Continuing outpatient individual and group psychotherapy aftercare helped Diane maintain an adequate adjustment in her adoptive family until the adoptive father's work required a geographic move.

Although Diane was placed in psychotherapy in the new location and seemed to be making an adequate adjustment, she called a friend in her old neighborhood and complained that she was not able to make close friends in the new location and that she had begun to use cocaine again. A week later she called another friend stating enigmatically that she "just wanted to hear her voice". A week later she overdosed on her antidepressant medication and died.

This tragic case reminds us that adolescents often offer meager clues which they expect us to perceive and actively pursue. Unfortunately, as in the case of Diane, these clues are often very confusing. Diane's friends were touched by her telephone calls and since they saw mainly the somewhat abrasive, behaviorally disordered facade which Diane used to protect herself from being hurt in dependency relationships, they simply did not recognize the warning. It is unknown whether Diane provided any warning to her new therapist. It is very likely that no clues were offered although Diane had lived in the new location for more than six months.

Diane's depression, substance abuse, and death also illustrate other important risk factors. As previously mentioned, her mother was a suicide victim. The mother committed suicide on a holiday evening during Diane's seventh year. Diane herself committed suicide within a week after that time ten years later. At the time of her hospitalization the psychologist who tested Diane noted, "thoughts of death are often on her mind." Diane also showed a pervasive difficulty in

forming and maintaining comfortable dependent relationships. She had a mild learning disorder which interfered with her effective functioning in school in spite of a tested I.Q. in the superior range. All of these factors contributed to her reputation as a troublemaker and smart-aleck. They also disguised to some extent her hunger for acceptance and affection. Finally, the geographic move with its disruption of Diane's therapy and friendship relationships probably contributed to her sense of loss and triggered the overwhelming sense of hopelessness and depression that led to her suicide.

A second brief case vignette offers additional examples of the same risk factors.

Dawn, a 14-year old Caucasian female, was raped by a girlfriend's father at a slumber party one year prior to admission. Because of the complex set of circumstances which probably included some poor legal advice, no action was taken against the rapist. Dawn responded to the event with severe psychological problems. She became very rebellious at home, slept excessively, lost about 20 pounds and appeared to lose interest in all of her previous activities, including her school work. She began to act out sexually, caught gonorrhea, became pregnant, and had an abortion. She also began to use drugs heavily, particularly marijuana and cocaine, and started running away from home for prolonged periods. Her depression only became clearly evident, however, when her parents separated and began planning for a divorce two months prior to her admission. When her mother told her of their plans, Dawn became profoundly depressed and made a very serious suicide attempt, taking all the medications she could find in the family medicine cabinet. She was hospitalized in a coma and transferred for psychiatric treatment when medically cleared. At the time of hospitalization, she appeared less depressed and was demonstrating

some of her previous defensive measures. Psychological testing reported defenses of "denial, avoidance, and externalization". Psychological testing also revealed visual perceptual motor problems for which Dawn seemed to be attempting to compensate.

CASE SURVEYS

To provide some numerical support to anecdotal clinical impressions, the last nine youngsters admitted for serious suicide attempts who also reported drug abuse, were reviewed. Certain features are interesting, although it is obvious that we cannot draw definite conclusions from such a small group or even state which hypotheses might best explain the case characteristics.

Two findings are extremely striking. A clear history of alcoholism within a family member (no more distant than uncle or grandparent) existed in eight of the nine youngsters (five girls and four boys). Three fathers, one mother, and four other close family members (two grandfathers and two uncles) had documented alcoholism. In some cases, several family members were known to be alcoholic.

The second striking finding was that a separation or divorce had occurred within the previous two years in six of the nine cases. In two other cases, the probability of separation was being openly discussed by the parents at the time of hospitalization.

A history of a suicide attempt or completed suicide was noted in a family member in only two of the nine cases and only three cases had recently experienced a geographical move. Four of the youngsters had evidence of primary learning disability through both history and psychological testing.

It is difficult to say exactly what these observations mean, but they suggest that the population is a highly vulnerable one. There is a major hereditary susceptibility for substance abuse. Central nervous system dysfunction or instability demonstrated through the presence of learning disabilities was also

evident in four of the youngsters and a fifth had a seizure disorder. Perhaps these vulnerabilities, coupled with problems created by drug abuse help to explain the youngster's difficulty in maintaining self-esteem and the ease with which they could develop a sense of helplessness and hopelessness that might make suicide attractive to them. Often, dependency relationships which might have supported the vulnerable youngsters were tenuous, particularly within their families and, as we have seen in several cases, these tenuous support systems were further disrupted by marital disharmony or separation.

Perhaps the subjective sense of their lives is better conveyed by Marti, a 15-year old girl who wrote in an English essay, in the hospital's school,

"Why can't I love anyone? Why can't I care about myself? Why can't I keep friends? Why do I hurt people all the time? Why can't I be straight? I can't think of any solutions. All (I) can think about is the questions and the problems that face me."

The psychologist described Marti as "an exceedingly discouraged person who sees herself as undergoing a great deal of suffering and torment.... The depressed feelings that Marti has are compounded by family problems.... This combination leads Marti to feel quite hopeless about things and there are signs that acting on suicidal feelings presents a continuing threat in her case.... Marti feels quite abandoned by other people."

Sometimes this sense of abandonment simply reflects reality. Sean, a 15-year old white male with a history of bedwetting until age 11, played with matches as a child, and was generally destructive. He was completely rejected by both of his divorced parents. The mother refused to take custody. The father hospitalized Sean after a serious suicide attempt but rejected the recommendation for long-term residential treatment or for outpatient treatment since he felt Sean did not deserve "to have another penny spent on his

meanness." He stated instead, that it was his intention to take him home, let him decompensate and then "turn him over to the authorities." On psychological testing Sean "painted a picture of a sordid, morally barren world, in which even loved ones cannot be trusted."

MANAGEMENT OF THE SUICIDAL CHEMICALLY DEPENDENT ADOLESCENT

The first priority in the treatment of the suicidally active, chemically dependent adolescent is risk identification. As mentioned previously, the recognition of suicidal risk is not difficult if the index of suspicion is high. The initial evaluation of all adolescents should include careful review of all pertinent suicide risk factors including the degree of hopelessness and stated desire for death, history of suicidal behavior in a relative or friend, history of previous attempts, and the history of recent losses or separations. It appears from the limited data mentioned in the study of the nine cases above that parental separation or divorce seems to be a particularly dangerous loss experience for this population of youngsters.

Once a youngster with a high risk of suicide is identified, it is important to remember that continuing caution is indicated since most of the conditions which predispose the youngster to depression and suicidal behavior are chronic. These basic vulnerabilities and pathological defenses do not yield easily to treatment and are difficult to alter on a permanent basis. One can easily be overly optimistic about patients who are in treatment. The process of psychotherapy itself temporarily satisfies emotional and dependency needs. The experience of being cared for may produce behavioral improvement which is not, however, readily internalized in the youngster's psychic structure. The fact is that these youngsters remain highly vulnerable to loss experiences. Any changes in living conditions perceived by youngsters as traumatic can produce new suicidal peril for them and their apparent gains may rapid-

ly vanish.

At the time of acute suicidal risk, aggressive treatment is necessary to protect the youngster. One cannot expect complete cooperation from either the adolescent or the adolescent's parents in all cases. For the adolescent, suicide often appears as a consciously desired solution to his/her chronic unhappiness while parents may consciously or unconsciously accept this outcome also. In some instances, such as Sean's father, the parent even seems to be actively and consciously encouraging the adolescent's despair and sense of abandonment.

Adolescents may resist help because they are ambivalent about desiring death and they fear dependency. Often, they force helpful adults to prove their determination and genuine desire to be of assistance by making the therapeutic process as difficult and unrewarding as possible. However, when provided firm, clear support of sustaining life and firm disavowal of suicide as an acceptable action, the adolescent will usually abandon suicidal efforts. At times, supervision of the adolescent is necessary on an almost constant basis to insure the youngster's safety, but as a rule, this kind of caution does not need to be extended over time. When adolescents are prepared to give unequivocal assurances that they will not harm themselves and they will report any suicidal urges to a responsible adult, the promise can usually be trusted. In the same way that adolescents are usually truthful in reporting their plan to kill themselves when asked directly within a framework of care and concern, their promises that they will not harm themselves--if delivered with appropriate affect to a trusted adult--are a reliable indicator of their ability and willingness to protect themselves.

The active treatment of the concurrent chemical dependency is also very important in these cases. Continuing use of drugs undermines self-esteem and produces a sense of alienation from caretakers, both of which increase the danger of suicide.

As a rule, traditional psychotherapy alone is

not sufficient to gain and maintain abstinence and control of addictive behavior in chemically dependent adolescents. Long-term traditional psychotherapy is usually necessary to ameliorate the psychological vulnerabilities which may have initiated the excessive dependency on drugs and also to help the adolescent tolerate the task of mastering those developmental achievements which were disrupted by chronic intoxication and the preoccupation with the drug life.

In addition, special remediation and ego building approaches may be needed to help the adolescent master the environment more effectively and internalize a sense of competence. These ego building, cognitive aspects of treatment may include special education as well as social skills training as indicated for specific adolescents. Practical, sensitive assistance in gaining school and/or vocational successes as well as help in developing and maintaining a network of friends is also important.

The youngster's environment should be evaluated also. If a neighborhood or school is particularly competitive, fragmented, cold, or unfriendly, the therapist may need to become involved in efforts to create community atmospheres more supportive of the fragile adolescent. Assistance in locating appropriate Alcoholics or Narcotics Anonymous support groups may be very important in maintaining abstinence and in providing needed emotional support derived from group membership and group recognition of achievement.

Family therapy is always a necessary part of the treatment process. Some families are difficult to treat. Often these youngsters have been a longstanding source of stress and unhappiness to the parents. The disturbed adolescent may even have been a significant element in the marital discord or separation commonly seen in these families. At the same time, many of the parents are chemically dependent themselves or suffer from ego weaknesses similar to those observed in the adolescents. The result of all these negative

factors is that these parents often present in a very unappealing manner. They may be overtly or subtly rejecting the adolescent patient, contemptuous of therapy (to some extent because they have had many treatment failures), and uncooperative. At times, the parents appear very child-like and self-centered and do not hold the attitudes toward child-rearing which mental health workers would find acceptable.

In spite of all these comments, many parents can be involved in therapy if they are approached with understanding and with an accurate perception of the special needs of their disturbed adolescent children. It is usually necessary to be very firm in involving the parents in the treatment process. This may go as far as insisting that they assume their parental responsibilities, if necessary, by involving protective services and other legal approaches to force them to behave responsibly. Firm limits on acting out behavior are often necessary. Interestingly, although this leadership is often initially greeted with anger, the anger does not seem to interfere with long-term efforts to involve the families in treatment. At some level, these adults realize that they have a parental responsibility and, like an acting out adolescent, to some extent they are inviting us to take a firm stand to demand their best possible performance on behalf of their children.

A complete discussion of family therapy approaches is obviously not the purpose of this paper. It should be mentioned briefly, however, that multi-family therapy provides a model in which families who have achieved progress in developing or regaining a supportive parental role in their child's life can help new families. The "experienced" families can calm and support the shakier new parents and guide them through the treatment process with greater tact and with less narcissistic injury than professionals alone can offer.

Didactic techniques, which include substantial education regarding the addictive process, its depressive component, and the effectiveness of therapy, also can be very im-

portant in orienting the family to the nature of the treatment process and encouraging them regarding the possibilities of a positive outcome.

The value of psychopharmacology in the treatment of these adolescents is difficult to evaluate generally. Some adolescents, particularly those with a clear family history of major depressive illness, do seem to benefit by antidepressants. These medications are a reasonable part of the treatment plan, particularly in cases where treatment is begun in a hospital setting. It is crucial, however, not to expect too much of the antidepressant drugs, particularly in youngsters with histories that include clear cut ego defects and external traumas such as most of those we have described in this paper. It is important not to forget that the most common drug used in suicide attempts and successful suicides is the antidepressant.

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OVERVIEW OF EARLY DETECTION AND TREATMENT STRATEGIES FOR SUICIDAL BEHAVIOR IN YOUNG PEOPLE

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INTRODUCTION AND OVERVIEW

During the past five years, it has become apparent that suicidal behavior among young people represents an important public health problem requiring the development and implementation of detection and information strategies at the national policy level. Suicide is now the second leading cause of death in young people. For example, between 1970 and 1980, 49,496 of the nation's youth, 15 to 24 years of age committed suicide. Within this one decade, the suicide rate for this age group increased 40 percent (from 8.8 deaths per 100,000 population in 1970 to 12.3 per 100,000 in 1980), while the rate for the remainder of the population remained stable. Young adults 20 to 24 years of age had approximately twice the number and rate of suicides as teenagers 15 to 19 years old. This increase in youth suicide is due primarily to an increasing rate of suicide among young men. Rates for males increased by 50 percent (from 13.5 to 20.2 per 100,000) compared to a 2 percent increase in females (from 4.2 to 4.3 per 100,000) between 1970 and 1980 so that by 1980 the ratio of suicides committed by males to those committed by females in this age group was almost five to one.

A first step in our review of this area is to define early detection. It is important to realize that completed suicide is a low-base-rate phenomenon in that, fortunately, it does not occur that frequently (1). However, this rare event status does not compromise our major objective, which is to increase our ability to determine who is at greatest risk for completed suicide. We would argue that targeting one's efforts to prevent successful suicide--that is, to detect all behavior that leads to a final common pathway, suicide completion--is best done if we understand the various domains through which suicidal behavior emerges. These domains are not just risk factors but spheres of vulnerability. Because they can be detected and manipulated, they also represent opportunities for intervention.

In this review, we will attempt to describe several levels of detection and to integrate our proposed model of risk factors with a multi-threshold level model of detection (Table 1). Unfortunately, up to the present, reports on detection of suicide have often been flawed by poor methodology. Moreover, available detection and interven-

tion studies have not been adequately evaluated, nor has sufficient attention been given to the development of a conceptual model of detection and intervention. We believe that there are three major levels of detection.

- The first level represents the need to "red flag" high risk groups. It is basically a detection awareness strategy to follow individuals who may possess certain genetic and biological risk factors that interact with environmental factors in such a way that these individuals may be at risk for developing behavioral problems and/or psychiatric disorders that are present in Levels II and III. Level I also includes environmental stressors that are linked with suicidal behavior.
- Level II represents the detection of major behavioral/environmental problems. Here we are dealing with symptomatic children and youth in whom assessment and intervention may be required. Problems such as emotional difficulties, running away from home, and poor self-esteem may be identified at this particular level.
- Level III represents the detection of a psychiatric disorder of sufficient severity to require assessment and intervention by mental health professionals.

These three levels will be described in greater detail later in this review.

Levels of Detection	
Level I - Detection Awareness:	Red flagging high-risk groups for awareness and educational purposes.
Level II - Detection of Major Problem:	May require assessment-intervention (academic problems, self-esteem, being the victim of child abuse).
Level III - Detection of Psychiatric Disorder	Requires assessment and treatment.

Table 1.

Model of suicidal behavior

Our next task is to describe the five domains that comprise our theoretical model of suicidal behavior. We believe that five domains organized as a matrix provide a simple but appropriate model for considering these five risk factors for clinical investigation as well as for education and clinician intervention (Figure 1). We believe this overlapping model of risk, shown graphically as a series of interlocking Venn diagrams, represents a compelling alternative to notions of final common pathways or parallel schemas (2). A major clinical research strategy using this new model will be to develop weightings for each of its major components. For example, in applying this model, the breakup of a relationship might be a final humiliating experience that triggers a depressive episode in a young person with a family history of affective disorder. Such an individual may also have poor social supports which interact with the other identified risk factors to increase the individual's vulnerability for suicide. The question is, at what level and in what degree do each of these factors contribute to suicide potential? Is the degree of overlap of all factors the most significant criterion? Or, we may wish to pose such questions as, what makes 15 percent of the people who suffer from an affective disorder end their lives by suicide while the other 85 percent do not? Using this overlapping model, we may learn that the subgroup of affective disorder patients who commit suicide have a greater overlap of other risk domains such as increased hopelessness, impulsiveness, fewer social supports, a recent humiliating life experience, and/or stronger family history of affective disorder or suicidal behavior.

Domains of risk matrix

What are the five domains that comprise our risk matrix? The first is a careful description according to psychiatric diagnosis. Second, personality traits relating to suicide, such as aggression, impulsiveness, and hopelessness, are important in and of themselves in charac-

terizing suicide since they may represent personality styles that cut across diagnostic groupings. In addition, this domain includes certain personality disorders, such as borderline personality disorder and antisocial personality disorder, which are more highly correlated with suicidal behavior and represent risk factors. The third domain is concerned with **psychosocial factors, social supports, life events, and chronic medical illness**. For example, early loss, greater number of negative life events, the presence of chronic medical illness, and fewer social supports increase the risk for suicide. The fourth area is the identification of **genetic and family factors** that predispose an individual to suicide. Previously, investigators have suggested that the genetics of suicide may be independent of the genetics in a family history relating to specific psychiatric disorders such as affective disorder or alcoholism. The final factor in the matrix is the **neurochemical and biochemical variables** which are currently

under active investigation in an attempt to identify either a biologic abnormality or a vulnerability state for suicide.

With respect to children and youth, each of these domains is at least mentioned in the available literature. A number of theoretical issues, however, still need to be considered. These center around such questions as, what are the commonalities across psychiatric diagnoses which increase suicidal risk; does the mere presence of such a disorder with the overlapping of the domains create the increased risk; or, is it both?

Psychiatric diagnosis

The diagnostic picture for youth suicide is not clear-cut. Only a few studies on completed suicide have been conducted in this age group. However, in the adult literature, we know from four major studies with sufficient sample size (three retrospective and one prospective (3-6)), that if one sums the find-

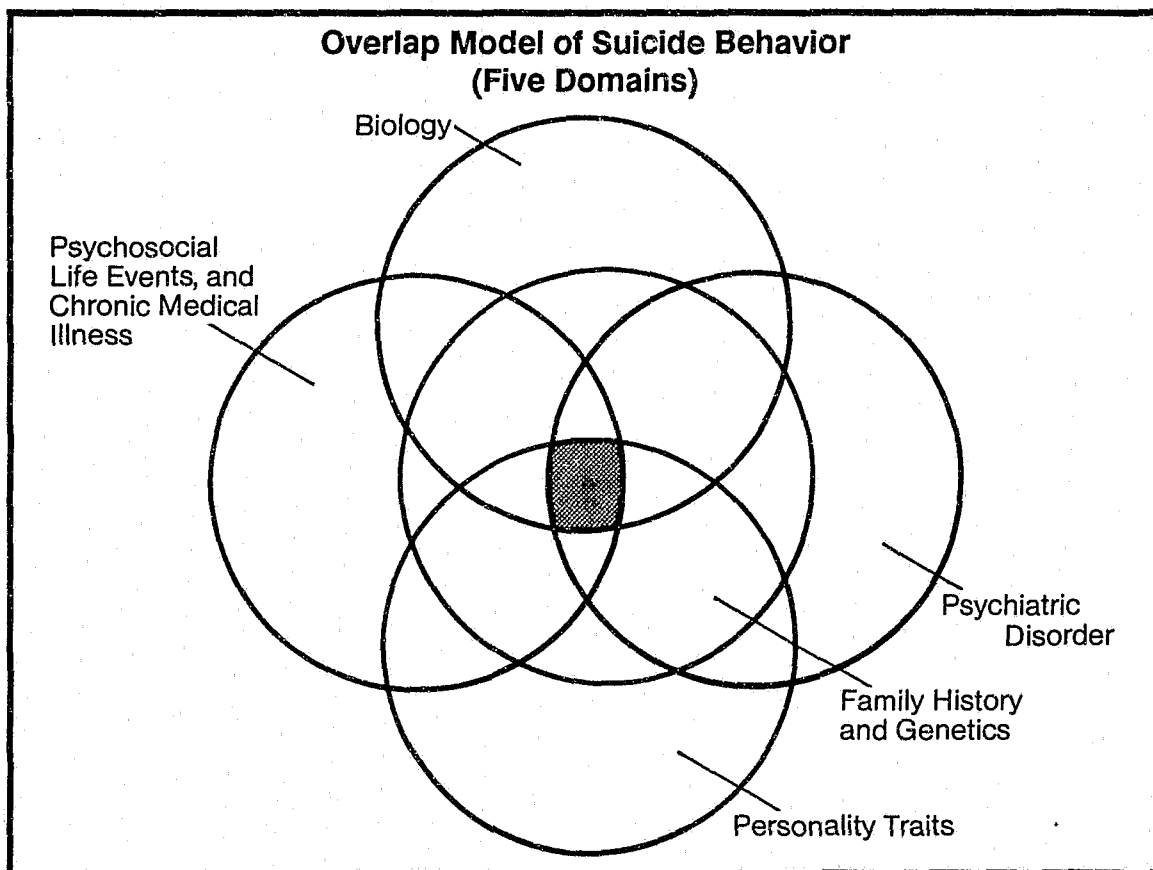


Figure 1.

ings about the association of suicide with psychiatric disorder from these studies, more than 90 percent of the victims had a psychiatric disorder and less than 10 percent had no mental disorder. The findings in the adolescent literature are quite similar. A recent study by Shaffii (7) found that 95 percent of the adolescent suicide victims had an associated psychiatric disorder by DSM-III criteria. A high percentage of these young people had an affective disorder--76 percent had major affective disorder or dysthymia as compared to 28 percent in the control group. His work (8) also suggests that 70 percent of youngsters who end their lives by suicide have associated substance abuse, 70 percent have a history of antisocial behaviors, 65 percent have "inhibited" personality traits, and 50 percent had made a previous suicide attempt. Suicidal behavior of parents, relatives, and friends, along with a parental history of emotional problems and abuse, were also significant variables. An earlier study by Shaffer (9) suggests that several personality traits are characteristics of youngsters who end their lives by suicide, including tendencies to be withdrawn, perfectionistic, impulsive, or aloof. Preliminary data from a large ongoing psychological autopsy study of adolescents (10) suggest that at least a third of the young people in the study who ended their lives by suicide had an associated conduct disorder and that one quarter of the sample population were suffering from a depressive disorder. In addition, a high percentage of these youth abused alcohol or drugs. Approximately 50 percent of these young people had a family history of suicidal behavior (11). Suicide attempts in this age group have likewise been linked to depressive symptoms. The co-morbidity of antisocial and depressive symptoms appears to be a particularly lethal combination in youth (10,12).

In sum, it is likely that the symptom triad of aggressiveness, impulsiveness, and depressive symptoms represents a major contribution to risk for suicide across the life cycle. In addition, substance abuse represents a major risk factor for youth suicide especially when

linked with affective symptoms and impulsive personality traits.

Personality factors

Even though conduct disorders and borderline personality disorders are highly associated with adolescent suicide (7-10,13,14), assessment of personality factors has been impeded by lack of standardized measures for these characteristics in young people. In addition, assessment of personality at the time of a suicide attempt is confounded by the distress experienced by the individual concerning the event. Finally, there is a continuum of traits and disorders associated with suicidal behavior in youths with such behavior in adults. Therefore, characteristics appear to be stable over the life cycle (15). It is proposed that certain diagnostic categories from the DSM-III Infancy, Childhood, and Adolescence section correspond to, and in effect eventually develop into, certain personality disorders (e.g., schizoid disorder of childhood and adolescent lead to schizoid personality disorder; avoidant disorder of childhood and adolescence leads to avoidant personality disorder; conduct disorder leads to antisocial personality disorder; oppositional disorder leads to passive aggressive personality disorder; and identity disorder leads to borderline personality disorder).

The presumption is that the childhood or adolescent condition is diagnosed if the individual is under age eighteen, and the adult personality diagnosis is used after age eighteen whenever the personality psychopathology has persisted at an intensity sufficient to meet disorder criteria (15). In addition, these personality variables may also have biological correlates (i.e., serotonin deficiency related to increased impulsiveness and aggressiveness) which interact with environmental factors. It should also be noted that the co-existence of Axis I depression and Axis I conduct disorder or borderline identity personality disorder may represent an extremely risky combination of factors.

Recently, the relationship of personality

variables to cognitive styles has been studied in suicidal behavior. In one study (16) cognitive characteristics of rigidity, impulsiveness, and field dependence were contrasted in a group of suicide attempters and a group of nonsuicidal psychiatric controls. The suicide attempt group was characterized by greater rigidity in a divergent thinking task; using multivariate analysis while controlling for age and diagnosis, field dependence was also more characteristic of the suicide attempters, but only in the 19-34 age group. Impulsiveness did not differentiate the two groups. The results were interpreted as supporting a hypothesis of a cognitive predisposition to attempting suicide.

In a similar manner, Beck and colleagues (17) intensively studied 207 patients hospitalized with suicidal ideation, but not recent suicide attempts, at the time of admission. During a followup period of five to ten years, fourteen of these patients committed suicide. Of all the data collected at the time of hospitalization, only the Hopelessness Scale and the pessimism item of the Beck Depression Inventory correlated with the eventual suicides. A score of 10 or more on the Hopelessness Scale correctly identified 91 percent of the eventual suicides. Taken in conjunction with previous studies showing the relationship between hopelessness and suicidal intent, these findings indicate the importance of degree of hopelessness as an indicator of long-term suicidal risk in hospitalized depressed patients. Beck (personal communication) has now been examining the congruence of cognitively rigid individuals and the level of hopelessness in the development of suicidal ideation and behavior. Neuringer (18) has suggested that cognitively rigid individuals faced with naturally occurring life stress are unable to generate alternative solutions to their problems; as a result, they are inclined to develop ideas of helplessness and hopelessness, which, in turn, heighten the risk of suicidal ideation and/or behavior. In support of this model, Schotte and Cum (19) found that college students under high life stress who performed poorly on an interpersonal

problem solving task, the Means-End Problem solving procedure (20), reported greater suicidal ideation as measured by the Scale for Suicide Ideation (21). While other issues of impulsiveness and aggressiveness in children need to be examined systemically, these data represent the current level of knowledge regarding the association of specific personality factors and suicide in young people.

Finally, in an extensive review of psychosocial and cognitive aspects of adolescent suicide, Petzel and Riddle (22) concluded that adolescent suicide completers are even more isolated, less visible, and more disturbed than suicide attempters. Social isolation and impulsiveness were reported in a number of studies, and suicidal behavior within the family was associated with increased adolescent suicide attempts. They described a host of familial, social, school, and emotional problems, as well as physical illness, as interacting to increase the suicide risk. Petzel and Riddle concluded with a recommendation for clinical research approach using an interrelationship of multiple factors.

Psychosocial factors

Although the data base is limited, there is considerable convergence of findings in the area of family and environmental factors in relation to youth suicidal behavior (23). Adolescents who make suicide attempts are characterized by considerably increased life stress and have had many losses (particularly early loss) and significant changes within the nuclear family as compared with other psychiatrically disturbed youngsters, depressed adolescents, and the general population. They have also had both physical and psychiatric illnesses. Precipitating events are often humiliating and are almost invariably interpersonal problems between the adolescent and his parents or peers. The social and familial background of these adolescents is marked by parental death, divorce, and separation. The general relationship with parents is often troubled,

and discord is a frequent characteristic of the marital relationship. Adolescents who attempt suicide have a greater number of negative life events, fewer social supports, and fewer personal resources than adolescents who do not. In addition, increased contact with suicidal behavior in the environment has been noted as putting certain vulnerable youth at greater risk.

Family history and genetics

A family history of suicide is a significant risk factor for suicide. Explanations for this association include identification with and imitation of a family member who has committed suicide, transmission of genetic factors for suicide, and transmission of genetic factors for psychiatric disorders such as affective disorders (24-28). A study of psychiatric inpatients revealed that (a) half of the persons with a family history of suicide had attempted suicide themselves, and (b) more than half of all patients with a family history of suicide had a primary diagnosis of affective disorder (29). A study of the Amish, a religious group with a 100-year history of non-violence, no alcohol or drug abuse, a high degree of social cohesion, no divorce or family dissolution, and a philosophy of suicide as the ultimate sin, has demonstrated, quite unexpectedly, that suicides do occur among this group. Twenty-six suicides have been documented among the Amish of southeastern Pennsylvania between 1880 and 1980. Twenty-four of the 26 individuals who committed suicide were diagnosed with a major affective disorder, and the suicides occurred in four primary pedigrees. This research suggests possible genetic factors in both the transmission of affective disorders and suicide (30). Another study of suicides in the general population found that six of 100 suicide completers also had a parent who committed suicide. This rate was eighty-eight times higher than predicted (31).

Investigations have suggested a high concordance rate for suicide in identical twins (32,33). While ten sets of identical twin pairs who both committed suicide have been

reported in the literature, there has been no report in which both fraternal twins have committed suicide (34). In another study, a greater incidence of suicide was found in the relatives of the control group (28). In the well-known Copenhagen adoption study, a greater incidence of suicide was found in the biological relatives of adoptees who committed suicide than in their adoptive relatives (as compared to adoptee controls) (24). The fifty-seven adoptees who committed suicide had 269 biological relatives, of whom twelve committed suicide (4.5 percent) and had no adopting relatives who committed suicide. By comparison, only two of the 269 biological relatives of fifty-seven matched control adoptees (0.7 percent) and none of 150 adopting relatives committed suicide. In another adoption study comparing suicide in persons with known depressive illness and matched controls, these same investigators again found a greater incidence of suicide among the biological relatives of the probands (3.7 percent). Of 407 biological relatives, fifteen (0.5 percent) committed suicide; only one of 187 adopting relatives committed suicide (S. Kety, personal communication).

These studies suggest that we may be able to separate the contribution of a family history of suicide and a family history of affective disorder to isolate high-risk groups for both research and clinical purposes. Issues of family history and genetic factors are complicated not only by concordance for psychiatric diagnoses in families but also by the environment in terms of identification and imitation of suicidal behavior by family members over long periods of time.

Biological factors

Recent biochemical investigations of suicidal behavior have shown that suicide victims and violent suicide attempters have alterations in the function of a brain neurotransmitter, serotonin, which has been measured by examining a major metabolite of serotonin, 5-hydroxy-indoleacetic acid (5-HIAA), in the cerebrospinal fluid (CSF). Other studies

have measured serotonin and imipramine binding in the brains of suicide victims. Furthermore, reduced central serotonergic activity is associated with suicidal behavior, not only when there is a diagnosis of unipolar depressive disorder but also in association with a range of other psychiatric disorders. This research has found a common biochemical association with aggression, impulsiveness, and reduced serotonergic function. Some studies suggest that the findings of decreased serotonin and violent suicide attempts may increase the risk of completed suicide ten-fold at one-year followup (35). Arsonists, for example, show a very high incidence of violent suicide attempts (36). But even with the promising 5-HIAA data, we must urge caution. While low 5-HIAA levels are associated with violent suicide attempts, low 5-HIAA levels are found in patients with diverse psychiatric illnesses and also in groups of normal controls (37). An increased incidence of depressive illness has been found in the relatives of both patients and normals with decreased CSF 5-HIAA (38,39). While the serotonergic data represent the most compelling current evidence for a biological correlate of suicidal behavior, other biological factors (neuroendocrinological, neuro-physiological) are also being investigated actively. It is expected that information derived from such studies will strengthen the relative weight of biological factors in our overlap model of suicide.

EARLY DETECTION AND TREATMENT

Several suggestions have been made about how to prevent suicide attempts in children and adolescents, but none of them have been evaluated. It is not known whether voluntary agencies providing help at times of crisis have had a major preventive effect. It has been suggested that more care in the prescribing of psychotropic drugs for young people may prevent overdoses (40-42). However, this is unlikely to have any impact on very young adolescents because they visit their general practitioners before overdoses less often

than their older counterparts (43), and usually attempt suicide with non-prescribed analgesics (44). In school children, educational measures, including use of the media, aimed at modifying attitudes to self-poisoning have also been proposed (41). Finally, some data demonstrate that States that have strict gun control laws have lower suicide rates (45). Other public health measures have also been found to be effective. In Great Britain, for example, the rate of suicide decreased when the type of domestic gas was changed from a toxic to a non-toxic form (24).

Evidence now available from two school-based programs demonstrates that teachers, counselors and other students were increasingly able to deal with suicidal students following crisis training for counselors, inservice training for teachers, and curriculum additions for students (46). In one program, students were described as becoming more willing to ask friends directly about their suicidality and were less likely to view a suicidal statement as "nothing to worry about." Students and teachers both reported increased knowledge about the mental health referral process.

While there is no dearth of literature on intervention techniques for youth suicidal behavior, the results of studies to date are compromised by poor methodology, lack of control groups, lack of evaluation and followup, and by the fact that most of these interventions are not based on a conceptual model of detection and intervention. These points are easily demonstrated by examining the published studies on whether volunteer agencies providing help at times of crisis have had a major preventive effect. A second form of "intervention" is represented by the many school-based programs that have provided in-service training for teachers and crisis training for counselors. However, no followup data are available to evaluate their impact. In sum, the available data base points to both lack of proven efficacy of these approaches as well as insufficient methodology to provide the tools to evaluate them. At this point, we have been unable to

demonstrate, beyond the importance of crisis support, that these interventions decrease the actual rate of suicide, although it is acknowledged that these efforts may play a significant role in providing needed support and education about suicide.

Risk detection levels

It is appropriate now to return to the three levels of risk detection to provide greater detail. We will give a brief overview of each level and then present several examples.

Individuals whom we would place in Level I, which can best be labelled **detection awareness**, are not actively suicidal or in immediate danger of suicide (Table 2). However, individuals at this level have certain risk factors of which we ought to remain aware. For example, the offspring of affectively ill or substance abusing parents, the offspring of a person who has died by suicide, close contacts with suicides and suicidal people, and abused and neglected children would comprise the Level I group. Level I would also include children who have recently been under extreme stress, such as divorce of parents, moves, the presence of a chronic illness either in the children or in the family, or the recent death of a parent or a close relative. It should be pointed out that one can think of this individual as having relatively little control over Level I problems. And, as

Level I - Detection Awareness

- a. Offspring of affectively-ill or substance abusing parents
- b. Offspring of suicides and suicide attempters
- c. Close contacts with suicides and suicidal people (prevention of contagion)
- d. Abused and neglected children
- e. Children who have recently been under severe stress
 - Divorce of parents
 - Move
 - Death of parent/relative

Table 2.

mentioned earlier, Level I contains individuals with a high threshold of genetic loading for psychiatric disorders or suicidal disorders as well as those individuals who have experienced major environmental stressors. Recently, Salk et al. (47), suggested that several "early" risk factors, namely respiratory distress for more than one hour at birth, no antenatal care for the mother before twenty weeks of pregnancy, and chronic disease of the mother during pregnancy differentiated adolescent suicide victims from matched controls.

Level II, shown in Table 3, is characterized by major problems that do not meet criteria for a psychiatric disorder. Young individuals who fit into Level II may require assessment, intervention, and perhaps even treatment; but the treatment is not for a DSM-III psychiatric diagnosis. Individuals at this level generally show some amount of distress, presence of symptoms, and/or decrease in function. Examples of symptoms at this level may include pronounced academic problems, the presence of learning disabilities, increasing interpersonal relationship difficulties, a major loss, or severe self-esteem problems. These individuals may be exemplified by youth who run away, adolescents who have an unwanted pregnancy, or children who are undergoing major stresses and become symptomatic. Extreme aggressiveness or feelings of hopelessness also characterize Level II in young people. Individuals at Level II may indeed become suicidal and are at risk for suicide attempts and suicide completion. They may be individuals who have demonstrated difficulties relating to Level I and have moved from Level I to Level II. However, we must remember that individuals can also move from Level II to Level III or I to III, or appear *de novo* at Level II or III.

Level III represents the detection of suicidal youth who have major psychiatric disorders (Table 4). When any individual is identified at this level, assessment and an intervention component are required with the intervention representing active treatment aimed at

a specific psychiatric diagnosis. Such diagnoses in children and youth may include affective disorders, conduct disorders, schizophrenia, eating disorders, substance abuse, and adjustment reactions. Even though personality disorders are not diag-

nosed before the ages of eighteen, they can be diagnosed in those youth between the ages of eighteen to twenty-four. In younger individuals, such disorders as conduct disorders, identity disorders, oppositional behavior, avoidant disorders, and overanxious

Level II - Major Problem Awareness

Requires assessment and intervention/treatment (not related to psychiatric diagnosis)

Anything that is not a major psychiatric disorder

Symptomatic, but does not meet criteria for a DSM-III, Axis I disorder

- a. Academic problems
- b. Learning disability
- c. Interpersonal relationship difficulties
- d. Self-esteem and sexual identity problems
- e. Runaways
- f. Having an unwanted pregnancy
- g. Children who are undergoing major stress or loss and are symptomatic
- h. Aggressivity, hopelessness, personality traits and styles

Table 3.

Level III - Major Psychiatric Disorder

Necessitates appropriate assessment and evaluation

Has a treatment component aimed at a specific psychiatric diagnosis

- a. Affective disorder
- b. Conduct disorder
- c. Schizophrenia
- d. Eating disorder
- e. Substance abuse
- f. Alcoholism
- g. Adjustment reactions
- h. Identity disorder
- i. Oppositional disorder
- j. Separation anxiety disorder
- k. Avoidant disorder
- l. Overanxious disorder

Table 4.

disorders would fall into Level III. In addition, as was previously discussed, certain disorders of childhood and adolescence may be predictive of adult disorders (i.e., conduct disorders lead to antisocial personality disorders). It should be pointed out that medical illness also can be treated at any of the three levels of suicidal potential.

The interactions of the overlapping matrix model (2) of risk with the three-level detection intervention schema should be readily grasped. For example, at Level I, the so-called awareness level, one may have a genetic loading for a psychiatric disorder, particularly an affective disorder, or have a family history of suicide which increases the individual's risk of suicide. In addition, there may be stressors in that young person's life that impact directly on the adolescent. At Level II, we include the genetic, biological, and environmental domains, but add to them personality style and traits, which may also play a major contributory role to risk so that a young person begins to have more of the domains or risk factors interacting by the overlap. Therefore, the risk for suicidal behavior increases as the individual meets Level II criteria. Future studies will determine whether the appropriate risk model is an additive or a multiplicative model. Finally, at Level III, which requires a psychiatric diagnosis, all of the domains and levels of the overlap model are apparent and interacting. Thus, genetic and biological loading, personality traits and style, the environment, and psychiatric diagnoses clearly interact at the Level III stage. Obviously, individuals can move among these levels; and it is hoped that individuals at Levels II and III, through appropriate intervention, will return to Level I where intervention is not necessary. Persons who are in clinical remission from a psychiatric disorder, however, should remain "red-flagged."

Intervention and treatment

The next issue to be considered is intervention and treatment, which should be reviewed at each of the three levels. Level I,

detection awareness, requires a strong component of education. This means education of teachers, parents, and health care professionals in detection awareness. For example, although controversial, we consider the education of young people themselves about their risk and about what they can do to prevent further development an appropriate arena for active discussion. We believe that direct information concerning suicide risk in relation to family history of suicide, the presence of alcoholic parents, or parents with affective disorders should be conveyed by health professionals in an age-appropriate style to young people.

We will also have to assess whether a heightened awareness among physicians of suicidal behavior will reduce the scope of the problem. The issue of physician recognition of mental illness is extremely complex, and both patient and physician factors have been studied to explain the lack of recognition. Nevertheless, it should be possible to design an intervention program in which the educational component for physicians focuses on suicide and related symptoms, diagnoses, and behaviors with specific emphasis on adolescents and young adults.

Awareness education

It is critically important to educate health care practitioners outside the mental health mainstream about the various levels of awareness that comprise our model. These individuals include family practitioners, internists, pediatricians, obstetricians, and gynecologists, who, while trained to deal with stressful health issues such as chronic illness or unwanted pregnancy in the young population, may not be aware of the additional risk imposed by the factors we have identified as part of our matrix. In addition, many young people may present to their doctors with physical complaints that are somatic representations of their psychic distress.

For the same reasons, it is important to extend our educational activities to health and social service personnel who work within the juvenile justice system. Health care profes-

sionals need to pay particular attention to life cycle issues that emerge during puberty and adolescence. We cannot overemphasize the need for education of health professionals. It is apparent from the adult literature that more than 80 percent of the people who complete suicide have seen a physician within weeks to months before the attempt and may have accumulated many months of prescribed medication which they can use to end their lives (3,5,6). Thus, physicians must be educated to diagnose psychiatric syndromes and suicidal behavior and to intervene and refer when appropriate. Guidelines for treatment, particularly when pharmacologic intervention is involved, need to be learned.

The second task in detection awareness is best described as information gathering and documentation by health care professionals about the various factors mentioned earlier under detection awareness. Documentation in patient charts by pediatricians or internists concerning Level I factors is extremely important. In essence, we are arguing for a type of red flagging of these individuals, even as a lifetime red flag. The major objective here is to keep children and youth at Level I through education, recognition of individual risk, and instruction about what to do if more factors develop so that we can prevent them from moving on the Level II or III.

The third task is "environmental detoxification." It is important to point out to the family of anyone at Level I the need to "detoxify" the home from fire arms, medication, and other potential means of suicide. These kinds of public health measures (gun control, non-lethal domestic gas, and removing toxic substances from the home) are important interventions in reducing suicide. The detoxification should certainly take place at Levels II and III, but we would argue that it is equally appropriate for Level I.

Level II, major problem awareness, requires a level of active intervention and treatment to deal with behavioral problems, personality issues, or specific life events. It is important to develop age-appropriate assessment

scales to determine degree of hopelessness, aggressiveness, personality, and other relevant characteristics that are associated with increased suicide risk. Interventions should include primarily behavioral interventions (for example, cognitive behavior training, psychotherapy, educational interventions for learning disabilities, self-esteem training, stress management, and group activities). We believe that these types of interventions should deal appropriately with various academic problems, self-esteem issues, stressful life events, personality issues, and runaway problems seen in adolescents at Level II.

This brings us to Level III, which deals not exclusively, but certainly with psychiatric disorders. Here, the use of age-appropriate assessment and diagnostic scales by health care practitioners is important, as is the issue of referral. When does the health care professional refer? What are the specific circumstances that require immediate intervention by the psychiatric system? Obviously, there are specific interventions for diagnosed psychiatric disorders including psychotherapeutic and psychopharmacologic treatments. In addition, we feel very strongly that the early development of bipolar affective illness or schizophrenia in young people requires immediate intervention for both the patients and their families.

Strategies for treating specific psychiatric syndromes may play a major role in preventing suicidal behavior. Examples include the use of lithium carbonate early in the course of bipolar affective disorder to prevent future manic episodes or the use of neuroleptics in the treatment of schizophrenia. Cognitive or interpersonal psychotherapies aimed at cognitive distortions and problems in relationships that occur in affective illnesses can help minimize symptoms and interactional styles that may occur with a chronic, untreated illness. It has been demonstrated that suicidal risk is probably high in the early years of bipolar disorder and schizophrenia. Therefore, aggressive treatment during the period of initial illness might

indeed reduce the risk of completed suicide.

Treatment strategies for Level III using the overlap model approach would be to treat the associated psychiatric condition but at the same time to "red flag" the high risk patient, paying particular attention to environmental stresses and psychosocial supports (Table 5). Psychotherapeutic and psychosocial treatment modalities used in conjunction with pharmacotherapy may increase the compliance rate of high-risk individuals who are most prone to commit suicide. In addition, psychotherapeutic treatment may improve interpersonal relationships and reduce the cognitive distortions that frequently occur with depression and suicidal thinking. Since suicidal patients are difficult to sustain in treatment and frequently drop out, the use of clinic facilities, clinic support, or network systems to ensure that such individuals will stay in treatment is an important strategy. In addition, such programs provide a type of social support through which patients, families, and clinicians can form an alliance that provides education, treatment, and family support over long periods of time. Reports from clinic facilities for the treatment of affective disorders in New York, Tennessee, and California confirm this phenomenon (48). They suggest that the rates of suicide in these patient groups are much lower than would be expected and that such system approaches have a "protective role."

Multidimensional Intervention components

This type of treatment strategy illustrates the interaction of the overlap model of suicide risk and the model of detection awareness levels and intervention. Affective disorder clinics such as those described above provide interventions aimed at all five domains of suicide risk: education to patients and their families (family history and genetics); development of network and support systems (psychosocial and environment); identification and treatment of associated psychiatric disorder (psychiatric disorder,

biological factors), and psychotherapeutic interventions (personality factors, psychiatric diagnosis, family problems). Interventions such as these clinics provide, which encapsulate as many domains as possible, increase the possibility of preventing suicide in high-risk persons. These programs follow persons in remission as well as during illness; therefore, individuals remain "red flagged."

Other psychiatric illnesses that require similarly aggressive interventions include alcoholism and drug abuse, particularly among youth, and disorders of childhood and adolescence such as conduct disorders and antisocial behavior. Interventions that involve as many domains as possible, including family treatment, environmental modification, and treatment of the behavioral disorder, will maximize prevention of suicidal behavior. Again, the need to detoxify the home should be apparent. In each case, one should follow crisis management principles, use psychotherapeutic and/or psychopharmacologic interventions when appropriate, but also include environmental interventions. It is important to educate the family and, when necessary, to treat the family.

Several final points with respect to intervention and treatment issues include the need to develop followup strategies and a schema to ensure that children at risk will not engage in recurrent suicidal behavior. Difficult issues often arise for the clinician in treating such cases. In general, young suicidal patients are

Issues in the Treatment of Suicidal Behavior

Therapeutic style - rapport, directness
Reassurance
Therapeutic interventions
 a. Altering cognitive rigidity
 b. Modification of hopelessness
Medical aspects - pharmacotherapy
Education - patient and family
Countertransference

Table 5.

difficult to manage and may seem at times unrewarding to treat, and the child and family may be excessively demanding. These factors may make the physician feel increasingly helpless and inadequate. It is important for health care professionals to keep these issues in mind and not to communicate negative attitudes and messages to the patients or their families.

CONCLUSION

To summarize, our recommendations can be grouped into three areas: educational, clinical, and research. We have placed a great deal of reliance on education interventions, for example, at Level I, "red flagging" high-risk children, detoxifying the home, and developing rapid and economical screening batteries for general practitioners and pediatricians to use as early detection tools. It is important to highlight the need for good record keeping of suicidal behavior, psychosocial stresses, and family history data. Regarding detoxifying the home, even though national gun control efforts have not succeeded at this point, it is appropriate to argue that stricter gun control is a method for decreasing suicide among youth. Studies have shown that States with strict gun control have lower suicide rates (45). While most detection efforts have focused on Level III (which are still inadequate because psychiatric illness is underestimated in youth), relatively little has been done at Level II and almost nothing at Level I. Recent studies show increasing rates of affective disorder and conduct disorder in young people (49). Even so, very few people really understand the relationship of any of these detection levels to suicidal behavior and where to go for help for the problems identified in each of the levels. With respect to the clinical arena, it is important to educate clinicians about the diagnostic criteria for psychiatric illnesses in young people and the most effective treatments for specific psychiatric syndromes in youth. From our discussion, it should be apparent that future directions for research operate at every one of the three levels that we have described and

that all three clearly need considerable attention.

However, research should not be confined to one level because there is considerable overlap across levels. It is hoped that the outline of these strategies can significantly enhance our approaches to the early detection and intervention of suicidal behavior in young people and, thereby, prevent this tragic loss of human life in our country.

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SPECIFIC TREATMENT MODALITIES FOR ADOLESCENT SUICIDE ATTEMPTERS

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INTRODUCTION

The treatment of adolescent suicide attempters is a particular interest of mine. I have been working with this population for about five years, along with David Shaffer, M.D., to develop interviews which identify the symptoms and problems of suicide attempters. More recently, I worked with Mary Jane Rotheram, Ph.D., to test treatment strategies targeted as specifically as possible to those problems. I approach the topic of treatment with a bias towards brief psychotherapy and outpatient management. As director of the Child and Adolescent Depression and Suicidal Disorder Clinic at the Presbyterian Hospital in New York City, I am also interested in the problems of training staff to work effectively with this difficult group of adolescents.

STUDIES OF TREATMENT FOR SUICIDE ATTEMPTERS

I can state quite simply that there are no specific treatment modalities for adolescent suicide attempters. That is, there are no treatment studies--psychotherapeutic, behavioral, or psychopharmacologic --which show that a clearly defined treatment approach is superior to no treatment or to some other treatment. There are many descriptions of treatment--individual, family, group, insight-oriented, behavioral, cognitive, and so forth--but no evidence that suicide at-

tempters who are so treated might not have done just as well without that treatment.

Only a few studies of treatment in adults provide limited support for the idea that contact with a helping professional is better than no contact for the prevention of suicidal behavior.

- Greer & Bagley (1971) showed that subjects who had two or more visits with a professional were less likely to make another suicide attempt than untreated subjects; however, the treated subjects were self-selected and may simply have been healthier and better motivated to change.
- Motto (1976) made regular telephone contact with one-half of 853 people who dropped out of outpatient therapy after hospitalization. At the four-year follow-up, 5 percent of "contact" and 8 percent of "no contact" subjects had committed suicide; this difference approached, but did not achieve, significance at the 0.05 percent level.
- Welu (1972) telephoned and visited a random sample of subjects at home. These subjects were more likely to attend outpatient visits and were less likely to make another suicide attempt than non-contacted controls.

- Studies by Ettlinger (1978), Chowdhury, et al. (1973), and Gibbons, et al. (1978) failed to demonstrate any impact of outreach or time-limited case work on reattempt rates.
- Liberman and Eckman (1981) showed that subjects receiving 32 hours of inpatient behavioral therapy did better on a variety of measures of mood than those receiving insight-oriented psychotherapy, but the groups did not differ in their reattempt rates.

The last observation speaks to a problem which has already been raised by others, namely, that suicide attempters have a number of problems such as mood disturbance, drug and alcohol dependency, aggression, etc., but it is difficult to know which problems will improve in therapy. Mood may change in the short run, for example, but suicidal behavior may not change in the long run.

DEVELOPING A TREATMENT PROGRAM

The second part of this paper addresses a series of questions which I keep asking myself in trying to develop an effective, practical treatment program:

1. What conditions need treatment?
2. Who wants treatment?
3. Who gets treated?
4. What general treatment approaches are useful with adolescents?
5. What can we learn from psychotherapy studies of other adult and child populations?
6. Are any medications of use?

This paper will try to provide some, not definitive, answers to these questions.

What conditions need treatment?

A review of the literature reveals relatively few characteristics which distinguish suicide attempters from other adolescent psychiatric

patients. Ideally, treatment should be designed to change a problem, symptom or constellation of symptoms (diagnosis). A valid diagnosis carries information about etiology, natural history, and sometimes, treatment. A suicide attempt is not a diagnosis since it is associated with many different causative factors and diagnoses.

SPECIFIC FOCI FOR TREATMENT

- Major Depressive Disorder (MDD)
 - Aggression, Conduct Disorder
 - Associated Physical Illness
 - Drug and Alcohol Abuse
 - Parental Psychiatric Illness
 - Marital Conflict
 - Parent-Child Conflict
-

MDD. Depression powerfully increases the risk of suicide in adults. While only 25-30 percent of suicide attempters can be said to be depressed, depression is a **treatable** disorder, at least in adults, and therefore, should not be overlooked.

Aggression and conduct disorder. Aggression and suicidal behavior often go hand-in-hand. Shaffer (1974) noted that a majority of young adolescents who committed suicide manifested antisocial behavior before their deaths; this was also found to be true in the on-going New York Study of Adolescent Suicide (Shaffer & Gould, 1985). Fifty percent of black suicide attempters, but only 10 percent of whites, had recently been in trouble with the law (Breed, 1970). Dr. Meeks pointed out that hopelessness and guilt are often associated with antisocial acting out.

Associated physical illness. Studies have shown higher rates of current medical illness among older adolescents who have attempted suicide than among age-matched peers (Garfinkel et al. 1982; Hawton et al. 1982). I include pregnancy among physical conditions associated with suicidal behavior.

Appropriate medical management and education can be expected to produce better physical and psychiatric functioning and improve self-esteem.

Drug & alcohol abuse. This problem was already discussed by Dr. Meeks. Thirty to 40 percent of adolescent suicide attempters have parents with high rates of alcoholism (Cohen-Sandler et al., 1982; Garfinkel et al. 1982). Depressive spectrum disease may affect the families of some suicide attempters, so that some members become depressed, some are alcoholics, some are both alcoholics and depressed, and some remain disease free (Van Valkenburg et al. 1977).

Parental psychiatric illness. Psychiatric illness is very common and serious among the parents of suicide attempters. For example, maternal depression can cause disturbance in children; depressed mothers show decreased emotional involvement, disaffection and increased hostility towards their children (Weissman et al. 1972). Maternal depression is also a barrier to compliance; this will be discussed later. Suicidal preoccupation in a parent and conscious or unconscious wishes to be rid of a child may push some children towards suicide as a solution to their parents' problems (Margolin & Teicher, 1968; Sabbath 1969, 1971).

Marital conflict. Adolescent suicide attempters come from homes with high rates of marital conflicts and are more likely to have heard recent talk of separation and divorce than psychiatric controls (Stanley & Barter, 1970).

Parent-child conflict. This is the most important external factor in adolescents' suicide attempts; 70 percent of our adolescent girls report suicide attempts precipitated by arguments with parents. Their parents often exhibit extremes of expectation and control, alternating between over-protectiveness and indifference,

withdrawal, and an inability to respond to adolescent crisis (Trautman & Shaffer, 1984).

Who wants treatment?

A suicide attempt is a life threatening event and one would think that parents would be eager to avail themselves of professional services to make sure it did not happen again. Yet this is not so.

NON-COMPLIANCE WITH AFTERCARE

Analysis of Suicide Attempters Seen in Emergency Rooms (ER)

23% were evaluated and completed 15 sessions of brief psychotherapy or were still in treatment.

10% were referred to other clinics or hospitalized.

but:

20% did not keep any outpatient appointments.

19% dropped out during the initial assessment period (first or second appointments).

27% completed two diagnostic visits but refused treatment or dropped out during treatment.

Source: Trautman & Rotheram, 1986, unpublished

In a consecutive series of 77 adolescents treated in the emergency room for self-poisoning or other self-injury, 23 percent failed to keep a followup appointment in the child psychiatry clinic and 19 percent kept only one followup appointment (Trautman & Rotheram, 1986, unpublished). This occurred in spite of vigorous efforts by telephone and letter to reschedule missed visits.

Our experience is similar to that of others:

**ATTEMPTER NON-COMPLIANCE
WITH AFTERCARE**

44% of 50 8-17 year olds (82% female) did not keep an appointment within one week of ER discharge (Taylor & Stansfeld, 1984).

61% of 27 10-17 year olds (50% hospitalized) did not keep followup recommendations (Litt, Cuskey, & Rudd, 1983).

88% of 138 children and adults (34 10-19 year olds) did not follow outpatient care recommendations.

75% did not follow recommendations for voluntary admission (Bogard, 1970).

55% of 29 adults did not keep outpatient appointments (Paykel, et al., 1974).

73% of 296 adults ("moderate or high risk for suicide") did not keep outpatient visits (Knesper, 1982).

Taylor & Stansfeld (1984) examined 50 8-17 year olds (82% female) who had been admitted to a pediatric ward following a deliberate self-poisoning. All were given a followup appointment in the psychiatric outpatient clinic within one week of discharge but 44 percent failed to attend. Only 39 percent of 27 10-17 year olds (half of whom were briefly hospitalized) complied with recommended followup within one year after their attempt (Litt, Cuskey & Rudd, 1983). In a study of 138 child and adult attempters, of whom 34 were 10-19 years old, only 12 percent of those recommended for outpatient care attended, and only 25 percent of those recommended for voluntary admission to an inpatient or day treatment facility actually turned up (Bogard, 1970). Compliance for the adolescent subjects was not reported separately. Paykel et al. (1974) reported 45 percent compliance among 29 adult patients given an outpatient clinical referral following

an attempt. In a study of 296 adult patients who were judged to be at moderate to high risk for suicide at an emergency room visit, only 27 percent kept an outpatient appointment (Knesper, 1982). Compliance with pediatric referrals from emergency to other clinics or from the pediatrician to child psychiatrist is generally in the range of 50-70 percent (Litt & Cuskey, 1980; Hildebrandt & Davis, 1975; Lefebvre et al., 1983; Bergman, Corbin & Haber, 1982; Bacon, 1985).

What contributes to compliance after emergency treatment for a suicide attempt? In the Taylor & Stansfeld (1984) study, attenders had more psychiatric symptoms, particularly **depressive symptoms** (depression, insomnia, and loss of appetite), were judged to have greater intent to die (as opposed to goals such as escape, help-seeking, or manipulation), and were more likely to have received a psychiatric diagnosis than non-attempters. This finding is similar to findings among adult patients that low levels of anxiety and/or depression and high levels of paranoid and sociopathic symptoms contribute to drop-out from psychotherapy (Baekeland & Lundwall, 1975).

Who gets treated?

This paper has already shown that 40 percent of attempters do not get **evaluated** and only 20 percent of the subjects (at best) complete a three-month brief therapy program.

Studies of drop-out rates from adult psychiatric clinics show that the median number of sessions attended is about six, and that 30 to 65 percent of patients drop out unilaterally, i.e., before their therapists think they should. In a study of 102 adolescent outpatients, Viale-Val et al. (1984) found:

- 23% did not turn up for the first visit.
- 25% dropped out after one, two, or three sessions (assessment).
- 26% dropped out unilaterally after four or more sessions.
- 10% were referred away.

- Only 14.7% stayed in treatment for a median of eight sessions.

Suicide attempters, children referred for school problems and externalizing disorders, and minority and low-income patients were less likely to stay in treatment.

One can conclude two things:

1. Adolescents are **not** more likely to drop out of therapy than adults, as is often stated.
2. People want brief treatment and fast results: either they get it and leave or they do not get it and leave.

Therefore, brief, crisis-oriented treatment makes sense for most patients. Many suicide attempters have problems of a brief nature; studies by Henderson et al. (1977) and Facy et al. (1979) illustrate this point.

SUICIDE ATTEMPT SUBTYPES

- A. Formal Psychiatric Illness**
Multiple Adverse Social Factors
Methods of High Endangerment
 - B. No Formal Diagnosis**
Acute Familial or Interpersonal Crisis
Methods of Low Endangerment
-

Suicide attempters in Group A are older adolescents and a greater proportion are boys. Suicide attempters in Group B are younger, mostly girls, and have problems which are often quickly resolved, with or without treatment.

What general treatment principles are useful?

We know from studies by Ricks (1974) and Kolvin et al. (1981) (see reviews by Shaffer, 1984 and Dulcan, 1984), that an effective therapist for children is active, assertive, explanatory, and responsive, not passive. S/he uses community resources and meets with parents. S/he uses longer treatment for more severely disturbed patients and shorter treatment for less disturbed patients. The therapist's age, sex, race, religion, experience, and theoretical orientation make

little difference (Parloff, et al. 1979), although Viale-Val et al. (1984) found that sex-matching of patient and therapist was associated with better treatment compliance.

Effective treatment for depression is characterized by:

- a. High treatment structure.
- b. A clear, well-planned rationale.
- c. An emphasis on skills training.
- d. The independent use of skills outside the treatment context (i.e., homework).
- e. An emphasis on self-attribution for increased skillfulness (i.e., not only behavioral change but also the ability to say, "I did this myself and did a good job of it").

What can we learn from other studies?

Cognitive behavior therapies hold promise for the treatment of depression and suicidal behavior in adolescents.

Beck et al. (1979) described the cognitive triad of depression: a negative attitude about oneself, the world, and the future. They argue that dysfunctional beliefs (e.g., "my friends don't really care about me") cause sad moods and lead the subjects into maladaptive behaviors (e.g., avoiding others). Several studies of adults have shown that cognitive therapy is as effective as tricyclic antidepressant medication for the continuing treatment of depression, with better treatment compliance.

Beck's cognitive therapy seems well-suited for adolescents: It is systematic, highly structured, and didactic. The patient and therapist work together to identify and solve problems, and the patient is instructed to carry out homework assignments, to gather information about himself, monitor mood and behavior, and try out new behaviors.

Meichenbaum (1977) focuses on the thinking processes involved in performing a task. He believes that a patient's behavior is influenced not primarily by environmental

events, but what the patient says to himself about these events. He trains children and adults to use coping self-instructional thought to deal with problem situations.

Spivack & Shure (1974) noted that children with behavior problems were poor interpersonal problem-solvers. They train children in two types of social reasoning--first, to think of alternative solutions to conflict situations, and second, to predict the likely consequences of the various solutions.

Lewinsohn (1974) proposes a behavioral theory of depression which has three major assumptions: 1) a lack of pleasant events (reinforcement) stimulates depressive "behaviors" such as dysphoria and fatigue; 2) the lack of reinforcement is a sufficient explanation for symptoms of depression, and 3) the amount of reinforcement is a function of the number of potentially reinforcing events for the individual, the number of potential reinforcers the environment can provide, and the skill of the individual in eliciting these reinforcements. Treatment involves the use of activity schedules, identification of reinforcers, and training in social and assertiveness skills and desensitization.

Family therapy interventions move the focus of attention from the attempter to pathological family interactions which promote suicidal behavior or which the suicidal behavior is meant to solve. Disturbances in family structure including role conflicts, blurring of role boundaries (e.g., the child who is given a parental role, or the mother who undermines her parental authority by saying, "Johnny, stop yelling! Okay?"), dysfunctional alliances across boundaries (e.g., a child who joins one parent in discrediting the other), failures of communication, secretiveness, and rigidity with inability to accept change or tolerate crisis, may promote suicidal acting out (Minuchin, 1974; Richman, 1979, 1981; Fishman & Rosman, 1981).

These systems-theory approaches are essentially descriptive rather than etiologic, but are useful in that they readily lead to defining the tasks of treatment, for example, get-

ting the parents to unite on rules for the child's behavior, or removing parental responsibilities from the adolescent. The clinician must take care not to let family systems issues blind him to the immediate psychopathology of the adolescent. Depressive delusions, for example, are reason to admit the patient to a hospital, no matter how solid the family relationship. On the other hand, removal from the home might also be indicated in the absence of major psychopathology when open marital conflict has pushed the adolescent to suicidal acting out.

Parent-child conflict is the most common immediate precipitant of suicidal behavior and family sessions are an essential, if not the only, component of successful management. (A useful discussion of combined individual and family treatment is provided by Steinhauer, 1985). The goals of the initial family sessions are to decrease destructive family interactions, increase communication among family members (including discussion of the adolescent's suicidal ideation and parents' destructive wishes), and to help the family identify solutions to the current crisis (Richman, 1979; Perlmutter & Jones, 1985). These solutions may be readily apparent once the family is able to state explicitly the nature of their crisis, and are already within their problem-solving repertoire.

Specific family training programs in communication skills and problem solving have been shown to be effective (Robin, 1979; Guernsey, Coufal & Vogelsong, 1981) but whether this kind of explicit skill training is necessary is unclear. In a study comparing problem-solving communication training (PSCT) with an alternate family therapy ("family systems", "psychodynamic", or "eclectic"), only PSCT families objectively used problem-solving techniques, but both groups reported significant subjective decreases in family conflicts and disputes, as compared to controls (Robin, 1981). In a study comparing communication skills training to unstructured group therapy for mother-daughter pairs, the skills training was

superior in enhancing expressive and empathic skills as well as the general quality of the relationship (Guerney et al. 1981).

A word of caution should be added about compliance with family therapy approaches. Drop-out rates from behavioral family approaches are high among lower socioeconomic and high-risk families (Wahler et al. 1977, cited in Werry, 1979). Shapiro & Budman (1973) reported significantly higher drop-out rates from family therapy than from individual therapy and emphasized that the father's enthusiasm for treatment is very important to the continuance of that treatment.

Group therapy. Very little is written about group therapy for adolescent suicide attempters. It is easy to understand why: groups for adolescents are not easy to start or maintain under the best of circumstances unless you have a captive population in a hospital. One needs 10 referrals to be successful in starting a group of five. Only a large medical center would have enough patients at any one time to start up a group exclusively for suicide attempters; and the group would have to be continuous, not time-limited.

An indication of the difficulty of running an outpatient group for adult attempters is provided by Comstock & McDermott (1975) who conducted open groups (that is, the patients were free to attend the group as long as they wished). One hundred five patients were so treated, and the median number of sessions attended was six. Only 20 percent attended the group for three months or longer. The number of patients who were offered but refused group treatment is not stated. This supports the earlier contention that, given a choice, the majority of attempters want very brief, supportive treatment.

Costock & McDermott (1975) provide some useful goals for short-term groups:

- a. Identify situational differences that lead to suicidal preoccupation;
- b. Point out that action without reflection accounts for many suicides; label inci-

dents of impulsive acting out as such; teach group members how to alter their tendency to act impulsively, especially under stress.

- c. Emphasize that alternative behavior is possible for individuals contemplating suicide;
- d. Foster psychological mindedness, particularly taking responsibility for one's behavior, self-observation, questioning motivation, identifying mood correctly, and examining differences between what the patient said and what she/he wanted to convey.

Other non-specific beneficial effects of group therapy include, learning that others in the world share one's problems, support by peers, role-modeling, ventilation, and acquisition of social skills such as conversational skills and the use of eye contact (Yalom, 1970). A skillful leader must ensure that role-modeling does not work negatively, that is with hopelessness, suicidal ideation, and suicidal behavior spreading contagiously to all group members. With its greater opportunities for frustration and provocation, a group experience may be more likely than individual treatment to bring out aggression in a suicidal person (Mullan & Rosenbaum, 1975) which may be meted out on other group members (DeRosier, 1975).

Glaser (1978) and Ross and Motto (1984) described group therapy techniques and experiences with hospitalized and non-hospitalized adolescent suicide attempters. The latter used group therapy with suicidal adolescents. After a two-year followup of 17 subjects, they found no reattempts or completed suicides. Glaser suggested that group therapy may be a useful alternative to family therapy for the adolescent who is in florid rebellion against his parents.

What drugs are useful?

Many reports demonstrate the superiority of tricyclic anti-depressants (TCAs) and ECT over placebo for the treatment of major depressive disorders in adults. Endogenous

or melancholic symptoms (e.g., early morning awakening and weight loss) respond well to TCAs in the short- and long-term (Anderson, 1982). Depressive delusions are generally resistant to TCAs but respond to ECT.

There were no well-controlled drug studies of children or adolescents before 1977; three or four have appeared recently, only one of which is a study of adolescents. In a double blind study of pre-pubertal children with MDD, Puig-Antich et al. (1979, 1985a) found no differences between imipramine (IMI) and placebo; the response rate was high, about 60 percent in both groups. This is a much higher placebo response rate than that found in adult studies, which is typically about 30 percent. A small study by Kashani et al. (1984) shows a trend ($p .09$) for the superiority of IMI in a pre-pubertal sample of nine subjects. Puig-Antich et al. did find that high plasma levels of IMI were associated with significantly greater improvement as compared to placebo or low plasma IMI. This finding was also reported by Geller et al. (1985) in a study using nortriptyline.

In an open study using IMI (5 mg/kg) in 34 adolescents, Ryan et al. (in press) found that 44 percent improved; there was no relationship between plasma level of IMI and improvement. In a study comparing amitriptyline and placebo, Kramer and Feiguine (1981) found no significant drug superiority.

Drugs for mania and bipolar disorders. Mania is extremely rare in children but increasingly common in adolescents. About one-fifth of adult bipolar patients report that their symptoms began before age 19, and 10 percent report onset before age 12! (Perris, 1966; Winokur et al. 1969; Carlson et al. 1977; Loranger and Levine, 1978). Many adolescents with bipolar disorder are misdiagnosed as schizophrenic; a patient of mine, who was doing headstands on his hospital bed, was diagnosed as "borderline." Mania and depression appear to be equally common first manifestations of bipolar disorder, but after onset, manic episodes outnumber

depressive episodes by about 3:1 (Carlson and Strober, 1978). About one-fifth of adolescents admitted for a depressive episode eventually develop bipolar disorder. Early onset has a worse prognosis both for frequency of episodes and suicide. Family risk for depressive disorder is greater for bipolar than unipolar (depression only) patients.

Lithium is effective for controlling the symptoms of mania in adolescents and for preventing recurrence, as is true in adults (DeLong, 1978; Youngerman & Canino, 1978). Possible complications of lithium treatment include hypothyroidism, proteinuria (renal damage), adverse effects on learning, concentration and memory (Judd et al. 1977) and inhibition of bone growth.

Carbamazepine, a drug related both to the TCAs and promazine (a neuroleptic) is effective in adults and in lithium-resistant subjects (Nolen, 1983).

In summary, this paper has tried to make the following points about treatment:

1. We are a long way from developing a specific treatment strategy for adolescent suicide attempters, and on one treatment that will be effective for this diverse group.
2. There is great resistance to treatment on the part of adolescents and their families.
3. People want brief treatment and quick results, especially low-income and minority patients (Acosta, Yamamoto & Evans, 1982).
4. Good therapy with adolescents is active, teaches skills, uses outside resources, engages the patient in problem-solving, and involves the family.
5. Cognitive-behavioral approaches meet the needs for brevity and activity.
6. We need innovative approaches to:
 - Educate families about the therapy process;

- Structure the therapies which focus quickly on specific problems,
- Promote home visits to understand problems families face and to reach out to those who will not or cannot come to the office, and
- Develop strategies which will appeal to minority and low-income families.

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PERSPECTIVES OF YOUTH ON PREVENTIVE INTERVENTION STRATEGIES

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SUMMARY

Because a youthful suicide has a powerful effect on thousands of young people, it is important to involve them in developing and carrying out preventive strategies which they might view as helpful. Their depth and maturity of thinking, their insights, honesty, and frankness can provide us with additional solutions to the agonizing tragedy of suicide. Their opinions regarding the statistics on the increasing rate of teen suicide, why some young people choose suicide while others choose life, and what we as professionals might do to help prevent this tragedy can offer us guidance in our examination of this phenomenon.

INTRODUCTION

It is estimated that every 90 minutes a young person completes the act of suicide. Nationally, suicide increased in youthful populations by 136 percent between 1960 and 1980 (5.2 to 12.3/100,000). According to the National Center for Health Statistics, suicide is the second leading cause of death for 15-24 year olds. For every young person who completes suicide, another 100 attempt suicide unsuccessfully, some becoming paralyzed or disabled for life. These numbers are evidence of a major health problem in the United States.

Young people have displayed remarkable insight and depth of understanding when addressing the reasons of why some of their

peers choose suicide while others choose life. They make cogent suggestions for effective and helpful intervention approaches. As helping professionals, we must continue to solicit their viable and important contributions, adding these to the already-existing data, so that we might obtain additional resources in our fight against this national tragedy.

Today's youth have clearly spoken to us of the stress and anxiety that they experience in today's complex world. Many of them have been profoundly touched by the suicide of a friend or loved one. It is, therefore, imperative that they be given full consideration in addressing this problem. It is appropriate that they become aware that they are not powerless, that they can take charge of their lives, and that they can assist their friends and peers by becoming part of the solution to suicide prevention.

We have solicited and received comments and opinions from young people throughout the country about why so many of their peers have chosen to give up on life while others did not choose this drastic action. We have asked them to report to us anonymously their suggestions for effective prevention techniques aimed specifically at young people between the ages of 14-24. Questionnaires (Appendix A) were distributed with the help of youth counselors, youth workers, and suicide prevention coordinators around the

country. Two specific age populations were targeted; high-school age youth, and college students up to the age of 24. Participants were provided with self-addressed, stamped envelopes for direct return of the information. Age and gender were indicated on the return questionnaire and, in many cases, the respondent chose to identify him/herself by name and address (the latter was optional).

Questionnaires were returned by 82 students, including 54 from high school youth and 28 from college youth. Among the total number of respondents, 35 percent were male, 45 percent were female; 20 percent replied anonymously. All of the responses were written with the exception of one high school group from the State of Georgia which submitted a five-minute video discussion. Students from twelve States were invited to participate including a sampling from the Northeast, Southeast, North Central, South Central, Northwest and Southwest. States included were New York, Maryland, Pennsylvania, Georgia, Minnesota, Kansas, Texas, Washington, Montana, Illinois, North Dakota, and California. Responses were received from Washington, California, Minnesota, Kansas, Maryland, and Georgia.

DOCUMENTATION OF OTHER RESOURCE STUDIES

Many authorities have described the attraction that the act of suicide holds for some young people in distress. Few researchers have gone directly to the source: to youth themselves. One account, in particular, called *Loss and Grief Overload* by Judith M. Stillion of Western Carolina University provides such a clear analysis of current youthful problems and attitudes that it is outlined here to serve as confirmation of the validity of this approach.

Ms. Stillion is a teacher who has headed an enrichment project for bright students. Her test cohort consisted of fifty persons each summer for four successive years. Every student had a measured intelligence quotient (IQ) of 130, had scored on achievement tests

at least two grade levels above their current placements, and had been recommended for the course by a school official. The investigation was a part of a project for gifted students in the ninth grade called the Cullowhee Experience, then in its 24th year, the theme of which was to study decisionmaking using the components of feeling, reasoning, valuing, and deciding. They discussed adolescent attitudes toward suicide for two days.

The discussion was important in understanding the world view of adolescents. These students stated that many of their peers are in a constant state of bereavement and grief. They believed that the suicide rate was already proportional to the increase in loss experienced by young people today. Several sources of loss which they listed are: body changes, the increasing divorce rate, geographical relocation and moving away from friends and support groups, stress and tension associated with living up to parental expectations and academic pressures, drug and alcohol experimentation, and the threat of nuclear destruction. John Mack documented similar feelings of anger and grief regarding the nuclear threat in his later studies with young people which he presented through videotape.

Mrs. Stillion concluded her study with many good suggestions, including:

1. Stop considering kids as innocents. They're not.
2. Think of them as veterans of grief and loss who have not yet learned to cope.
3. See that they find adults who can teach them about coping and who will give them permission to express their sorrow and pain, talk out their anger, and resolve their grief.
4. Consider applying grief counseling models to adolescents.
5. Help youth acknowledge and understand their feelings and teach them skills to cope with the overload of loss.

Stillion believes that many adolescents have images of a safe, predictable, consistent world only in their fantasies (if at all). She concurs with Erik Erikson's theory that mentally healthy people must have a basic sense of trust in the world around them. She concludes with optimism that we must communicate to youth that, in spite of the stress, loss, television newscasts and media headlines, there still exists a rewarding world.

In March 1986, a special edition of Life magazine examined America's teenagers, their passions and problems. They put together a nationwide team of 22 teenage reporters and assigned them the task of interviewing their high school peers. They looked at what the 25.5 million youngsters born between 1967 and 1973 were doing. The survey concluded that "the highs are the highest, the lows the lowest; it's the first time and the last time and forever." Adolescence has never been tougher with all-time-high numbers of teen runaways, pregnancies, imprisonments, and suicides.

Although the Life survey was criticized for containing shallow and vapid questions relating to current sayings, hairstyles, eating habits, etc., many of the questions allowed us a composite view of the more serious pressures facing today's adolescents. For instance, it was reported that "marijuana smoking is as regular as breathing." When asked, "What do you want to be when you grow up?" most teens responded "rich." Regretfully, the Life report missed the opportunity to deal with the teens' attitudes about suicide, depression, and stress.

HIGH SCHOOL STUDENT RESPONSES TO THE QUESTIONNAIRE

In February and March of 1986 questionnaires were given to high school students across the country. They were asked to respond to four questions relating to suicide. The first question was as follows:

"In your opinion, why are so many young people between the ages of 15-24 attempting suicide today?"

In reviewing the responses, it is clear that high school youth feel that they are living extraordinary stressful lives, due in part to pressure from family, school, peers, and others in authority. Some thought that they are being pushed too hard to achieve. A student from Pennsylvania said: "society expects too much from us like ... get good grades, go to a good college, get a good job, make a lot of money, be a success." Other students felt pressure to be perfect and never make mistakes. They felt they could not live up to the many expectations which were placed on them by parents, and society as a whole. They spoke of competition and giving up when it became clear that they couldn't "measure up."

Many students attributed suicide attempts to wanting attention from parents or friends or "to see if anybody cares." There was a near consensus that people who attempt suicide are lonely, sad, depressed, have low self-esteem, feel unloved, rejected, unwanted, or feel they are in the way. A student from Georgia said "if I killed myself, my friends wouldn't have to put up with me anymore." They talked of the cruelty of "friends" who "criticize, call you names, or make fun of you."

The high school students spoke to the feelings of hopelessness when too many problems piled up and they didn't feel comfortable sharing that with anyone. Being overwhelmed with pain and sadness and "not being able to trust anyone" was a common statement. One student lamented, "they don't know where to turn so they turn to the easy way out." A 16-year-old girl speaking of those who think of suicide said, "if people don't try to do something to stop them, they (the youngsters) think that they (the adults) really don't care." Some students believed that most people really don't mean to go through with suicide; they leave hints and hope somebody will stop them.

A number of respondents wrote about the meaninglessness of life in terms of feeling

bored. "There is nothing for us to do ... there is nothing to live for ... there is no purpose to life." A student from Washington wrote "I don't feel needed, important, valuable ... so what's the point of living?"

A common issue for teens attempting suicide was discussed as "confusion about sexual identity." Comments were written as follows: "You have guilt about your sexuality, your actions you have fears of being gay." Also, "due to religious upbringing, guilt and fear of being evil or a sinner is terrifying. You're afraid you will be punished by God, so you might as well go ahead and punish yourself."

Drug and alcohol abuse was viewed by students as an important reason for some kids attempting suicide. "There is a lot of peer pressure to do drugs and they are used for recreation ... people can't handle it ... if you're already depressed, using drugs exaggerates and magnifies your feelings." Punk music and rejection by friends was also mentioned frequently as causes for attempted suicide. Other issues discussed included kids who are abused physically or sexually, kids who are angry and have no outlet for their anger, teen pregnancy and the associated guilt and shame, as well as getting revenge on others.

"In your opinion why are so many young people between the ages 15-24 completing suicide today?"

A number of responses from high school students repeated and emphasized the same reasons as for attempting, with special emphasis on stress and pressure to achieve. Additional relevant comments include the following:

"Suicide is an escape from too many problems at once"

"They don't actually see themselves DEAD"

"People don't take the warning signals seriously"

"Everyone would be better off if I was dead"

"It's so easy to get a gun or other weapon"

"Revenge, to make everyone sorry and guilty"

"Breakup of a romance"

Adolescents get depressed because they tell themselves things that aren't true, such as "I'm stupid ... nobody likes me ... I'll never stop hurting ... it's hopeless ... I'm hopeless." Another comment was "sometimes you believe you are crazy and you're better off dead."

The third question was stated as follows:

"What do you think can be done to prevent suicide?"

Answers ranged from things individuals can do to suggestions for society in general. Typical responses were:

"Use students as counselors because they relate better to their peers"

"Have telephone counseling lines"

"We need more speakers in high school and junior high to educate students, teachers and parents."

"Relieve some of the pressures"

"Take all threats seriously"

"Teen clubs would help kids have something to do"

"Tell teens bad times won't last"

"Have dinner together as a family--we never see each other anymore"

It is apparent, from the responses, that these high school students want to be included in problem solving and helping to save lives.

The last question in the questionnaire addresses the issue of why people do not commit suicide. The question was posed as follows:

"Why do you think most young people do not commit suicide?"

Most of the respondents concluded that the reasons most people do not commit suicide is that life is going well for them; they have friends; they know how to ask for what they want; they realize the pain or the problem

won't last forever; and they have goals for the future. Others felt that these teens had people to talk with who understood them and who listened to them without trying to solve their problems. Some thought that many kids are taught that suicide is morally wrong and their religious beliefs kept them from doing it.

A few teens felt that their peers did not commit suicide because they were afraid to die and frightened of the pain involved. They were also frightened that they might be disabled if they did not succeed. A few teens expressed the thought that if no weapons or pills could be found in the house, the depression and urge to kill themselves might pass.

On a positive note, several respondents stated,

"They have a love of life in spite of trouble"

"They are not afraid to tell someone they are in trouble or to ask for help"

"Most teens value their life, even in spite of present circumstances"

COLLEGE STUDENT RESPONSES TO THE QUESTIONNAIRE

College students in the some geographical areas were given the same questionnaire as the high school students. The first question was as follows:

"In your opinion why are so many young people between the ages of 15-25 attempting suicide today?"

Their responses were similar to those of the high school students, citing pressure to achieve beyond their abilities, high pressure from family, peers, school, themselves, and society to perform, drug and alcohol involvement and abuse, family problems, loneliness, and hopelessness. They addressed the issues of low self-esteem, inability to communicate, a combination of problems, inadequate social skills, losing a boyfriend/girlfriend, and not knowing how to cope. There were numerous responses from students who believed that

suicide attempts were for attention-getting and were a cry for help which had gone unheard. Some of the specific comments were as follows:

"Possibly we lack the mental toughness that it takes to face the reality of the real world."

"As an animal scientist, a very important principle was constantly drilled into my head-- genotype (internal) x environment = phenotype (the outward expression of a trait). Environmental factors are numerous: breakdown of the traditional family, lack of responsibility, pressure to achieve beyond their ability, a means of drawing attention."

"I have been involved in three different situations where people wanted to commit suicide. In all three cases, I felt the major problem was that the persons did not like themselves, mainly because of a hard situation that had happened to them (abortion, break-up of a relationship). In all cases it seemed the only way out."

The second question presented to college students was as follows:

"In your opinion why are so many young people between the ages of 15-24 completing suicide today?"

Responses in this category again reflected the thinking of the high school students with a number of additions as follows:

"Younger people are committing suicide because they feel inadequate or they aren't given enough attention. More should be taught about the psychological thoughts of children" wrote a 21-year-old female who indicated that a friend had committed suicide.

"Too many pressures to think and act like adults. When I was 15 my mother decided to remarry. I was expected to understand and hold back all my anger."

"Unemployment is a problem ... now ... in college, part-time ... and later. Maybe I won't be able to get a job to support myself."

"People don't realize the permanence of suicide."

"A lot of kids are selfish and don't think of anybody but themselves."

"If you can't equal your parents' success, why try? Take the easy way out and kill yourself."

"A lot of kids only meant to attempt but end up dead because they didn't know how to save themselves."

"Feeling lonely and trapped--cornered."

"The media show life's problems solved quickly and painlessly. Youth expect to lead such happy lives, quickly resolving their problems. You agonize over decisions and you fear failure."

"Both people I know killed themselves because of drugs."

"I don't know who I am and what my purpose on earth is. Finding my identity is hard--I might as well give up now."

Question 3 of the survey asks:

"What do you think can be done to prevent suicide?"

College students discussed a variety of preventive measures involving the individual, the family, schools, and society. Pertinent responses are as follows:

"We need more education about suicide for students, teachers and parents. We need to know the warning signs of depression."

"Teach kids a more realistic view of life."

"Allow for failure and help kids realize you can learn from your mistakes."

"Let students know that others have the very same problems and they just hide it better."

"Tell them it isn't okay to die."

"I don't like my problems, but I know they are temporary."

"Let kids create plays and improvisations about suicide for other kids to see--kids listen to kids."

"Encourage kids to plan conferences themselves on suicide. Adults can advise, but let kids get involved in actually doing it."

"Teach the consequences of suicide on family and friends."

"Deglamourize suicide. Kids need to know the gory details and that it is not romantic."

A 24-year-old male from Athens, Georgia summed up his suggestions for preventing suicide with these comments:

a. "Parents taking more time to really talk with their children and being courageous enough to openly discuss with them their problems."

b. "Giving children tasks to perform to establish early on their own personal importance in the scheme of things."

c. "Don't spoil children by constantly giving them material things, but instead, give them your time."

d. "Encourage children to do their best, but make them understand that their own personal best may be less than someone else's, and that's okay."

e. "Encourage children to spend more time in creative activity and athletic activity rather than just sitting and watching television for hours on end."

The last question for college students posed in the questionnaire was:

"Why do you think most young people do not commit suicide?"

The essence of comments from college youth is as follows:

"Feelings of responsibility or guilt."

"Too scared to do it."

"Hopeful about the future."

"Have few problems."

"Strong support network."

"They enjoy life."

"I thought of how others would feel ... I couldn't do that to them."

"Mental toughness."

"They have goals and dreams."

"They let their anger out in other ways."

"They know that all problems can be solved and that nothing is so bad that they have to die over it. Things just feel that way sometimes."

"The knowledge that I do have something to offer ... maybe not now, but some day."

"It's okay to fail and to be imperfect, if I do my best and learn from my mistakes."

"Since God made me I must be valuable and okay."

"My religious teachings keep me from suicide."

"I'm afraid of what I might miss if I killed myself."

SUMMARY AND RECOMMENDATIONS

Through a sampling of high school and college students' attitudes about suicide, it is clear that many of their lives are full of complexities, pressures, stress and frustrations. A 22-year-old female from Minnesota spoke for a number of her peers when she wrote:

"Attempting suicide is a cry for help. Too many people take life for granted and too many people take love for granted. Without expression of such feelings, people of ages 14-24 can feel neglected and useless. On a more personal basis, in the early twenties or late teens there are a lot of transitions, walls of financial uncertainty, too many paths to follow and decisions to make with no one to really help. If you're standing on shifting sand, lacking control of life, what better way to control it than to end it? Completed suicides, I feel, are attempted suicides that went too far. People who attempt suicide want to be helped, but are too hasty and sometimes the result is a completed suicide. I think that when suicide is actually completed, it has been an action taken because of a gnawing growth

of self-disappointments over many years. Some people just feel that life just isn't satisfying enough. I just don't understand why these people don't speak louder or more obviously to get the help they need. Sometimes people can't listen because they aren't spoken to openly enough."

The energy and enthusiasm of the youth who responded to the task of suggesting solutions to the problem of suicide is encouraging and gratifying. They took their charge seriously and gave thoughtful ideas with mature insights. Suggestions covered four main areas including preventive measures for individuals, families, schools, and society.

Recommendations for Individuals (Ages 14-24)

It was probably no accident that major emphasis was given to the area of individual responsibility and initiative. Although the three other areas were important to them, it is observed here that young people are aware that it is their own coping skills and abilities which can save lives. They do not hide from the reality that they themselves have the power to be in charge of their own lives, even though at times they may feel powerless. They observe that they may not be able to control events in their lives, but that they can take charge of how they respond to those events.

A general theme among all the students was learning sufficient coping skills to handle crises, especially a suicidal one for themselves, or for someone else. To learn how to cope and how to solve problems was a priority. It was suggested that when someone had suicidal thoughts and images, they could consciously replace them with more positive concepts and thoughts. To go further, young people wanted to change their own attitudes about counseling so that there would be more freedom to seek counseling without fear of being labeled "crazy" or "inadequate."

Students wanted to find ways to decrease the pressure they felt from parents, peers, teachers, others in authority, and their own self-imposed pressure to perform and achieve. It was felt that if they could open lines of communication with others and take responsibility for giving feedback about the kind of pressure they were feeling, they at least would not feel like victims.

A major insight and recommendation from youth was that if they were to risk sharing their humanness and vulnerability with others, then everyone would begin to realize that most people have the same problems and the same feelings. One student told of a 7-year-old boy who found a Playboy magazine and looked at the pictures. When asked what he thought of the naked people in the pictures, he thought a moment and then said, "Well, under clothes, everybody is naked!" A 20-year-old from California said: "Letting down the barriers and taking off our masks is a way to begin to understand that we are not alone, and that others experience the same feelings."

Self-esteem is important to youth and finding ways to feel valued and worthwhile is an important task. They suggest loving yourself unconditionally, just because you were born, and not because of what you do. If you can do that, it doesn't matter who else loves you because you always have yourself and your self-respect.

The students were concerned with finding a purpose in life, some meaning or goal for the future. They suggested that a skill for coping with depression was to find something you wanted to do in the future that if you died you would never have the opportunity to do ... a real "missed opportunity." They suggested picturing what the future would be without you and without your contribution. To anticipate something in the future is to have hope.

The fast-paced, complex life of school, relationships, family, cars, drugs, alcohol, peer pressure, and the accumulation of problems can lead to wanting to end one's

life. A 19-year-old female from New Jersey said, "I didn't want to end my life, I wanted to end what was going on in my life ... and there's a difference." This insight is rare and needs to be translated to others, according to many college students.

The wisdom of youth tells us that we must learn patience in an impatient world; that pain does not last forever, nor does joy. It is important to know that depression doesn't last a lifetime, even though it may feel that way sometimes. Additionally, when discouragement and pressure to achieve are experienced, it is important to remember that it took parents a long time to be successful too.

Individuals need to understand that suicide is a permanent solution to a temporary problem. They need to take responsibility to ask for help when they need it. They need to find outlets for anger so it doesn't get bottled up. They need to know they are not helpless even when they are abused. Many students suggested getting help from their minister or rabbi or from their religious beliefs.

The students discussed the need to deal with relationships in terms of learning how to get into one, how to keep it together, and how, when appropriate, to get out of the relationship without destroying one another.

Students recommended that everyone have a support system of several people whom they trust so they may confide in them during stressful times.

Since most young people realize that they experience many losses in their lives, they recommend learning about the process of grief and how to handle loss. They suggest that the individual give him/herself permission to learn from mistakes without being devastated and especially that they learn to laugh at themselves. One 24-year-old student stated, "to be able to minimize the heaviness and seriousness of life with laughter is to be able to survive."

Finally, young people wanted their peers to take responsibility to plan conferences ad-

addressing the problem of depression, stress, and suicide. They believe that peers listen to peers and that they can have the greatest impact on one another. They advised that youth work alongside adults in an educational preventive effort at educating other youth in terms of warning signs, interventions, and counseling resources. They are 99 percent in favor of teaching peer counselors to help identify and counsel troubled youth, perhaps one day teaching peer counseling skills to the whole student body.

Recommendations for the Family

Youth are asking for the support and encouragement of parents, rather than pressure to succeed. They are asking for quality time with parents, including occasionally eating dinner together instead of everyone in the family being on different schedules. They suggest helping young people to feel better about themselves by talking to them, not at them. They want their feelings to be taken seriously; they want their lives to matter and to feel that parents value them as people, not as puppets to perform and to be controlled. They suggest that parents pay closer attention to the feelings of their children and that they take threats of suicide seriously, especially in those who have attempted previously.

They suggest that parents take parenting courses to learn to communicate, listen, and hear, so they can teach kids to communicate effectively also. They want parents to set limits, but to be fair in so doing. They suggest removing guns and large doses of medication from the home so that, in moments of desperation, it would be difficult to find the means with which to kill oneself.

Young people are concerned about child abuse and wish that parents would get help with the stress and pressure of parenting, and know how to have more control of their anger. They also want parents to help children understand that "someone can be angry at you and still love you." Many kids

expressed concern that a parent's anger means the child is unloved and unloveable.

Additional recommendations involve issues of drinking and parental alcoholism. They suggest that parents seek help with their problems, so they can set a better example at home.

A final suggestion for parents is that parents and children should enjoy one another more without getting into power struggles. Youngsters would like to do things with parents occasionally, but they want their privacy respected and their need to be with their friends understood. They hope that parents know that learning to become independent is difficult, and finding their identity is a major task. They need help with that, and with the fact that sometimes they feel like kids, and the next minute they feel like adults. They are asking for patience.

Recommendations for Schools

Almost unanimously, young people recommend that suicide prevention programs be conducted in the school, but that they be geared to teaching skills such as communication, dealing with stress, building self-esteem and problem solving. They want the word "suicide" minimized so that it is not always in front of them. They hope that schools will provide this kind of training which includes learning the warning signs of depression, intervention skills, and what to do when suicide occurs. They want students, teachers and parents to have the same training.

A popular suggestion was to have peer counselors in the schools so that everyone would know someone his or her own age with whom she/he can confide. Respondents to the questionnaire emphasized teaching coping skills and helping skills. They wanted to learn how to cope themselves, and they wanted helping skills to be able to help someone else in trouble.

Most students stated that they had no idea of where to go for help outside the school. They recommended posting phone numbers of

outside counselors and centers in the halls and bathrooms of the school.

A young man in Georgia suggested that coping skills be listed on a wallet-sized card so that if you felt really suicidal, you could pull that card out of your wallet and read something like:

1. Pain doesn't last forever.
2. Go talk to a friend or someone you can trust.
3. Your feelings are normal.
4. Give yourself a break.
5. Suicide is a permanent solution to a temporary problem.
6. Call 256-9797 to talk with someone who can help.

Students recommended that drama clubs and classes write and perform theatrical presentations dealing with the subject of stress and depression, so that youth will be more receptive to dealing with the issue of suicide. It is their thinking that, in an age of fast-moving video frenzy, one of the best ways to get the attention of young people is through live entertainment. The original student musical entitled, "Dim Lights Need More Current" performed by a cast of students from Griffin High School in Griffin, Georgia, was cited as an example. This kind of presentation, done under qualified adult supervision "benefits the student audiences, the cast, and the community," according to a 17-year-old student.

Recommendations for Society

The primary focus for action in this area is the changing of attitudes of our culture to be more accepting of counseling and of asking for help. Young people want to change attitudes about discussing problems so that "you know you are not alone and you know that everybody has problems."

Students hope that society will value young people more in the future and will help them understand that their life does matter. They do not want society to dictate what success is;

they believe success is an individual matter. They hope that people will become less judgmental and more loving, allowing young people to succeed and fail in their own time, without the pressure of a materialistic culture judging everything in terms of money, things, prestige and power.

Students suggest more community centers, supported privately or publicly, so kids have a place to go and to belong. They hope society will encourage more physical activity in this age of the computer revolution and the age of television. They suggest that doctors receive more training in suicide prevention so that patients who have attempted suicide will not be released too soon from the hospital. They want the clergy to have more training in prevention and learn how to help the attempter and the family of a completed suicide, so that they don't commit suicide themselves. They expect our society to teach people the consequences of suicide to families, friends, and communities throughout the country.

REFLECTIONS

It is the attitude of the young people in this country who believe that they can make a difference that will help those who feel that they cannot. It is their hope that under our masks we are indeed one and, if not the same, at least similar. It is their vision for the future that provides them with a sense of purpose and direction. It is their attitude, their hope, and their vision that will change this world to effect not only the problem of suicide in this country, but that will allow them to become healing enablers in a society which needs them. As they feel needed, as they feel their power, as they feel their value, our families, schools, and communities will feel their presence.

We have been privileged to experience their energy and their enthusiasm in writing this paper. Their voices have been heard and duly recorded, with respect and admiration. A 22-year-old young woman from Minnesota wrote these simple words:

"Most people have the strength to hang on to tomorrow, knowing that sunshine and rainbows follow the rains."

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APPENDIX A

DATE: _____

QUESTIONNAIRE For youth 14 to 24 years old

___ High School
___ College
___ Other: Please explain _____
___ Age _____
___ Large City ___ Medium City ___ Suburb ___ Small Town
___ Other: Please explain _____

Anonymous: _____

OPTIONAL

Name: _____

Address: _____

City, State, Zip: _____

Phone: Office _____ Home _____

Person responding to questionnaire:

___ Friend or relative of someone age 24 or younger who has attempted suicide.

Friend ___ Relative ___

___ Friend or relative of someone age 24 or younger who has completed suicide.

Friend ___ Relative ___

___ I have seriously considered suicide myself.

___ I have attempted suicide myself in the past.

___ I do not have any personal experience with suicide in this age group of anyone age 14-24

PLEASE ANSWER THE FOLLOWING QUESTIONS:

1. In your opinion why are so many young people between the ages 14-24 attempting suicide today?
2. In your opinion why are so many young people between the ages 14-24 completing suicide today?
3. What do you think can be done to prevent suicide?
4. Why do you think most young people do not commit suicide?

My response will be:

___ Written (limit: 2 pages)

___ Audio cassette recording (limit: 5 minutes)

___ Video recording (limit: 5 minutes)

MASS MEDIA AND YOUTH SUICIDE PREVENTION

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INTRODUCTION

The stereotype of the mass media is that of an omnipotent sculptor of attitudes, interests, and behaviors of a highly malleable and responsive public. After all, if the advertising it presents can effectively merchandise products as diverse as detergents and politicians, then surely it must be responsible for stimulating and controlling the behavior of large numbers of people.

Social scientists who have investigated the effect of the mass media on human behavior have been primarily concerned with the impact (essentially negative) of television. Of special interest here are those studies suggesting media influences on aggressive--specifically suicidal--behavior among young people. If such a negative impact can be documented, then preventive efforts can focus on attenuating these effects.

TELEVISION AND YOUTH

Among adolescents, television is the preeminent medium and a trusted source of information. There is clear evidence that television advertising aimed at the youth market is successful in influencing purchasing behavior (1). Television as a whole, has been described as a significant source of socialization (2) and, by the National Institute of Mental Health (NIMH) as "a significant part of the total acculturation process" (3, p.87).

Estimates of viewing habits of adolescents, ranging from 18 to 21 hours (4) to nearly 28

hours per week (5), have led to the observation that typical American youth spend more time watching TV than at any other single activity, including school (6). Among the more negative stimuli to which the typical young viewer is exposed during these hours are frequent depictions of people drinking alcohol and a barrage of violent images and acts.

Content analyses of television programming have found that alcohol use, both casual and heavy, occurs twice as often as the drinking of coffee or tea (7). Greenberg (8) estimates that the average viewer who is too young to drink will see about 3,000 drinking acts per year, although Wallack, et al. (9) argue that heavy or irresponsible drinking is shown only infrequently. Similarly, very little licit or illicit drug use is depicted on television (10). In contrast, televised acts of violence have been described as "so pervasive that, by graduation day, the average high-school student has seen 18,000 murders" (5, p.46) and 800 suicides (11).

Violence on Television and Aggressive Behavior

The most widely publicized conclusion of the NIMH-sponsored review of the relevant scientific literature on television and behavior was that "violence on television does lead to aggressive behavior by children and teenagers who watch the programs" (3, p.6). Although the link was not seen as enduring, it was described as "causal" (3, p.6). The researchers proposed several theories, all of

which are common to suicidology, to account for the observed effects: (a) observational learning (imitation and modeling), (b) disinhibition, (c) attitude change, (d) desensitization and heightened arousal, and (e) justification of preexisting aggressive behavior.

Representatives of the broadcast industry (12,13) and others (14) have questioned the evidence and conclusions presented in the government review and criticized the studies as methodologically inadequate and proving correlation but not causation. However, while noting that research never yields unequivocal interpretations, Rubinstein concluded that "the convergence of evidence from many studies (of television and aggression) is overwhelming" (7, p.821).

MEDIA AND IMITATIVE SUICIDE

If violence on television promotes imitative aggressive behavior, can it be demonstrated that media depictions of suicide promote suicidal behavior among its viewers? Bolen and Phillips found significant increases in suicides in the United States just after televised news stories about suicides with effects lasting about 10 days (15). Phillips also reported evidence suggesting that both suicides and fatal and nonfatal auto accidents increased after fictional (soap opera) suicides appeared on television (16). However, Kessler and Stipp criticized his methodology and further analyses invalidated this finding (17).

The effect of publicized suicides on imitative behavior has been most consistently documented in studies of the print media. In an early paper, Phillips found statistically significant increases in suicides just after front-page suicide stories (18). Phillips termed this phenomenon the "Werther effect," referring to an alleged rash of imitative youth suicides that followed the publication of Goethe's *The Sorrows of Young Werther* in 1774 (19). Phillips showed that the Werther effect increased proportionally to the amount of

publicity devoted to the suicide and that it occurred primarily in the geographic area where the suicide story was published. Wasserman extended Phillips' data set and reexamined his findings (20). His analysis revealed that only stories of celebrity suicides appeared to elicit imitative behavior. Recently, Stack reported an extension of this work, demonstrating that entertainers had a more significant effect on imitative suicides than other celebrities (e.g., politicians, criminals) and that this effect on suicide rates was as profound as that found for unemployment (21). Moreover, Stack demonstrated that the effect was specific to those in a similar social role--stories of young male suicides most affected suicides of young males.

Other work by Phillips has linked publicized suicides to transient increases in other forms of violent death that might serve to disguise suicidal intent, namely, motor vehicle accidents and noncommercial airplane crashes (22-24).

Davidson and Gould have summarized this research and concluded that nonfictional, media-reported suicides do serve as models for imitative behavior (25). The evidence linking fictional models with imitative behavior is, however, more controversial and less conclusive.

Anecdotal reports of imitative suicide following presentations of fictional suicides on television and in movies have appeared (22,27). Radecki (11) has documented 37 deaths by Russian roulette world-wide between 1978 and April, 1985 attributed to imitations initiated by viewing the movie "The Deerhunter." Even rock music has been blamed for stimulating suicide (28). Until recently, however, no one had presented empirical evidence for a relationship between fictional suicides and imitative suicide.

Gould and Davidson have reported the first such data (29). They examined completed youth suicides for metropolitan New York City, southwestern Connecticut, and all of New Jersey as well as admissions at six New

York area hospitals for attempts two weeks before and two weeks after each of four televised movies presenting fictional suicides. They found significant increases in both attempts and completions in the followup period.

Unanswered by this data is the question of whether the cases following the televised fictional suicides were new or merely accelerated, i.e., they would have occurred anyway at some other time, precipitated by some other event. Also, no data is presented that directly link the event to the film, i.e., did the adolescent even see the film? Also, there is some suggestion that the attempts following the film were of lower lethality (resulting in a lower proportion of hospital admissions after, rather than before each film). Therefore, it can be construed that an ostensibly negative effect may actually have been positive in that more troubled teens, because of the film, were stimulated to bring themselves to the attention of the helping system. As further evidence of this interpretation, hot-lines and crisis centers reported significantly increased numbers of telephone contacts after these presentations (30).

With regard to increased completions, the Gould and Davidson data are difficult to interpret. One of the films studied had no subsequent youth suicides reported. Another, in which the teenager portrayed actually talked his suicidal father out of killing himself, had four youth suicides after the film, versus none prior to its showing. These data argue for more intensive case studies, moving from macro to micro analyses.

Television and Suicide:

"Surviving": A Case Study - Part I

On February 10, 1985, the ABC network aired a three-hour drama about youth suicide. "Surviving" was a fictional portrait of two depressed teenagers who found solace in one another's arms and escape from pain through a dyadic suicide by carbon monoxide (CO). The *New York Times*' review of this production described it as "serious," "enormously watchable," and "intelligent" (31).

ABC conducted its own poll of national probability sample and found that 16 percent of those contacted had watched the film and that 93 percent of the viewers rated the film good to excellent (32). The majority viewed the film with another person (e.g., a parent or child), talked about it after its presentation, and felt that it had increased their awareness and understanding of the problem of teen suicide.

Other studies suggest that the film had untoward effects. Ostroff et al. noted significant increases in adolescent admissions to a psychiatric emergency service for suicidal overdose in the two-week period after its presentation (33). Gould and Davidson's data for this film showed four completed suicides after its showing compared with only one before (29).

To evaluate further the effects of this film on completed youth suicide, we collected data from nine urban medical examiners' offices across the United States: Atlanta, Cleveland, Dallas, Ft. Lauderdale, Philadelphia, San Diego, Seattle, St. Louis, and Washington, D.C., serving a combined population of more than 12 million. The total number of suicides certified by these offices in 1985 amounted to 1,843, an estimated 7 percent of all suicides in the United States that year. We then compared two-week and four-week data sets, before and after the February 10, 1985 air date of "Surviving." As noted in Table 1, there were no differences for either study period in: (a) total suicides, (b) youth suicides, and (c) carbon monoxide suicides. However, there was a noticeable shift in the proportion of youth suicides by carbon monoxide. This shift might be accounted for by a process of identification with and imitation of characters in the film.

All five of the youth suicides by carbon monoxide after the movie were male (the movie depicted both a male and a female CO suicide). Further investigation of each of these suicides revealed that only two of them were known to have watched "Surviving." Each had seemingly positive reactions to the film: one wrote in his diary, "I loved that

film;" the other was reported to have responded to the film more ambiguously as "helpful."

Each of these youths had long histories of pathology. One had made a prior suicide attempt by overdose six months earlier and was in treatment at the time of his death. The other left a diary spanning the last two years of his life that documented a suicidal gesture two years earlier, frequent suicidal ideations, and at least one other failed attempt by carbon monoxide. The diary also recorded severe family conflict, rage toward his father, and problems of sexual identity. If anything, he had been more significantly affected by another television movie, "Consenting Adults," which aired prior to "Surviving" and dealt with homosexuality and a lack of family support. About this film he wrote: "...the movie reminded myself of me 100 percent...I feel exactly about males as he did. I feel like I'm lying to myself."

Such psychological autopsies of completed suicides allow for more intensive investigation of idiosyncratic influences not ascertainable through aggregate data analyses. From these case studies we can derive no evidence that "Surviving" stimulated new suicides. An imitative effect is suggested only in the shift of method chosen by youth who otherwise were known to be suicidal before the movie aired.

The act of viewing a film takes place in the mind. The viewer cannot be reduced to a simple stimulus-response machine. How we participate as observers, with whom we identify, what we perceive selectively, and whether we will be influenced at all depends on a variety of personal and mediating factors: our history, our moods, our predisposition, our needs. Heavy viewers of television have been found to see the world as a mean and scary place (17); those predisposed to violence might be those who prefer to watch

Nine-City Sample of Suicide Completions Before/After Broadcast of "Surviving"

	<u>Before</u>	<u>After</u>
Total Suicides		
4-Week <u>N</u>	165	155
2-Week <u>N</u>	87	74
Youth Suicides (under age 25)		
4-Week <u>N</u>	34	29
2-Week <u>N</u>	23	18
Proportion Youth/Total Suicides		
4-Week	0.21	0.19
2-Week	.26	0.24
Carbon Monoxide Suicides		
4-Week <u>N</u>	16	18
2-Week <u>N</u>	8	8
Youth Carbon Monoxide Suicides		
4-Week <u>N</u>	2	5
2-Week <u>N</u>	2	3
Proportion Youth CO/Youth Suicides		
4-Week	0.06	0.17
2-Week	0.09	0.17

Table 1.

and who are most readily aroused by viewing violence (34). Those influenced by fictional suicides appear to be so predisposed, rather than molded by the suicidal stimulus.

MASS MEDIA AND PREVENTION

One approach to the prevention of youth suicide is to limit or inhibit stimulating influences on suicidal behavior. To the extent that the media may present models for imitation or where the media depicts behaviors that predispose depressogenic conditions (e.g., makes alcohol consumption seem attractive), then reducing these influences would be appropriate.

However, the media may also take a more active and positive role in prevention. Educating the populace could increase early detection of potentially suicidal youth. Using the media to inform viewers about health problems and to provide models that promote health-conscious behavior is one possible way to reach some of these potentially suicidal adolescents and thus reduce the population at risk.

Public Service Announcements

Public service announcements (PSAs) are the most typical mass-media vehicle for campaigns to educate the public and promote health. PSAs attempt to increase viewers' awareness of a specific problem and possible solutions. In addition, some aim at changing beliefs, attitudes, motivations, and behaviors; however, significant change generally fails to occur (6).

The reasons for ineffective PSAs are many and varied. Most PSAs consist of a small number of spots of varying quality, aired neither at prime-time nor when the targeted viewing audience is available to watch. In addition, competition between PSA sponsors limits the frequency of showing, therefore limiting the saturation, dissemination, and reach of any one message. As a result, the average time period during which a PSA is kept active is only three months (35).

To be effective, public information messages must be factual and specific and must reach the intended target audience. The great majority of those produced do not meet these criteria (35). Only 6 percent are aired during prime viewing time and even then on local stations when most of the viewing audience watches national programming (37). Han-neman and McEwen found that PSAs which were oriented toward youth were often aired **during school hours** (38).

PSAs are usually placed gratis by the broadcaster (in contrast to paid advertisements); therefore, they are placed as space and time permits. Some of the responsibility for this lack of reach rests with those who produce the PSAs. For example, Capalaces and Starr found that station managers were poorly informed about a series of anti-drug PSAs, consequently, they allotted haphazard energy and effort to their scheduling (39). Goodman also noted that station public service directors lack specific guidelines for attending to these campaigns (35).

Evaluations of PSA campaigns have found anti-drug PSAs to be cost-effective (40) and anti-crime campaigns to be effective in changing behaviors (41). Other campaigns considered effective, however, have not been found to affect the young (42) and some may even have "boomerang" effects in that the risky behaviors sensationalized by the media may be glamorized and lead to increased experimentation among youth (43).

Flay (44) and Goldstein (45) have suggested several guidelines for effective PSA campaigns. PSAs should be novel and use a knowledgeable, credible spokesperson with whom the audience can identify. The content of the PSA should be based on scientific fact and delivered in a manner that minimizes the arousal of fear. Also, clear alternative behaviors should be presented. The PSA needs widespread dissemination, high saturation (frequent exposure), and extended duration of exposure. To be most effective, PSAs need to be supplemented by other media (e.g., print) and community networking.

PSAs have been developed that focus on suicide prevention. Highly professional PSAs have been produced by and are available from the Los Angeles Suicide Prevention Center and the American Association of Suicidology. However, to date, no evaluation of their effectiveness has been conducted.

Television and Suicide:

"Surviving": A Case Study - Part II

One possible explanation for the lack of imitative suicides following the showing of "Surviving" in February 1985 was the extensive public information and awareness campaign conducted by ABC's Community Relations Unit. The campaign included both broadcast and print components. Five one-minute news segments featuring interviews with specialists in adolescent suicide and stress management were distributed. PSAs, with room for a local crisis center hotline number, were provided to all local stations. One hundred thirty thousand handbooks on teenage suicide prevention were distributed free to secondary schools, mental health centers, and crisis centers nationwide. Some local ABC affiliate stations went further, sponsoring mini-documentaries and even town meetings.

The central element of this campaign was a half-hour educational program, "ABC Notebook: Teen Suicide" hosted by one of the stars of "Surviving". Eighty percent of affiliated stations carried "Notebook," 80 percent of these were aired on the weekend of "Surviving." However, fewer than one in five stations (18.2%) showed "Notebook" during prime time viewing hours. Perhaps for this reason, only 6 percent of the viewers who watched the movie, saw "Notebook" as well (36).

PRINCIPLES OF EFFECTIVE MASS MEDIA PREVENTION CAMPAIGNS

Historically, mass media public information campaigns have rested on the assumption

that problems should be addressed with more and better information. Thus, information has been confused with education, and education with prevention (46). Behavior change does not result from mere exposure to well-designed informational messages. This "hypodermic needle theory" is too simplistic and has not been proven to be effective (47).

Effective suicide prevention must rest on the assumption that the target group--those at risk (potentially suicidal adolescents) or those around the person at risk (parents, teachers, peers)--can be reached by, will attend to, participate in, and respond to preventive messages. The messages must be informational (e.g., signs and symptoms, cues) and directional (e.g., where to get help); but, also, they must provide skills and incentives to act.

How do you get high risk adolescents, those who are acting out, depressed, abusing substances, etc., to pay attention to suicide prevention programming? What have we learned from studying mass media prevention efforts that increases the likelihood of having positive impact?

Sacco and Silverman have outlined five principles, inferred from empirical data, for successful mass media prevention campaigns: (a) information must be readily available to the target audience, (b) communication strategies must be designed to be salient to multiple targets, (c) contradictory information must be minimized, (d) objectives must be realistic and specific, and (e) desired behaviors to be pursued by the audience must be made explicit (48).

Flay and Sobel (6) suggest that mass media efforts must use multiple sources of information, extend campaigns over time, and convince gatekeepers (e.g., television station managers) of the worth of the campaign, to ensure adequate dissemination. They argue that more persons will pay attention if the message is seen as meeting a salient need (e.g., offers a skill) and is delivered by someone with whom adolescents identify or on

whom they model themselves (e.g., music groups, sports figures). Furthermore, and perhaps most important, they contend that media programs must be both complimented and supplemented by school-based curricula, home/family involvement, or community organization designed to increase interpersonal communication, discussion and networking.

The most successfully designed mass media campaigns that promote changes in health behavior are those that incorporate interpersonal communication (49). For example, the USC/KABC-TV Smoking Prevention and Cessation Program consisted of five 5-minute news segments, a coordinated 5-day classroom curriculum for junior high students emphasizing social skills regarding resisting social influence, homework assignments requiring adult involvement, a followup series of five 5-minute news segments, and a written guide provided to all parents. Students involved in the program made significant gains in smoking cessation and non-initiation (6).

To teach specific behavioral skills, the Stanford Heart Disease Three Community Study (50) included intensive mass media campaigns (PSAs, radio and television features, newspaper articles, bus cards, billboards) and face-to-face clinics for high risk subjects. The program extended over two years and significantly reduced risk for cardiovascular disease.

The Crime Prevention Coalition, with the cooperation of the Advertising Council, produced the national "Take a Bite Out of Crime" campaign (41). This program relied heavily on well-produced PSAs designed to induce behavioral change, a coordinated print campaign, and local community projects. Significant changes were accomplished in six of seven target goals.

A similar and impressively coordinated effort, although as yet unevaluated, has been mounted by WQED-TV in Pittsburgh. "The Chemical People" project (51) involved two PBS television shows, educational print

resources, and guides. Most importantly, it involved citizen outreach activities which resulted in more than 10,000 town meetings which evolved into continuing task forces to deal with youth drug problems on a community level.

RECOMMENDATIONS AND CONCLUSIONS

The mass media are not responsible for causing youth suicide nor are they responsible for preventing youth suicide. Yet, as a significant part of the sociocultural milieu in which our children are raised, they have the potential to profoundly alter the message environment in which children behave.

To the extent that publicized news stories about celebrity suicides contribute to the suicide of a youngster predisposed to suicide, concern within the media needs to be raised. Newsworthiness is an appropriate consideration in the amount and type of coverage given a news event. Celebrity suicides are newsworthy, but the possibility of imitative suicides as a consequence to their reports suggests some balance needs to be considered. Neither censorship nor prior restraint* are appropriate, but limits may be. Elective guidelines might be established. Consultative discussion between media representatives and suicidologists might, for example, achieve some desired balance between the public's need to know, the media's right to report, and alternative consequences.

* There has been but one legal test of prior restraint, that of *Weluvs. CPB*, No. H-80-1332 (S.D. Tex, Filed 6/16/80). On June 16, 1980 a temporary restraining order precluding defendants from distributing and broadcasting "Choosing Suicide" was denied for lack of federal jurisdiction. The show, scheduled on PBS that date, was a documentary distilled from 19 hours' recording of the ideas, plans, and discussion by and with Jo Roman regarding her suicide. Roman, age 62, had Stage II breast cancer (80% survival rate), had planned her suicide over 10 years, and died by suicide in June, 1979 by a lethal dose of Seconal. Plaintiff argued that broadcast would cause immediate and irreparable harm. Defendants countered that the feared impact of the program was "speculative," that there was no definitive evidence that the broadcast would inevitably, directly, and immediately cause harm, and that prior restraint was unconstitutional.

To the extent that the media may be used to educate, concentrating on prosocial education in early childhood appears to be the best possible use of the media for prevention. To the extent that children can be influenced by positive models, taught instrumental skills, etc., and to the extent that positive models are presented by the media, there is likely to be some lessening of the multitude of factors that lead to suicidal behavior. Especially important might be the depiction of nonsuicidal solutions to situations of conflict and despair (52).

The use of PSAs as vehicles of health promotion, information dissemination, and behavior change needs to be examined closely. If the guidelines discussed above regarding dissemination, targeting, timing, frequency and duration cannot be implemented effectively, then, short of government regulation, industry cooperation accomplished through consultative discussion is needed. The empirical research strongly supports supplemental efforts--the use of schools, home, and community networking--to make a public information campaign effective. With such activities, normative behaviors are established around the goals of the campaign and peer influences minimize opportunity for non-participation.

What is known about the impact of PSAs has come from their use in health promotion campaigns other than that of suicide prevention, primarily drug abuse prevention. Whether guidelines derived from these experiences are directly applicable to suicide prevention either awaits further research or requires a leap of faith. While we await further research, that leap of faith appears worth making.

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INTERVENTION STRATEGIES: ENVIRONMENTAL RISK REDUCTION FOR YOUTH SUICIDE

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SUMMARY

The cost of suicide in terms of mortality, the effects on lives saved and the costs of health care are great. Numerous factors associated with suicide are far-reaching and deeply rooted in the problems of society, family, and in the biochemical problems of the individual. Each suggests a specific set of interventions. The majority of risk for teenagers, however, appears to center on two areas: the cultural pervasiveness of violence, and the negative social factors of neglect and stress. The interventions that would appear to have the greatest impact on youth suicide are decreasing the cultural pervasiveness of violence, limiting the availability of lethal agents such as drugs and alcohol, firearms and medications, and instituting education programs for youth, parents, and the public.

What are the theories about the causes or predisposing factors of youth suicide and what interventions could influence the methods of suicide?

This paper examines the issues of environmental risk reduction as an intervention strategy for reducing suicide. To do this, two issues must be addressed. What predisposes an adolescent to commit suicide? And, what methods do young people use to commit suicide?

Regarding the predisposing factors, many

theories abound. The factors most frequently cited as related to the rising rate of adolescent suicide are:

1. A high level of social and academic competition and pressure.
2. Violence that children and adolescents are exposed to--real violence such as rape, murder, and child abuse and created violence on television, in videos, movies, and music.
3. The lack of socially acceptable ways for youngsters to express anger.
4. The lack of connection to religion.
5. The increase in abuse of drugs and alcohol.
6. The special sensitivity of many kids to social isolation.
7. The increase in the absolute number of adolescents in society.
8. The pressures on kids to grow up too quickly.
9. The increasing mobility of the American family.
10. The disappearance of the extended family, the dissolution of the nuclear family, and the changing role of the family.

Which of these causes are amenable to intervention?

1. Competition and Pressure:

Suicide rates are high in societies where achievement is a major priority and lower where there is less pressure to achieve. In Japan (DeVos, 1968) and in Sweden (Hendin, 1964), where achievement is important, suicide rates are high. The highest rates among adolescents today are in countries such as Switzerland, Austria, Canada, and the United States (World Health Organization, 1985), all countries with a highly motivated young population. In the United States there is extreme pressure on our young to achieve. Ever increasing numbers of young people obtain college degrees and doctorates (in 1940, 3/100,000 and in 1971, 15/100,000) (U.S. Bureau of Census, 1974). Ours is an achievement-oriented society and children learn it as early as kindergarten.

Pressures to achieve academically are felt particularly strongly during the adolescent years. Failure to achieve may be particularly painful to adolescents whose families place heavy emphasis on success. Some adolescents may choose to take their own lives rather than to disappoint their parents or see themselves as a failure.

In order to combat a high level of competition both socially and academically, we would need to encourage cooperation. This would mean a different ethos of society. I don't see this happening.

Could we impress upon parents the necessity of reducing the pressure on their youngsters? Can we ask parents not to give their children a large number of lessons, not to send them to prestigious schools, not to instill values of competition and achievement? I doubt it.

2. Violence:

Our society has become almost immune to violence. The need for social agencies and law enforcement agencies to intervene to reduce the number of murders and violent crimes is imperative but beyond the scope of this paper.

Teens are greatly influenced by the media:

television, rock videos, the movies, and music. Producers will make and air what the public will pay to hear and see. I suspect the most forceful intervention will come from the buying public. If adolescents and adults refuse to buy products which depict violent behaviors, the industries will stop producing them. I am not hopeful that this will happen rapidly.

In July of 1978 it was estimated that the average American child, by his eighteenth birthday, had watched the equivalent of 710 solid days (almost two full years or 17,040 hours) of television. He will have seen 15,000 television murders (McWhirter, 1986). One study reports that the level of television violence in shows specifically designed for children have become increasingly violent. In 1967, one hour of cartoons contained three times the number of violent episodes as one hour of adult programming. By 1969, only two years later, violence in children's television was six times more prevalent (Murray, 1973).

It has been suggested that watching violence on television sensitizes the viewer to perceive more violence in the world around him and increases the likelihood that the viewer will use violence as a means of resolving conflicts (Liebert, Neale and Davidson, 1973). The kids who watched the cartoons in the 1960s are today's adolescents and young adults.

Perhaps, we might want to follow the example of Iceland. Iceland has television-free Thursdays to reduce the disruption in family life. Otherwise transmission is limited to the hours between 8 and 11 p.m. We should check the suicide statistics for Iceland.

Violence will be discussed further in the section on the use of guns as a method of suicide.

3. Aggression:

The inability of adolescents to express anger in a socially acceptable way may be contributing to the suicide rate. In societies or in situations where there is an acceptable outlet for

aggression, the suicide rate appears to be lower. For example, there is a lower rate of suicide in the army during war time. Individuals may have the opportunity to discharge aggression and hostility toward an actual enemy. It is possible, however, that suicides are hidden under the guise of battle casualties (Yessler, 1968).

Young people learn about the limits of expressing aggression in their societies. When they are angry, some kids may be able to risk open expression of aggression against adults. But some have to internalize their feelings. For these adolescents, inward aggression and self-destruction may seem like a reasonable solution for problems which make them angry such as family disruption or school or social failures.

It would be healthier if schools and parents would allow for the open expression of anger, frustration, and resentment within socially acceptable limits. Society must move away from encouraging physical punishment for children or any method of intimidating children which blocks their ability to express their own angers. Non-harmful, non-physical, non-combative techniques must be taught to parents and children and adolescents.

4. Religion:

It is believed that in cultures where the majority of people subscribe to a formal religion, successful suicides are low and where there is no formal religion successful suicides are higher (McAnarney, 1979).

Religious attendance in the United States is undergoing change, especially for adolescents. While stated church membership has increased at the same rate as the total population, many churches are reporting difficulties in maintaining contact with adolescents through teen groups, once popular in the 1950s and 1960s, but no longer popular now.

It would be interesting to study whether the adolescent suicide rate is higher among

teenagers whose families practiced a religion as compared to those adolescents who were never reared in any religion, or among those who continue to practice their families' religion as compared to those who do not. As noted by many sociologists, groups in transition experience more suicides than stable groups. The presence or absence of a religious belief may not be the important variable, but rather the transition from a religious system to none, which might make an adolescent vulnerable to feelings of guilt and non-belonging.

5. Drug and Alcohol Abuse:

The association of drug and alcohol abuse with suicide is well documented and needs no further elaboration here. Drugs and alcohol are used by teens to belong to a peer group, to numb the psychological pain, and to escape depression. But drugs and alcohol are depressants. The substances which are taken to alleviate depression cause kids to become more deeply depressed. Whatever can be done by law or social agencies to stop the use of potentially lethal drugs and whatever can be done by schools, parents, and media to educate kids on the dangers of drug and alcohol abuse will certainly aid in the efforts to curb teen deaths by suicide.

6. Isolation:

Social isolation is a factor which appears to contribute to adolescent suicide. We know, for example, that suicide rates are higher in the western part of the country than in the eastern section. This is thought to occur because there are fewer social services in the West and people are more isolated from one another. We know that kids who commit suicide are often loners, withdrawn, and without friends.

What can be done to help these lonely kids? We cannot reshape personalities, but we can reshape the places where the kids spend most of their time--their schools. Our elementary, junior high and high schools could have smaller classes. The schools could encourage

social skills, not just academic skills.

We know that college students commit suicide in the fall more often than any other time of year. One theory accounting for this is that the transition from home to college is a difficult one. Kids move from the protection of their families and home town to the anonymity of an unknown town and a big institution. Colleges need to recognize this and make the transition easier. Freshmen need to live in small units and have more intimate classes where they will get to know their professors and make friends. Large classes could be reserved for upperclassmen where support may be less a matter of life and death. This is probably an issue of economics for colleges and universities, but if mental health counts more than dollars, classes could become smaller. The same is true for our elementary and high schools. We need smaller classes and more teachers.

7. Population:

The absolute numbers of teenagers in society appears to be positively correlated with the number of suicides among this age group. The theory is that the more teens there are present in society, the greater the competition for academic honors and employment opportunities and the fewer chances for success. This appears to be correcting itself with a decreased teen age population predicted by 1990 (Holinger and Offer, 1986).

8. Accelerated Pace:

The pressures on kids to grow up too fast and too soon, often tasting the privileges usually reserved for adults such as sex, money, and drugs while they are psychologically still children, can have disastrous consequences (Elkind, 1981). The average age of today's top fashion models is 12 to 15 (New York Magazine, 1980). The average age of one's first sexual experience is now 15. This places enormous pressures on kids who are cognitively and emotionally still children.

Many of our teens have too much material wealth, have nothing to strive for, and are

bored all the time. They have experienced very little external adversity and yet feel a great deal of internal disconnectedness.

Again, I don't see much hope in reversing this trend. The only solution I can see is to move much of our population to the back woods of Wisconsin. The pressures have to be less and the pleasures simple. This would also help redistribute the population of the U.S. into less populated areas and reduce the crowding in the East. Thus, violent behaviors, such as murders, which are thought to be the result of frustrations and crowding, would be reduced. With the increased population in the West, isolation and the resultant violent behaviors such as suicide would be reduced. Thus, by redistributing the population of the United States we could reduce both the suicide and the homicide statistics.

9. Mobility:

On the other hand, redistributing the population would increase the already high rate of mobility in the United States. Mobility may be a factor in the youthful suicide rate. Again, groups in transition, such as mobile families, have higher suicide rates than those in stable circumstances. Some of the transitional members of contemporary society are people living in disorganized portions of big cities, for example, immigrants, and individuals transferred every few years by corporations. Studies in Seattle, Minneapolis, and Chicago show extreme concentrations of suicide in the disorganized central sections of the cities (Shneidman and Farberow, 1957). These transitional sections of the cities are characterized by extreme mobility and personal and social disorganization. People become isolated and lonely as they move into unfamiliar surroundings.

Studies on immigrants produce similar results. The suicide rates for immigrants is substantially higher than the rates in their countries of origin (Bourne, 1973, Burvill, et al., 1973).

We have seen a high incidence of suicide among adolescents in "new" towns such as

Plano, Texas in the last few years. It is possible that some of the suicides in the more affluent towns such as Scarsdale, New York, may have to do with the families of transferred executives. We would need to look at the background of the families of teens who have committed suicide and consider how transient their histories have been.

Some adolescents welcome changes, but others may be frightened by them. For those youngsters who may be uncertain of themselves, reassurances previously provided by a stable home life, a stable religion, and a predictable place to live, may be absent. Rather than face the insecurity of continual changes, some youth may choose to die.

10. Family:

The traditional family is disappearing. Half of today's children will be adolescents in a divorced home. Increasingly, children will be living in single parent families. Even where two parents are present, both parents may be working. Women are entering the work force and men are not electing to stay home and take their place. Families are depending on two incomes. But the question does not appear to be one of divorce or of working parents, but rather one of involvement. American parents spend less time with their children than parents of almost any other nation in the world. The attitude of many American parents is that their children are an inconvenience, an impediment to freedom or to success.

In societies where family ties are close, the suicide rates are low. Conversely, where families are not close, the suicide rates are high. One study contrasted the suicide rate (all ages) of the city of Edinburgh, Scotland with that of Seattle, Washington. The suicide rate was 15/100,000 in Edinburgh and 20.8 in Seattle (Ripley, 1973). The cities were said to be comparable in population composition, colleges and universities, weather, and location on the water. Edinburgh was characterized as a more traditional, less violent society with strong roots in

family and school and with a far less mobile society than Seattle.

Work by Dizmang (1974) on the Shoshone Indians again suggests that the lack of family stability and a chaotic childhood account for their high rate of suicide. This message is repeated again and again throughout the literature (Finch and Poznanski, 1971; Hendin, 1964; Toolan, 1968).

The model for the traditional nuclear family is changing in twentieth century America. The once stereotypical family--the male head of the household, the female keeper of the hearth, and a home with children emotionally and geographically close--is changing for many. The number of divorces is increasing (a 4.1% increase between 1960 and 1965 and an additional 8.8% increment between 1970 and 1973). Exactly what the American family will be in the future is hard to assess, but there is little doubt that it will not be the traditional family of the 1900s.

The changes in the American family have not been shown to be causally related to self-destructive behaviors. The presence of supportive family, however, whether living under one roof or two, can help teens pass through the developmental phases of adolescence. If adolescents have lost one or both parents and do not have adequate parent substitutes, they may be severely compromised in their ability to complete this developmental phase without being vulnerable to impulsive, self-destructive behaviors. In addition, in families where adults give little time or concern for adolescents, or where parents are not in contact with their children, early symptoms of suicidal behavior may go unheeded. The adolescent who is neglected or unheard may attempt suicide in order to get attention. Occasionally this attempt may turn out to be lethal.

Thus, the changing American family may compromise the adolescents' capacity to cope with the stresses of adolescence and may compromise the parents' ability to recognize their children's problems before suicide becomes the only alternative to the

youngster.

While we cannot influence the divorce rate by public interventions, and while we do not wish to encourage parents who are miserable to remain together, there are directions we could take which might be helpful to our children and adolescents. One method is screening programs for early detection of emotional and behavioral problems. Perhaps where parents are not capable of detecting such problems, the schools and the community mental health agencies can help. Early detection can mean early intervention.

What are the most common methods of youth suicide? What interventions could influence the methods of suicide?

How do kids commit suicide? It is well known that guns and medications are the most common methods of suicide. The frequency of use of these agents in teen suicides necessitates concentrating on them. Other methods of suicide such as hanging, jumping off bridges, jumping in front of cars and trains are less frequent and less prone to regulation and, therefore, have less prevention potential.

Firearms are the leading cause of suicide, and is the one method which has increased significantly with the increase in suicide rates (Boyd, 1983). Guns now account for more suicides than all other methods combined: 65 percent of teen suicides are committed with firearms. An environmental risk reduction strategy would call for decreasing the availability of handguns. Some 25 million households have handguns and one-half of these keep their handguns loaded (Cantor, 1985). Adolescents are impulsive. Having a loaded handgun around the house is an invitation to disaster.

Mandatory safety training and public education on the dangers of handguns in the home would not solve the underlying problems of self-esteem and depression which contribute to suicide, yet it would result in fewer deaths. The analogy with mandatory seatbelts is ap-

propriate. Seatbelts do not make people better drivers, but they do improve the chances of surviving a collision.

Epidemiologic studies estimate that of those teen suicides committed with a gun, 70 percent of those victims could not have obtained handguns or firearms if there had been gun regulations, and some 50 percent of those individuals might have used another method. Thus, it is estimated that the reduction in firearm accessibility would save the lives of approximately 20 percent of our youth (Hollinger, 1984).

Limited gun control, such as mandatory waiting period and background check for handgun purchasers is one step. Others might include licensing of handgun owners and halting the manufacture and sale of snub-nosed hand guns. The sale of handguns to individuals with a history of psychiatric hospitalizations or previous suicide attempts might be prohibited and regulations might differentiate between handguns and other firearms.

While the issue of gun control is a controversial political concern, the bulk of the evidence seems to suggest that it would be an effective method of reducing the suicide rate (Westermeyer, 1984; Browning, 1974; Markush and Bartolucci, 1984; Boyd, 1983; Hudgens, 1983; Lester and Murrell, 1980, 1982; Lester, 1983).

When highly lethal methods of suicide are less available, evidence shows that people do not necessarily switch to other means. When the English converted their home heating gas from deadly carbon monoxide-containing coke gas to low-lethality natural gas, the suicide rate dropped 33 percent. The low rate has remained constant despite the bleak economic picture in England which might have been expected to lead to an increase in the suicide rate (Kreitman, 1982; Seiden, 1984).

While the mere correlation between guns and violent deaths does not indicate causality, it is clear that strict gun control laws in many countries are correlated with a lower

incidence of homicide and suicide. For example, all guns must be registered in the Netherlands; in Italy and Norway, guns are seldom used by the public. In some countries private ownership of a pistol is forbidden to everybody except the police, military personnel, and a few competitive marksmen. "In Great Britain, most persons, including officials of the British Rifle Association, find it difficult to comprehend the notion of the right to bear arms, as espoused by many persons in this country" (Fredericks, 1984).

While it is true that other means of committing suicide are used in countries where firearms are not available, little doubt remains that the availability of firearms makes violent acts such as suicide, easier to commit--and the lethality of the act has no peer. If an individual can be deterred from committing suicide, even temporarily, his chances for survival increase, which with gun in hand, would be lost.

Poisoning, usually with prescription medicine, is the second most common method of suicide, accounting for 11.3 percent of all suicides. The availability of lethal drugs could be limited by restricting the number of tablets permitted for each prescription. This kind of legislative restriction on sedative and hypnotic drugs is thought to be largely responsible for the decline in the suicide rates in Australia in the 1960s and 1970s (Oliver and Hetzel, 1973).

In addition, the tricyclic anti-depressants could be sold with an emetic or antidote. If a teen overdosed and changed his/her mind or was found, an antidote could be given and a life could be saved. Projections claim this method might save approximately 3 percent of teen suicides per year (Holinger, 1985).

The first antidote ever developed against Valium and Librium, the drugs most commonly used in suicide attempts, has undergone preliminary successful human testing. The antidote, called Anexate, could be used to save hundreds of lives each year (Chicago *Tribune*, 11/3/85).

Jumping from high buildings or bridges is another method of suicide for which intervention may be possible. Access to high buildings could be limited, physical barricades such as high glass or steel fences could be required above a specified height and windows above a certain story could be made unopenable or unbreakable. However, since the number of suicides among young people which occur by this method are few, the impact of the interventions probably would not be great. The causes of youth suicide appear to be enormously far-reaching and deeply enmeshed in societal problems. The building of barriers on buildings and bridges would not seem to make a dent in the problem.

What can we do to reduce these alarming statistics? Perhaps the most important possibility for intervention is to conduct school programs in positive mental health education for students, teachers and parents. These programs must begin with helping children to develop self-esteem, and communication and listening skills. Then kids can learn how to identify a child in trouble and how to reach him. They must know whom to turn to in the school to get help and when to turn to a professional. They need programs in stress management and coping skills as well as programs in suicide prevention. School faculty need to know what to do in the event that someone in the school does attempt or commit suicide to prevent one suicide from becoming multiple suicides.

Educational intervention is difficult to evaluate because of the absence of data. Over a period of years, however, education would appear to have the best potential for decreasing self-inflicted mortality. Here I use the analogy of sanitation and its effects on infectious disease. More lives have been saved by preventive sanitation than by antibiotics. Based on studies of the effects of public education in the areas of child abuse, discrimination, and drunk driving, self-inflicted mortality for children and adolescents could be reduced by as much as 20 percent through public education (Holinger, 1984).

HIGH RISK POPULATIONS

Psychiatric patients and suicide attempters

The major focus of this paper is on adolescents in the general population. However, it is well documented that psychiatric patients and those who have previously attempted suicide have a far greater rate of completed suicide than that of the general population (Pokorny, 1983; Sainsbury, 1982). Thus, they must be considered. Can our knowledge of their high risk be used for prevention? Kreitman (1982) has shown that if we were to screen a large high-risk population we would catch relatively few suicides at high expense. If one concentrates on a smaller high-risk group, the yield is so low that the overall reduction in the total number of suicides is minimal.

What other possibilities can be considered? The first is training of psychiatrists, psychologists, physicians, nurses, and other mental health professionals to be increasingly aware of the risk of this group.

Another fruitful avenue is that of biochemical research. Specific biochemical tests are being developed to establish the potential of patients with biochemical disorders such as decreased serotonin levels for the propensity to impulsive, violent behaviors including suicide (Van Praag, 1982).

A third possibility involves the use of the agents of suicide, particularly guns and medications. Stricter regulations of gun sales and medications are needed, especially to previous suicide attempters and persons with histories of psychiatric hospitalization.

Juveniles in jails and detention centers

Another group of youngsters with a high rate of suicide are adolescents held in jails and juvenile detention centers. One example of practical intervention is the program that the Samaritans of Boston have instituted. Each week, volunteers meet with the inmates of the Charles Street Jail where they have trained thirty inmates to be "barred befrienders" to help identify the suicidal

among the 5000 new arrivals to the jail each year. Since the program began there have been six suicides at Charles Street, rather than the fifty-six that the National Institute of Justice statistics indicate normally happen in an institution of its size. In addition, officer training in suicide prevention is now required by the State of Massachusetts. How effective this training will be in the prevention of youthful suicide should be evaluated.

Another area of risk for youth is in juvenile detention centers. Youngsters are brought here, often on a first offense such as a drunk driving charge, to wait for a parent. They are placed in a cell and left alone. Sometimes there is a television monitor for surveillance. I would rather recommend the use of other inmates for surveillance rather than an inanimate object, and further would recommend the holding of these youths in cells with another person present rather than alone. Often these kids are humiliated and frightened, and isolation is the last thing we want for them. These procedures are simple to institute and they may help to reduce the death toll for a select high-risk population.

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SCHOOL-BASED PREVENTION PROGRAMS

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INTRODUCTION

As the statistics on youthful suicide rise dramatically, prevention of youth suicide has become a priority of professionals involved with community-based facilities. Suicide prevention centers, crisis hotlines, family physicians, and teachers are just some of the different community resources available to help the suicidal individual. The efficacy of these various individuals and programs has, however, been subject to question. Controversy still continues about whether suicide prevention centers and agencies, psychologists and psychotherapists can actually prevent suicide (Bagley, 1968; Jennings, Barraclough and Moss, 1978; Innes, 1980). Other studies, specifically those examining the role of suicide prevention centers, similarly have found conflicting results (Weiner, 1968; Lester, 1974; Miller, Coombs, Leeper, Barton, 1984). Overall, however, suicide prevention centers may have some beneficial effects especially in diminishing the rate of suicide in young white females (i.e., women and girls 24 years of age or younger).

Recently, suicide prevention programs and curricula have been developed for junior and senior high schools. These programs have assumed various tasks but have as their overall goal the prevention of suicide by the students enrolled in school. All of the current programs utilize some of the ideas of a comprehensive school-based prevention program. Unfortunately, serious omissions occur in many of these programs. In review-

ing this field, it is apparent that nine aspects of prevention programs must be developed and integrated into the different school-based programs. They are:

1. Early identification and screening.
2. Comprehensive and thorough evaluation of the depressed, suicidal, and psychiatrically disturbed young person.
3. Crisis intervention and case management.
4. Programs immediately following a suicide.
5. Education for students, teachers, community, and professionals on identification, diagnosis, and management of suicidal youth.
6. Monitoring and followup.
7. Community linkage and networking.
8. Research of epidemiology, causation, and longitudinal followup of attempters.
9. Advocacy.

This paper reviews the existing youth suicide prevention programs developed for schools and elaborates on some of the more critical aspects of the nine components of a systematic protocol that would comprise an effective prevention program.

The general purpose of a successful school-based program should be to integrate an understanding of the risk factors for youth suicide, an appreciation of the behavioral characteristics and clinical symptomatology of the suicidal individual, and an awareness

of the various psychosocial stressors with which the suicidal adolescent is attempting to cope. The synthesis of these three functions forms the basis of suicide curricula for schools.

This review of existing youth suicide prevention curricula was undertaken by the Greater Lakes Mental Health Foundation in Tacoma, Washington. The review committee consisted of educators, physicians, psychologists and community workers. A review of 19 programs revealed that only five curricula received an overall positive rating. Some programs had specific deficiencies when rated on a four point scale examining four aspects of the prevention curriculum. The four areas critiqued were: coping skills, prevention, intervention, and postvention.

EARLY IDENTIFICATION AND SCREENING

The question of "what do we screen for?" arises in training educators and school administrative staff to screen for suicidal youth. Does the screening include an examination for depression, antisocial behaviors and attitudes, impulsiveness, suicidal intent, hopelessness, coping skills, family background, and psychosocial stressors? Should evaluation include all these areas? Three general areas of early identification and screening that **must** be examined are:

1. Identification of depression in young people,
2. Appreciation of the various psychosocial stressors affecting students, and
3. Methods of responding to and handling difficult problems.

Early identification is dependent on observing the various risk factors associated with attempted and completed suicide in youth. Risk factors identified by Hawton (1982) and Garfinkel, Froese, and Hood (1982) are:

1. older adolescent,
2. male,

3. previous attempts,
4. chemical dependency (alcoholism) in the family,
5. family breakdown,
6. deteriorating school performance,
7. recent antisocial acts (characterized by rage, aggression, and impulsiveness),
8. living away from the family,
9. history of depression.

In a 1986 study of suicide attempts in high school students, Garfinkel et al. (1986) showed that attempters had more than twice the number of psychosocial stressors within a six-month period prior to their attempts than normal adolescents. The various stressful events were not just more frequent, but were qualitatively distinct from the stressful events in non-attempters. For example, family breakdown, divorce, and school-based difficulties were far more frequent in the attempter's group.

Common stressors experienced by adolescents who attempt suicide include:

1. Breakup with boyfriend or girlfriend.
2. Trouble with brother or sister.
3. Change in parents' financial status.
4. Parental divorce.
5. Losing a close friend.
6. Trouble with teacher.
7. Changing to a new school.
8. Personal injury or other physical illness.
9. Failing grades.
10. Increased arguments with parents.

Although more than fifty events could be identified as upsetting to an adolescent, these ten were reported most often by the attempters. The stressful life events are ranked in order of frequency that adolescents attempting suicide identified as most to least stressful of the ten most troubling events (Garfinkel, et al., 1986).

Suicide attempters in a high school setting demonstrate not only depression, but also behaviors characterized by:

1. Angry and explosive outbursts.
2. Passive withdrawal into drinking, smoking, and drug usage.
3. Avoidant types of behavior including hypersomnia, joyriding, and infrequent communication with adults.
4. Recent antisocial behaviors such as fighting, violent outbursts, stealing, and vandalism.
5. Visits to family doctors concerning depression.
6. Deteriorating school work.

Recently, Garfinkel, Hoberman, Parsons, and Walker screened 4,267 junior and senior high school students in rural Minnesota. They examined five symptom and behavioral areas:

- Depression
- Antisocial behavior
- Life stressors
- Familial and demographic factors
- Coping and adaptive strategies

Hopelessness and nihilism were not evaluated. Information concerning suicide attempts, ideation, and impact of role models were also assessed and shown to be important in determining suicide attempts. Instrumentation for this type of screening and early identification is relatively simple and brief. Self-report questionnaires and rating scales were the most efficient way of obtaining this information. The Beck Depression Inventory; Berilson Rating Scale for Depression; A-COPE, Johnson and McCutchen Life Events Questionnaire, demographic, familial, and antisocial questions were shown to have validity. By applying this information to specific students, it is possible to identify an individual undergoing severe stress. A pattern emerges that often resembles that of

a suicidal adolescent who has a sufficient number of preexisting risk factors to warrant a further comprehensive evaluation.

COMPREHENSIVE EVALUATION

Following the screening measures, some students will be identified as needing further evaluation. The comprehensive assessment and evaluation of a student attending a junior or senior high school must be based on a structured systematic psychiatric protocol. This should include a structured psychiatric diagnostic interview, self and clinician ratings, and psychometric testing. The evaluation must utilize existing instruments that have a high degree of validity and reliability. Because depression reflects a temporary and episodic state, most rating scales and instruments for evaluating depression do not have a high test/retest reliability. There are, however, a number of structured psychiatric interviews that are effective in identifying depression, including:

- Kiddie SADS
- DICA, (individual and parent)
- DISC, (Diagnostic Interview Schedule for Children) (individual and parent)

Clinician ratings such as the Children's Depression Rating Scale by Poznanski demonstrate good psychometric properties. In addition, self-report ratings such as the Children Depression Inventory (CDI) (Kovacs, 1978, Birelson, 1978) and the Beck Depression Inventory, (Beck, 1979) are worthwhile as well as parental ratings for depression. Psychological tests such as the Personality Inventory for Children (PIC), the Minnesota Multiphasic Personality Inventory (MMPI), and the Million Personality Profile for Adolescents can be usefully applied to the evaluation of suicidal youth. Often in a school setting, the evaluation team must obtain both parental and teacher evaluations of the student and examine the difficulties being identified in as many set-

tings as possible. Weinberg (1973) showed that between 40-60 percent of all learning disabled children met diagnostic criteria for depression.

It is also important to measure hopelessness and suicidal intent. Suicidal intentions are measurable with instruments such as the Beck (1974) or Pierce Scales (1981). The Beck Hopelessness Scale has been shown to be a very good predictor of completed suicide in individuals who have made a previous attempt (Beck et al., 1985).

Evaluation should include a thorough assessment of an individual who had already made one suicide attempt. A number of characteristics of the attempt indicate how serious the attempt was and the probability of an individuals' ultimately committing suicide. The following characteristics, originally suggested by Beck (1974), Hawton and Catalan (1982), and Garfinkel, Froese, and Hood (1982), are good predictors of the seriousness of a previous attempt.

1. whether others were near by
2. the likelihood of being rescued
3. precautions taken to avoid discovery
4. actions that indicate that death was likely (e.g., giving away one's most prized possessions)
5. intricate and extensive suicidal plans
6. leaving a suicide note
7. not telling others of the attempt following the self-destructive actions
8. informing others of the attempt before it actually occurs
9. family history of suicide

CRISIS INTERVENTION-- A MODEL

Barteolucci and Drayer (1973) and Hawton and Catalan (1982) recommend a crisis intervention model based on brief, collaborative problem-solving therapy emphasizing the rapid resumption of control over one's environmental future. Various personnel in-

side and outside the school system may be effective in working with crisis intervention teams based within schools. The following individuals may be asked to provide a consultation or act as a liaison:

- child and adolescent psychiatrist
- school psychologist
- nurse
- social worker
- teacher
- principal
- speech pathologist
- occupational therapist
- coach
- audiologist
- pediatric neurologist
- clergy

Depending on the unique aspects of a case, these diverse individuals may be asked to consult or become a permanent member of the suicide prevention team. The role of psychotropic medication should be examined critically because it may be useful in treating an immediate crisis (Hawton and Catalan, 1982). In general, the purpose of the suicide team is to transform, for the depressed and suicidal adolescent, an environment that, until the crisis, had only emphasized academics and athletics. The team should provide a very supportive, concerned, and empathetic group of individuals prepared to work with the individual to alleviate psychological and social stress.

One of the chief responsibilities of school-based suicide prevention teams should be to insure that an adolescent receives the necessary psychotherapy and social work following a suicide attempt. It is important to establish immediately an integrated network of parents, community-based professionals, and school-based educators and counselors. Often the early crisis intervention work done with the school will determine how successful subsequent community-based counseling

will be. If the rapport and therapeutic alliance established with the school-based personnel is effective, it is likely that community work will also replicate that positive pattern.

GOALS OF INTERVENTION AFTER A SUICIDE

As outlined by Hawton (1982) and Beck, Schuyller, and Herman (1974), a number of specific goals should be set and accomplished during the crisis-intervention work with an adolescent who has attempted suicide. Catalan et al. (1980) and Hawton and Gaths (1979) demonstrated that all disciplines, including social workers, counselors, psychologists, nurses, and psychiatrists can assess the individual who has attempted suicide. They clearly indicate that the diagnostic assessment of every adolescent attempter need not involve only one discipline. The goals of the assessment are as follows:

1. Establish a therapeutic alliance.
2. Determine the type of psychosocial stressors the individual had been experiencing.
3. Rule out the presence or absence of a psychiatric disorder.
4. Identify the adaptive and coping mechanisms that the individual uses to manage stress.
5. Determine all the external resources and support personnel and systems within the individual's life that can be called on to help.
6. Identify what further help the person is willing to accept in order to stop the suicidal behavior.

The first step of this protocol is to determine all the events that immediately preceded the attempt. In general, a thorough history of the preceding 48 hours is essential. Events during the two days are reviewed with the individual to determine whether or not some could be viewed as a precipitant, or perceived by the individual as a reason for self-destructive behavior. If no psychosocial stressors are identified and the suicide at-

tempt appears to have no reasonable event causing it, then it becomes very important that a psychiatric disorder be ruled out. Most often, when no psychosocial stressors or obvious reasons for the self-destructive actions are apparent, the suicide attempt is a direct outgrowth of a psychiatric disorder.

An evaluation of the degree of hopelessness, suicidal risk, and lethality of the actions must occur next. The circumstances of the attempt indicate how lethal and serious the behavior was. Garfinkel, Froese, and Hood (1982) and Beck et al. (1974) described features of attempted suicides that are important to identify:

- Was the attempt made in isolation?
- Were others nearby and likely and able to intervene? This is necessary to find out because efforts to avoid discovery or to conceal the attempt indicate level of severity.
- Were there actions that showed the person anticipated death? Giving away one's most valued possessions is information about severity often provided by friends.
- Was a suicide note left?
- What was the extent of premeditation and planning?
- What method of self-destruction was chosen? Jumping, hanging, and drowning are more lethal and serious than drug overdoses and wrist laceration.

Following an attempt, it is useful to have the adolescent list with the person doing the evaluation, all his/her difficulties. In order of frequency, identifiable problems emerge and include the following:

- problems with boyfriend or girlfriend
- problems with parents.
- problems of a non-specific nature within the family.
- problems that are school-based.

Hawton, O'Grady et al. (1982) demonstrated a similar list of problem areas in 50 adolescents who had attempted suicide, including parental, school, peer, social, physical, sexual, and alcohol based difficulties. It is important to note that such difficulties may, in fact, be a consequence of depression rather than a cause. They may also perpetuate a person's pessimistic view of himself and his future. Moreover, they may also have precipitated the crisis or the decision to end one's life.

After identifying existing problems and psychosocial stressors, the next step involves the identification of a possible psychiatric disorder. Identifying cognitive problems is as important as identifying affective disorders. For children and adolescents it is known that individuals with learning disabilities, brain dysfunctions, and severe depressions may have marked cognitive changes. It is also known that individuals with depression have cognitive distortions and altered attributes that affect thought content. At this step individuals assessing the patient can do a full mental status examination, emphasizing an evaluation of both mood and thought disorders.

The next component of the evaluation emphasizes identifying family psychopathology, family dynamics, and external resources available to the suicide attempter. Research has indicated that significant psychopathology in family members, especially alcoholism and family breakdown, are frequently associated with adolescent suicide attempts. General psychopathology in other family members should be documented noting whether another family member has tried to commit suicide. Suicide attempts and completed suicide in other family members are associated with suicidal behavior in adolescents. Dynamic issues are also important, especially in determining the help young persons can expect from individuals in the immediate environment. Because family members may have coped with severe problems for a long period of time, they may not be accommodating to the adolescent's

present crisis. They may take a very rejecting, uncooperative attitude. They may also treat the child as if he/she were "expendable," i.e., they are so tired of the long-standing conflicts that they have "given up" on the person's ever getting better. Without sufficient resources available to the attempter, closer observation such as day hospital and full hospitalization may be necessary.

The adaptive and coping mechanisms of the attempter should be explored. It is important to determine whether the attempter is showing the commonly observed behavior of individuals who attempt suicide: passive withdrawal, avoidant behavior, irritable and angry responses, and impulsive/explosive antisocial actions. At this stage of evaluation, previous suicide attempts, ruminations, and plans should be identified. Finally, all supportive relationships must be identified; they can include peers, family members, clergy, educators, and professionals. It is important that the evaluator not keep the suicidal behavior strictly confidential. If intentions are kept secret, adolescents with suicidal ideation may not be adequately monitored or managed in all settings, and could result in a fatality.

The last step is to establish a contract. The individual who has attempted suicide agrees to work on specific problems with identified external resources without turning to suicide during a specified period of time, usually three to four months. Often, three to four months is necessary to allow for sufficient mood elevation, cognitive reorganization with new attributes, and the resolution of various psychosocial stressors to deter the individual from further suicidal behavior.

SURVIVING A CHILD OR ADOLESCENT SUICIDE

Following a suicide, educators and community workers have difficulty managing and counseling relatives, peers, and classmates of the individual who committed suicide. A number of principles should be adhered to within the school setting that would deem-

phasize the social learning and role modeling that can occur following a suicide. All subsequent actions should be handled in a very sensitive manner deemphasizing, but acknowledging the presence of guilt, responsibility and anger. Only two basic principles underpin this type of work; first, preventing social modeling from occurring, and second, preventing negative feelings of guilt, responsibility, and anger from overwhelming the survivors.

A number of tasks should be carried out in the school that are directed to both school friends as well as the general student body. Following an attempt or completed suicide, approximately one-third of the student body will have already heard about it indirectly. Educators therefore, should not think that by discussing what has occurred, they are giving young people the idea that suicide is an option. The students can be encouraged to explore with adults the sense of loss and abandonment regarding the suicide. Herzog and Resnik (1967) indicated that both the parents and peers may have difficulty in communicating openly about the individual who committed suicide and may need support, direct encouragement, and time set aside to discuss it.

Individuals working with peers of the suicide should attempt to stress the psychopathology that the individual was experiencing. Adolescents often believe the individual who committed suicide did not have any problems whatsoever. Occasionally this is true, however, more often the psychopathology was minimized or not readily apparent. Stressing the psychopathological elements in the individual's functioning demystifies the suicide, emphasizes emotional and mental disturbances, and makes it more difficult to identify with the dead individual. A major component in working with the survivors is to break down the identification with the individual who committed suicide. Emphasizing family and other problems unique to the individual and deemphasizing the strengths the individual possessed are methods by which identification can be diminished. Em-

phasizing psychosocial stressors such as academic difficulties, breakup of peer relationships, and physical issues that were stressful events in the individual's life, places the suicide in the context of a unique set of circumstances. By sharing the unique aspects, other students have a more difficult time in identifying with the decedent. Furthermore, professionals and educators working with the students should deemphasize suicide as the cause of death. In fact, some professionals do not mention suicide at all but emphasize depression and various other stressors as leading to the individual's suicide.

Peers, classmates and family members should be encouraged to limit the extent of memorializing the decedent. Although not fully researched in a controlled fashion, some empirical evidence suggests that individuals who memorialize a suicide do so in a much more elaborate fashion compared to a similar age person dying from other causes.

Finally, coming to terms with the loss and abandonment must be explored. Survivors have great difficulty in comprehending suicide as permanent and volitional. These two particular aspects (i.e. volitional and permanent) of the decedent's actions should be discussed. In general, ventilation of anger with the decedent ("he was no different from the survivors"), responsibility and guilt, and non-specific communication are not the most effective ways of trying to limit the social modeling and the potential for clustering of suicides.

EDUCATION FOR STUDENTS AND SCHOOL PERSONNEL

Educational programs to develop sensitivity and awareness of the issues of youth suicide abound for students, teachers, and administrative school personnel. Educational programs vary in duration, content, and personnel. The major components of various programs are four-fold and usually include coping skills, prevention, intervention, and postvention.

Some programs have been as brief as one

class period and others have grown to as many as 3 to 5 classes. No one has been able to demonstrate that programs directed to students have any direct benefit. Similarly, no evidence suggests that programs for school personnel are effective. It is possible that general discussions about suicide may have a deleterious effect on the students in that the topic may inadvertently become idealized and appealing.

STUDY OF EDUCATIONAL PROGRAMS IN MINNESOTA

Garfinkel, Hoberman, Walker, and Parsons examined suicide educational programs in rural Minnesota high schools which were directed to either students or educational personnel. They wished to determine if educational programs correlated with either the suicide attempt rate for that particular school or the occurrence of severe depression. The ten schools studied had six suicide attempts within the six months prior to the beginning of the study. Beck Depression Inventories were completed on 200 students designated for this study. Students in grades 9, 10, 11, and 12 in a particular class were asked to fill out the Beck Depression Rating Scale, provide other information such as suicide information, demographic data, and coping and life stress events schedules. Principals were interviewed to determine the number of educational programs on suicide, depression, or stress that the school provided. They were also asked whether specific personnel within the school were designated to give these educational programs and whether or not experts were brought in. The range of programs varied from 0-4.

Whether educational programs were provided did not correlate with either the suicide attempt rate in a particular school or with the occurrence or severity of depression recorded. The type of speaker, (by discipline, or an outside expert, or someone on faculty) also did not have an impact on the rate of suicide or depression. Similarly, the number of suicide education programs or

number of staff persons did not have a significant effect on these two variables.

This is a pilot study that will be replicated in forty more schools. The programs may be criticized on the basis that the philosophy or approach was not known. It is encouraging to note that in spite of media attention to suicide and the social learning and modeling that can occur when suicide is discussed generally, these programs did not have an enhancing effect on the suicide and depression rate within the schools that we studied. Therefore, one can cautiously conclude from these preliminary findings that a nonstandardized educational program within a school setting directed to students and teachers is not associated with an increase in suicide attempts or severe depression within a particular high school.

When the Greater Lakes Mental Health Foundation critically reviewed youth suicide prevention curricula, they identified four components of the student and teacher curricula: coping skills, prevention, intervention, and postvention. Nevertheless, the programs that were critically reviewed had multiple omissions from the reviewer's perspective.

The curriculum that received the highest rating was developed by Thomas C. Barrett, Ed., entitled, "Youth in Crisis, Seeking Solutions to Self-Destructive Behavior". It consists of 255 pages dealing with prevention and intervention models for the school and community. A five-lesson curriculum is provided along with exercise and resource material accompanying the lessons. My review of this material is more critical and I have identified a number of shortcomings:

1. The overall model is vague and is overly sociological and anthropological with a deemphasis on mental disorders as a cause of youth suicide.
2. The bibliography is far too brief and not current.
3. The mental health team does not include psychiatry.

4. The student curriculum spends most of its time examining the issues and circumstances surrounding suicide itself, with a deemphasis on depression.
5. The model of suicide emphasizes societal factors and does not integrate or emphasize psychology.

Herbert of the Fairfax County, Virginia Public Schools has produced "A Guide to Adolescent Suicide Prevention Programs Within the School". This 55-page booklet summarizes the major characteristics of suicide educational programs based within schools and communities. It has a balanced perspective that identifies depression as being a significant factor in youth suicide. It has not been demonstrated, at this time, whether these particular programs have an ameliorative effect on suicide and depression within school settings. It also has not been shown whether these types of programs are inadvertently providing role models to already depressed individuals and guiding more people to attempt suicide.

Many of the educational models for students emphasize more effective adaptation, coping skills, and communication among teenagers. The program that has developed these educational areas most systematically is the Suicide Prevention Center in Dayton, Ohio. They have produced five separate teacher manuals that deal with various aspects of depression and suicide. The most useful of the manuals emphasizes stress management, i.e., coping skills, instead of focusing on the topic of suicide. It is not known whether it is more helpful to discuss depression, coping mechanisms, or more effective communication than to avoid bringing suicide to the classroom directly to the students attention.

Most educational programs encourage the development of early self recognition of depression. Self-identification and identification of depression in one's peers appear to be worthwhile skills to teach students. Emphasizing depression rather than suicide appears to be an effective way of focusing on a phenomenon associated with suicide. Ex-

amining ineffective coping styles, as well as more effective coping mechanisms is a very useful and practical educational strategy for students. Learning to deemphasize passive withdrawal, avoidant types of behaviors, alcohol and drug use, anger, and antisocial behaviors is important. Emphasizing networking and the integration of adult guidance into the youth's support system are worthwhile skills with which to train and educate our high school students. Reinforcing assertive and clear communication is also a worthy goal of educational programs. Deemphasizing the rageful forms of communication and the indirect methods that are commonly seen in suicidal youth are also being brought to the attention of the students. At this time, it is not known whether educational programs emphasizing these issues will alter either coping or communication in depressed and suicidal individuals.

COMMUNITY LINKAGE AND NETWORKING

School suicide prevention teams can become a community link to other school districts, high schools, community mental health centers, hospitals, universities, churches, and private mental health practitioners. The legal system, including truant officers, probation officers, and community police officers frequently can be included. Community networking includes determining what community-wide educational programs are available. Networking deals with the media and guides them to deemphasize the coverage of suicides when they occur and to establish followup, aftercare management and treatment networks to serve young people after a crisis or suicide attempt. Often the suicide prevention team within the school must interact with parents, siblings, children, and adolescents who are especially vulnerable to depression and suicide. The prevention team should work with youth in health, recreational, and social areas and in the exchange of expertise among all groups addressing this problem. The linkage serves as a prevention, crisis intervention, and re-

search base for the enhancement of scientific and clinical knowledge about youth suicide.

RESEARCH

Applying the model outlined above, the University of Minnesota Division of Child and Adolescent Psychiatry and the Agricultural Extension Program in the Department of Home Economics, in association with the 4-H Clubs of Minnesota, established a broad community-based study of youth suicide attempts in rural Minnesota. The study included 52 counties in three regions of rural Minnesota. It surveyed 82 schools and involved 65 agricultural extension agents. Over 4,267 students were surveyed and their information provided data on:

- demographic characteristics of suicide attempters.
- the prevalence of suicide attempts in rural Minnesota youth.
- stressful life events.
- coping and adaptive skills.
- a self-rating scale for depression.
- an inventory of antisocial behaviors.

Research of this type was only possible with the help of an extensive network of professionals working with the schools in collaboration with community resources. It utilized existing networks and teams within and outside our junior and senior high schools. Other research taking place within schools that has examined affective disorders in suicide included a study of the prevalence of Seasonal Affective Disorders in high school students.

MONITORING AND FOLLOWUP

Because of the unique function of schools that keep all children below the age of 16 in school eight hours a day, five days a week, students in a junior high school and the early grades of senior high school are much more available for monitoring and followup pur-

poses. Unlike adults who have made a serious suicide attempt or gesture, and whose diverse vocational and social functioning make it difficult to determine their compliance with recommended management programs, children and adolescents can be followed within the schools by a suicide prevention team and the school team can monitor community-based treatment programs. Because individuals who attempt suicides are at high risk for ultimately completing suicide or making multiple attempts, it is imperative to monitor these individuals closely. Monitoring and supervising the progress of individuals who have been identified as individuals at risk or are involved in self-destructive behavior, can be a major function of the school-based team. Similarly this team is in a unique position to monitor community-wide trends regarding suicide, community education efforts, media exploitation of youth suicide, recent advances in suicide research, and specific school trends over a number of years. Suicide in a particular school can be examined as a function of unique local situations and events.

CONCLUSIONS: THE YOUNG PERSON'S ADVOCATE

The development of suicide prevention programs and teams within our junior and senior high schools results in a number of programs being developed. These include:

- Early identification
- Comprehensive evaluation
- Crisis intervention
- Postvention
- Education
- Monitoring
- Community linkage
- Research

Providing these different functions can be accomplished while the students maintain their routine and regular activities. The school

program becomes a resource not only for the school and district, but for the entire community. It becomes a clearinghouse for new research, comprehensive management techniques, and the coordination of community education efforts in the area of suicide. Moreover, as this team monitors, follows-up, and establishes a registry of individuals at highest risk for suicide, it can become the children's most effective advocates. School, peer and parental attitudes may be insensitive and unaware of the depressed and suicidal individuals who lack the energy, social skills, and abilities to deal effectively with the usual adolescent developmental demands. Having advocates within the school setting can provide immediate response to difficulties at teacher, peer, classmate, and parental levels. Explaining to both teachers and parents that a suicidal and depressed individual may not be able to concentrate and complete homework and, therefore, punitive actions about incomplete assignments, lack of energy, and excessive daydreaming may be harmful to an already depressed individual. Explaining physical ailments and somatic symptoms may also be very helpful. As the young persons' advocate, the prevention team ultimately can reframe behavioral, physical, and social problems from one perspective to another. Rather than observing antisocial behaviors entirely within a conduct disorder framework, one can also present them as adaptive behaviors commonly seen in depressed and suicidal individuals.

The most important benefit of all is that the suicidal student will have an advocate readily available eight hours a day who will be knowledgeable about the thoughts and feelings the student is experiencing, able to interpret the individuals' behavior towards others more effectively, and will accomplish these tasks in an empathetic fashion to the student. It is estimated between 3-6 percent of all high school students require the direct services of a suicide prevention team. Not only do at-risk students, but all students, teachers, and members of the community benefit from the diverse activities of this team.

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