



U.S. DEPARTMENT OF JUSTICE
Office of Justice Programs

CATEGORICAL ASSISTANCE PROGRESS REPORT

The information provided will be used by the grantor agency to monitor grantee cash flow to ensure proper use of Federal funds. No further monies or other benefits may be paid out under this program unless this report is completed and filed as required by existing law and regulations (Uniform Administrative Requirements for Grants and Cooperative Agreements — 28 CFR, Part 66; Common Rule, and OMB Circular A-110).

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4. IMPLEMENTING SUBGRANTEE		5. REPORTING PERIOD (Dates) FROM: 12/98 TO: 2/28/99	
5. SHORT TITLE OF PROJECT Assessing ADM Disorders Among Juvenile Detainees		7. GRANT AMOUNT \$166,500	8. TYPE OF REPORT <input type="checkbox"/> REGULAR <input checked="" type="checkbox"/> FINAL REPORT <input type="checkbox"/> SPECIAL REQUEST
9. NAME AND TITLE OF PROJECT DIRECTOR Linda A. Teplin, Ph.D., Professor		10. SIGNATURE OF PROJECT DIRECTOR <i>Linda A. Teplin</i>	11. DATE OF REPORT 4/1/99

12. COMMENCE REPORT HERE (Continue on plain paper)

1. Background

In November of 1995 we began data collection on a major study of the mental health service needs and the patterns of service use of high risk juveniles. We interviewed our final subject in June of 1998. Our sample contains 1832 youth who were arrested and detained. Table 1 shows the sample characteristics. We have extensive mental health service information on this sample. Table 2 shows preliminary DSM-III-R diagnoses, and Table 3 shows urinalysis results. This study offers a valuable opportunity for understanding the development of mental health service needs, the patterns of service use, and the risky behaviors (HIV/AIDS sexual risk behaviors, drug use, and violence) of high risk young people.

In 1995 our plan was to take advantage of this opportunity and to extend our study of juvenile detainees into a longitudinal design. However, we faced a problem. We had to begin tracking and sample retention operations immediately, but were not funded by the National Institute of Mental Health for these operations. We needed funds for subject tracking and sample retention while we designed the longitudinal study and secured federal funding.

In the spring of 1996 we approached the **Office of Juvenile Justice and Delinquency Prevention** to help us avoid losing this valuable opportunity. **OJJDP** funded us to achieve two aims: to develop tracking and sample retention procedures for the longitudinal study of delinquent and high risk youth, and to track and retain our sample of 1832 subjects until we secured funding for the longitudinal study.

We have succeeded in both these aims. We have developed effective and efficient procedures for tracking and retaining our sample, and for managing the enormous flow of

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information from this operation. We have also effectively tracked our subjects and have secured funding for the longitudinal study of the youth in our sample.

This longitudinal study is very important for the field of child and adolescent psychiatry and mental health services research. Several agencies have agreed to provide funds for it. These agencies include the Health Services Section of the National Institutes of Mental Health, the Office of AIDS Research of the National Institutes of Mental Health, the Office of Research on Women's Health of the National Institutes of Health, and the Centers for Disease Control and Prevention. The longitudinal study, the **Northwestern Juvenile Project**, is now funded for five years. We could not have obtained funding for this longitudinal study without funding from OJJDP.

2. Major Findings

Our tracking and sample retention procedures include the following:

- We send each subject a birthday card and three mailings each year (see attached examples). Two of these mailings include gifts (e.g., McDonald's gift certificates, pairs of tickets to the Chicago White Sox or Cineplex Odeon Theaters). Incarcerated youth receive a \$10.00 money order. Each mailing includes a business reply card. We also send **Northwestern Juvenile Project** key chains or refrigerator magnets prominently displaying our address and toll free phone number. These mailings maintain the interest of our subjects while allowing us to verify addresses. We encourage them to let us know if they move, and we make it as convenient as possible for them to call or write us.

- When a piece of mail is returned, our in-office tracking operation gears up. We first call the youth's last known phone number. We then call relatives, friends, and the subject's previous phone numbers. We contact county and state correctional facilities to determine if the youth is in placement or incarcerated. We check school records to see if the youth has transferred or dropped out. If the youth is on probation, we contact his or her probation officer. We also check credit bureau and Department of Motor Vehicles records.

- If our in-office operation fails to locate the subject, we send a field tracker to the community to talk with family, friends, and acquaintances. Our field trackers review all the available information and then begin to visit known haunts and places the youth frequents.

This escalation of effort has proven both successful and efficient. Sometimes returned mail results from postal error and is resolved with a single phone call. Many youth move and fail to notify us. By acting quickly, we are usually able to determine the new address. Checking all our sources before moving into the field also minimizes tracking costs. At the same time, getting a case to our field trackers quickly capitalizes

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on the information the youths' friends and acquaintances in their old neighborhoods can give us.

Our tracking and retention operation captures large amounts of information. Even paper files are too cumbersome for a tracking operation of this size. In addition, our telephone staff requires instant access to information about subject status and history. To meet these needs, we have developed a relational database system to manage our information needs. We are able to enter and update data as it comes in, and we can instantly share this information among the many members of our tracking team.

We have logged over 24,000 contacts with youth in our sample. These contacts include all the day-to-day activities of the tracking operation: mass mailing and birthday card contacts, business reply cards, phone calls from youth, phone calls to parents and schools, personal visits to incarcerated youth, and so on. Our database also contains over 26,000 acquaintance records. These include addresses for subjects' family and friends; names of schools, teachers and probation officers; and identifying information from correctional facilities, police computer systems, the Department of Public Aid, and other public agencies. In short, we have developed procedures for the timely and responsive tracking of our subjects and for managing the unwieldy data necessary for such an operation.

Our second aim, to track our subjects until we secured funding for the longitudinal study, has also been successful. By providing interim funding for our tracking and sample retention operations, **The Office of Juvenile Justice and Delinquency Prevention** made this possible. A critical component in the longitudinal application was evidence that we could retain our sample. When we submitted our federal grant application we could locate over 96.5% of our sample, and we located and interviewed all twenty subjects in a feasibility study except for one who was deceased. This was important evidence in support of our ability to complete the longitudinal study.

3. Implications for the Field

Typically, most studies investigate general population youth to see who becomes delinquent. However, there has never been a comprehensive, large-scale longitudinal study of delinquent youth. We have shown that it is feasible to assess the longitudinal development of mental health service needs, service use and risky behaviors (drug abuse, violence, and HIV/AIDS risk) among these youth.

4. Directions for Future Research: The Northwestern Juvenile Project

Although many mental health professionals speculate that youth in the juvenile justice system are a particularly needy yet underserved population, there are few empirical data. To date, no study has examined released detainees to determine their ongoing psychiatric (mental health and substance abuse) disorders and the patterns and sequences of symptoms, psychiatric comorbidity, and functional impairments over time. No study has

examined if and when high risk youth who need services receive them in the community, which system provides services, the types of services youth receive, the sequence of services, and the patterns of service use over time. Moreover, no study has examined these questions among the increasing numbers of convicted juveniles serving sentences, 128,700 cases per year nationwide. Our longitudinal study will do this.

We also plan to study three behaviors that are often associated with ADM disorders: drug use, violence and HIV/AIDS risk. We chose these behaviors because they are major public health concerns, they are theoretically and empirically related, and they are prevalent among delinquent youth. Although many of our subjects have already engaged in these high-risk behaviors, most have done so only intermittently or have engaged in their milder forms (e.g., marijuana use, not IV drug use). The literature suggests that many of our subjects will engage in more frequent and serious risky behaviors as they age. The Institute of Medicine AIDS Council notes that, despite the public health impact of these risky behaviors, there are insufficient data, particularly on their developmental sequence. The proposed study will be the first large-scale prospective study of these risky behaviors among delinquents.

Our longitudinal study has three specific aims:

- **ADM Service Needs.** We will assess persistence and change in ADM disorders (including onset, remission, and recurrence), comorbidity, associated functional impairments, and the risk and protective factors related to these disorders and impairments.
- **Barriers, Pathways and Patterns of ADM Service Use.** We will assess if and when juveniles who need ADM services (as determined in Specific Aim 1) receive them after their cases reach disposition (whether they are in the community or incarcerated) and from which sectors: mental health, juvenile justice/adult corrections, child welfare, education, general health, informal services. We will examine perceived barriers to care, pathways into treatment, and patterns of service use over time (types, volume and intensity of services, combinations, gaps in care, and sequences of services among sectors). We will determine how service use changes over time and which factors predict continuity and change.
- **Pathways and Patterns of Risky Behaviors.** We will assess the patterns and sequences of development of drug use, violence, and HIV/AIDS risk behaviors among our subjects, focusing on gender differences, racial/ethnic differences, the antecedents of these risky behaviors (risk and protective factors) and how these behaviors are interrelated. Our longitudinal design allows us to study how youth progress from milder to more severe risky behaviors and determine the variables that predict these changes.

5. Publications, Papers and Presentations

We currently have three publications planned:

- a paper on the prevalence and development of psychiatric disorders among detained youth;
- a publication on comorbidity of major mental disorder with substance abuse among high risk youth; and
- a paper on the methods used to conduct longitudinal studies of high risk youth and the sample retention procedures we have developed.

6. Implications for Policy or Service Programs

These data will help direct the types of prevention programs that best fit the needs of delinquent youth. Longitudinal data allow us to examine fundamental questions not possible in cross-sectional studies. For example: What are the most common patterns of comorbidity, and which variables predict the *sequence* of disorders as youth age? Do delinquent youth receive adequate services for their disorders as they move from adolescence into early adulthood? Are youth with ADM comorbidity more likely to be neglected by service systems than youth with just one disorder? How do HIV/AIDS risk behaviors develop over time? Which variables determine whether youth progress from milder HIV/AIDS risk behaviors (e.g., unprotected sex with one partner) to more serious behaviors (e.g., trading money for sex with many partners)? How do these HIV/AIDS risk behaviors differ by race/ethnicity and by gender? Delinquent youth are also at great risk for perpetrating and being victimized by violence. We will also examine the baseline data to highlight those variables that best predict youths' vulnerability to violence. These data will help direct the types of prevention programs that best fit the needs of delinquent youth.

Attachments

Table 1: Juvenile Sample Characteristics

Table 2: DSM-III-R Diagnoses among Juvenile Detainees

Table 3: Emit Urinalysis Results among Juvenile Detainees

Sample Birthday Card for Juvenile Subjects

Letter Accompanying Summer Mailing to Juvenile Subjects

Table 1. Juvenile Sample Characteristics			
		N	%
Race/Ethnicity			
	Black	1034	56.6%
	White	333	18.2%
	Hispanic	460	25.2%
	Other Race	1	0.1%
Gender			
	Male	1172	64.0%
	Female	660	36.0%
Age			
	Mean	14.9	
	Median	15	
	Mode	16	
Specific Ages			
	Ten	7	0.4%
	Eleven	20	1.1%
	Twelve	87	4.8%
	Thirteen	257	14.0%
	Fourteen	219	12.0%
	Fifteen	494	27.0%
	Sixteen	647	35.3%
	Seventeen	90	4.9%
	Eighteen	10	0.5%
Total		1832	100.0%

Table 2. DSM-III-R Diagnoses Among Juvenile Detainees*

Diagnosis	Total		Male		Female	
	%	n	%	n	%	n
<u>AFFECTIVE DISORDERS</u>						
Major Depression	14.4	1238	11.4	805	19.9	433
Mania	1.6	1238	1.9	805	1.2	433
Dysthymia	11.2	1256	9.3	819	14.9	437
Hypomania	1.0	1250	1.2	815	0.5	435
Any Affective Disorder	19.3	1257	16.2	820	25.2	437
<u>ANXIETY</u>						
Obsessive/Compulsive Disorder	9.0	1235	8.4	808	10.1	427
Overanxious Disorder	7.1	1244	4.9	813	11.1	431
Generalized Anxiety Disorder	5.1	1249	4.5	814	6.2	435
Separation Anxiety Disorder	13.1	1246	10.3	814	18.3	432
Panic Disorder	0.5	1257	0.2	820	0.9	437
Any Anxiety Disorder	21.9	1258	18.4	821	28.6	437
<u>SUBSTANCE DISORDERS</u>						
Alcohol Abuse/Dependence	23.5	1242	24.2	809	21.9	433
Marijuana Abuse/Dependence	40.8	1242	41.3	811	39.9	431
Any Substance Abuse/Dependence	46.7	1242	46.7	808	46.5	434
<u>DISRUPTIVE BEHAVIOR DISORDERS</u>						
Conduct Disorder	41.6	1254	40.9	817	42.8	437
Oppositional Defiant Disorder	15.0	1253	13.8	817	17.2	436
Any Disruptive Behavior Disorder	45.1	1257	43.8	820	47.6	437
<u>ANY OF THE ABOVE DISORDERS</u>	79.7	1258	77.7	821	83.3	437

*All figures are unweighted sample statistics.

**Table 3. EMIT(tm) Urinalysis
Results Among Juvenile Detainees***

	N	Any Drug %	Any Except Cannabis %	Cannabis %
<u>Race/Ethnicity</u>				
Black	821	58.7%	4.3%	58.1%
White	257	57.6%	8.6%	56.0%
Hispanic	354	59.0%	13.0%	57.1%
Other	1	100.0%	0.0%	100.0%
<u>Gender</u>				
Male	961	63.0%	8.1%	61.9%
Female	476	49.4%	5.3%	48.1%
<u>Age</u>				
Ten	7	0.0%	0.0%	0.0%
Eleven	16	12.5%	0.0%	12.5%
Twelve	65	41.5%	1.5%	41.5%
Thirteen	205	49.8%	3.4%	49.3%
Fourteen	170	52.4%	3.5%	51.2%
Fifteen	383	60.3%	6.3%	59.3%
Sixteen	517	64.4%	10.6%	63.1%
Seventeen	63	74.6%	12.7%	74.6%
Eighteen	10	80.0%	20.0%	60.0%
Total	1437	58.5%	7.2%	57.3%
*Unweighted Sample Statistics.				