RESEARCH INTO VIOLENT BEHAVIOR: DOMESTIC VIOLENCE

HEARINGS

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BATTERED WOMEN: AN EMERGENCY ROOM EPIDEMIOLOGY WITH A DESCRIPTION OF A CLINICAL SYNDROME AND CRITIQUE OF PRESENT THERAPEUTICS

Statement
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Before the

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MR. CHAIRMAN, MEMBERS OF THE SUBCOMMITTEE:

The bright lights of the emergency room and crisp order of the staff define the atmosphere where the crises of daily life, the complex knots of culture, economy, work and love are whittled into "diagnosis and treatment." A few patients break through the anonymity to become well known either because of their illness ("sickler, acoholic, asthmatic") or their persistence ("neurotic, hysteric"). But the majority pass through ritual and limp homeward with a clean slate.

Confronted with this situation physicians are quick to share their frustration with emergency room patients who use the service "incorrectly" and "ought" to utilize the clinics and primary care centers. In spite of the so-called crisis in health care which makes evident the abysmal lack of care available to most individuals, physicians cling to the notion of an "emergency" as an immediate life-threatening event.

The struggle about resource utilization is really a struggle about diagnosis. Patients triage themselves to the emergency room, and despite the complaints of staff, it is in the end, the community which defines the needs a medical facility must meet. However, this definition is not always immediately apparent for it is hidden within the complex categories of medicine which mystify social collectivity.

This research is an experiment in reconstructing that collectivity from the individuated histories of women seeking aid. Literally thousands of woman-years are represented in the records of these women. In this sense, we are not discussing an "epidemiology" nor a "clinical syndrome" but the history of the struggle women have waged to define medicine in the context of social reality beyond the examining room.

The history of women in medicine is a vicious one, marked by septic abortions, sterilization abuse, forced mental hospitalization and suicide attempts on prescribed medications. It is the history of women "allegedly" raped and others "allegedly" beaten by husbands. It is a struggle in the deepest sense, and this work is dedicated to its continuation and eventual victory.

REVIEW OF THE LITERATURE:

In the spring of 1970 a community center for women opened in the town of Chiswick, just outside of London, England. It was to be a day care center and a place where housewives could overcome the isolation of their nuclear homes to collectively meet the growing economic crisis within the British Isles.

But one woman brought her children to the center and asked for permission to stay as she needed refuge from the continual beatings she suffered at the hand of her husband. Her request was granted and each day thereafter more women came with the same request. In short time more than fifty women and children from the town of Chiswick were living in four rooms and the first shelter for battered women was established. Chiswick House is now located in a large rambling home and is only one of more than seventy shelters which have been established throughout the United Kingdom.(1)

Widespread publicity and battles with the government over housing regulations prompted Parliamentary hearings on the problems of battered women. In the midst of a growing national scandal, British physicians were forced to consider the issue.

> "He hit me with his fists, feet and bottles, smashing me to the floor; then he started to kick, sometimes with repeated blows to the face ... he has tried to strangle me ... During my marriage of nearly four years I have received constant bruises all over my body, this has been more so during pregnancy. I have received black eyes, cut lips and swollen nose. Most of my bruises have been to the scalp where they do not show. On one occasion I had bruises to the throat and abdomen and was unable to speak; on admission to hospital I was found to have multiple injuries and broken ribs."(2)

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J. J. Gayford's study of 100 women living in Chiswick House finds that the above account is typical. He notes that the majority had turned to their general practitioner for aid and 71 were taking anti-depressants or tranquilizers. Twenty one women ahd been treated for "depression" with chemical or physical agents. One half of the sample population had tried to commit suicide at least once but a majority admitted "it was only to draw attention to their plight or to get away from the situation."

These women had tried to leave their husbands many times before finally coming to Chiswick House. They had returned to the marital home however because of promised reforms, threats and actual demonstration of further violence, because children had remained in the marital home or simply because there was "nowhere else to go." "Only eight went back because they felt love or sorrow for their husband."

Gayford notes that women had sought help from a range of social services with no resolution of the problem. Women had turned to the police, solicitors, Citizen's Advice Bureau and physicians prior to seeking refuge at the shelter. But the very nature of the problem imposes a dilemma for traditional social services for they presuppose a sanctity of the marital home and deny the need for protection of women while long term solutions are in process. For instance, the failure of the legal system is inevitable so long as a woman is living with her husband for the "threat of further violence is more powerful than legal sanctions, resulting in most cases being withdrawn before they come to court ... probation and a suspended sentence may result in violence ... short prison sentences release a man who has changed little and has grounds for an increased grudge against his wife."(2)

Gayford's in depth experience with the women of Chiswick House convinced him that "most wives were subjected to repeated violence because they had no alternative but to return to the marital home ... (and) places of sanctuary are needed."(2)

Fonseka underscores the importance of battering as an etiology of injury among women in his description of battered women seen in the emergency room of King's College Hospital in England. He found that battered women constituted 60% of all women admitted for treatment of injuries suffered in an assault. The pattern of injuries of such women showed a clear predilection for the face. Battering once established, apparently tends to escalate in its severity over time for "when the older woman suffered trauma at the hand of her consort, she was noted to suffer a relatively more severe injury."(3)

Increasing divorce rates (4), studies on child abuse (5,6) and research on the criminology of domestic crime (7,8,9,10) suggest that family life in America is more like conflict management than blissful harmony.

The magnitude of wife-beating is suggested by Wolfgang's findings that between 25 and 50% of all reported homicides and assaults occur within the family. (7) This finding was later confirmed (10) while other studies estimate that between 17 and 37% of all divorces are attributed to primarily physical abuse (4,11,12).

The most common generalization in early work on wife-beating is that "violence is as American as apple pie" particularly among lower-class males (13). Advocates of this "culture of poverty" theory (14,15) hold that for males in low income communities, battering may well be normative behavior. Chester and Streater (11) found a higher incidence of physical abuse among lower and working class families than families with a high socio-economic status while Lystad found that "class (income and occupation) was a more important

predictor than race (16). Steinmetz suggests however, that occupational environment rather than wage scale is a better indicator of potential battering (17).

There are important trends which appear to contradict the theory of a class specific etiology of battering. Strauss finds no difference in the attitude toward physical violence among working class and middle class parents (18). A study of one wealthy Maryland suburb found that domestic complaints of physical abuse of women ran into the hundreds each month (19) while a comparison of a district in Harlem to Norwalk, Connecticut reports no significant difference in the incidence of domestic violence within these radically different communities (20).

How can one explain wife-beating? Some argue that men who are beaten as children grow into adulthood to beat their wives and children (21) while women beaten as children are likely to accept abuse in adulthood as normal (22). Exchange theorists point to the interactional history of particular couples and suggest that a wife's "passive-aggressive, seductive or independent behavior" may lead to domestic violence (23A, 23B, 15). But the Dobash's work suggests that the family itself may be the source of violence as battering emerges around demands for women's services (cooking, cleaning, child-care, money management and sex) within the home (24).

The socialization of males in American society has been noted as a source of violence. Whitehurst found that 12% of his male sample felt justified in using force in response to marital infidelity and 33% thought that violence against women could be "an act of love" (25). Goode points out that the capacity of males to use violence within the family derives from their superior resources outside of the family (26). Strauss and Rodmen would add, however,

that cross-cultural studies suggest that male authority within the home seems to follow from male authority over social resources only when male superiority is a value maintained by culture and social institutions (27A)

In American society, in which the complex of male superiority as a value, male authority over the home and male domination of social resources underpins the relationship of every woman and man, women who are battered find little help in traditional social service settings. There is virtual consensus that the police, courts, welfare and social work agencies, hospitals and mental health clinics have failed to respond adequately to the problems of battered women.

Bannon points out the training of police prevent them from viewing the battered woman as a victim with independent claims for help and safety (28). Police may be officially instructed not to interfere in family disputes (29). In some states, husbands are permitted to assault their wives provided that injuries are not "severe" (30). Doctors treat battered women with anti-depressants, electro-shock therapy or mental hospitalization and label their problem "depression." (1,2,3,15). It is not difficult to understand why some researchers have noted that the present response of major institutions has contributed to rather than alleviated the problems battered women face (24,31, 22,27).

The fact that there are virtually no adequate services available to battered women re-enforces and rationalizes the response of medicine, the courts and police. It encourages the continual reshuffling of such women into and around existing services. At a point where a woman "fits" into an existing diagnostic category she is able to get "treatment." When she is injured, she gets surgical help. When she is depressed, she can get drugs. When she tries to commit suicide she can enter the mental hospital. When she is finally addicted to alcohol or drugs she can enter a "detox" program.

Too many women understand too well the battered woman who writes: "I have learned that the doctors, the police, the clergy and my friends will excuse my

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husband for distorting my face, but won't forgive me for looking bruised and broken. I have learned that no one believes me and that I cannot depend upon any outside help. The greatest tragedy is that I am still praying and there is not a human person to listen. All I have left is the hope that I can get away before it is too late." (20)

METHODOLOGY: STRUCTURAL CONTEXT

A continual confusion and abiguity will persist throughout this presentation unless the reader is aware that this is a study of the continual interaction of a medical care system and battered women. In one sense, this limits the analytic framework so that broad generalizations about battering per se, its magnitude and implication in the society at large cannot be reached. In another sense, this is a strength of the present work in that it is a study of battering and its impact upon a medical care system and, conversely, a description of the results of patient-physician interactions.

The methodology is imbedded in an understanding of battering as a phenomenon with historic dimensions as well as the assumption that medical records are a reflection of the relationship that exists between a particular patient and this hospital complex. While this relationship may span many years for some patients and only a single event for others, in each case the record constitutes a particular, individualized relationship which may be determined by socio-economic and geographic as well as medical variables.

In other words, this is a view of battering from the limited vantage point of medicine's own records; in this it is as much a commentary on medicine as it is a description of battered women.

In previous presentations of this work, many have asked "how can you compare the records of one woman who has used this hospital for many years with the record of another who has only recently used this hospital?" In essence, the question is whether one can utilize historic data in order to describe a present phenomenon? To the first aspect, I would claim that in each case, time is not the relevant constant, but interaction with the hospital is the relevant constant from the perspective of the medical care system; time, extent

and historicity are descriptions of the interaction, but do not constitute the interaction either from a patient's view or the clinicians'. To the second dimension of this critique, I would claim that there is, in fact, no other viable means of describing the present as abstracted from its history. To chose to do so is an ideological rather than methodological distinction. The disaster of an ideology which locates diagnosis within the individual event, abstracting that event from its history and social context is well described in the case study of battered women.

METHODOLOGY:

SAMPLE: The initial sample consisted of all medically adult women who sought aid for injuries of any kind at the Yale-New Haven Hospital Emergency Room in December of 1975. The initial sample included 520 women between the ages of 16 and 98.

DE FACTO SAMPLE: Data was gathered from the files of Medical Records at Yale-New Haven Hospital and such files were available for 481 women (92.5% of the sample). Records were not found for 39 women (7.5% of the sample) due to insufficient or erroneous identification, and records lost to clinics and individual physicians. All data analysis in the study is, therefore, based upon a sample size of 481 women.

TRAUMA HISTORY: Each traumatic episode in a patient's medical record was classified in one of the following categories:

positive: injury was attributed to spouse or boyfriend in the medical record of the event.

probable: patient was beaten, kicked, hit, punched, but no personal etiology was noted.

suggestive: the recorded etiology of the injury did not seem to adequately account for the injury (i.e. fell down stairs and got two black eyes.)

negative: nothing in report of injury would raise suspicion that injury was result of battering; includes anonymous assault and muggings.

Data gathered for each episode included patient's age and marital status, the context, method and personal etiology of the injury, the type and location of the injury, whether patient was pregnant, medications prescribed in the emergency room as well as disposition and referrals patterns recommended at discharge from the emergency room.

PATIENT CATEGORIZATION: Patients were assigned to one of four categories based upon their trauma histories. If any injury in the trauma history was positive, then the patient was categorized as positive (battered) regardless of the description of other injuries in her record. If any injury in the trauma history was probable, but none were positive, the patient was categorized as probable (battering); and if any injury was suggestive of battering but none were positive or probable, the patient was categorized as suggestive (of battering). If every incident in the trauma history was negative the patient was categorized as negative (not apparently battered).

MEDICAL HISTORY AND GENERAL DATA BASE: Information from review of the medical record included descriptive data on race, religion, method of payment and usual care as well as Emergency Room utilization information for both medical and surgical services. Obstetrical history and marital status at time of delivery were likewise recorded. Finally, the date of onset of a host of problems was noted; these included alcohol abuse, drug abuse, family disorder, suicide attempt, rape, seizures, multiple vague medical complaints, and concern about abuse directed against children, psychiatric emergency room visits, Connecticut Mental Health Center use and commitment to Connecticut Valley Hospital.

METHOD OF ANALYSIS: Data was analyzed using a Data Text system primarily because of the capacity of this system to handle the cross-correlations between basic patient data and a variable number of injury incident reports.

PRESENTATION OF RESULTS

MAGNITUDE AND DIMENSIONS OF BATTERING

In order to understand the magnitude of the problem of battering as it confronts an emergency room which has yet to develop a therapeutic alternative, it is necessary to approach the data from several vantage points.

The overt prevalence or incidence of battering considers only individual events without benefit of historical information. From the standpoint of someone working in the emergency room for a brief period of time, it represents the "perceived" prevalence of battering. If the sample population is divided into categories of risk on the basis of only the December event which prompted contact with the emergency room, the following data emerges:

CATEGORY	CASES	PREVALENCE*
POSITIVE	14	2.8%
PROBABLE	25	5.2
SUGGESTIVE	47	9.8
NEGATIVE	395	82.2
	481	100.0

* prevalence = cases/total caseload

The present active prevalence emerges when battering is considered to be an ongoing problem as opposed to an isolated event. It represents the number of women who appear to be in relationships where they are physically abused. If the same population sample is divided into categories of risk based not only upon the December event, but also matched medical histories from January 1970-December 1975, the following data emerges:

CATEGORY	CASES	PREVALENCE*
POSITIVE	36	7.2%
PROBABLE	21	4.4
SUGGESTIVE	47	9.8
NEGATIVE	377	78.3
	481	100.0

*prevalence = cases/total caseload

If one further recognizes that battering is not only an ongoing problem but also one which may carry repercussions and risks to women even after they have resolved or dissolved an abusive relationship, then the historic prevalence becomes important. If the sample is categorized on the basis of all trauma history up to and including the December event, the following data emerges:

CATEGORY	CASES	PREVALENCE*
POSITIVE	41	8.5%
PROBABLE	21	4.4
SUGGESTIVE	50	10.5
NEGATIVE	369	76.6
	481	100.0

*prevalence = cases/total caseload

One further refinement is to recognize that since battering is a phenomenon with historic dimensions, one can increase the accuracy of prevalence data by including a short glimpse into the future. In other words, for research purposes one can utilize data from 1976 to shed light on the question of whether a woman was injured in an abusive relationship in December of the previous year. The documented prevalence of battering is reached by categorizing patients on the basis of the entire trauma history accumulated through March of 1976:

CATEGORY	CASES	PREVALENCE*
POSITIVE	46	9.6%
PROBABLE	23	4.8
SUGGESTIVE	51	10.6
NEGATIVE	351	75.0
	481	100.0

In order to test the hypothesis that battering is an historic phenomenon rather than an isolated event, consider for a moment, the implication of that hypothesis. One would expect to find that if battering has an historic dimension and it tends not to be resolved within the present social service network, that once a woman comes to the emergency room apparently battered she would be likely to return again battered. The converse, of course, is that women seen in the emergency room apparently battered in December would be likely to have trauma histories independent of the December event which corroborated the clinicians index of suspicion. Construction of a simple 2 x 2 table to test the relationship between the population judged to be at risk in December and the group judged to be at risk on the basis of other medical records shows:

		MEDICAL RECORD EVALUATION	
		AT RISK*	NOT AT RISK
EVALUATION OF DECEMBER EVENT	AT RISK	57	25
	NOT AT RISK	38	351

*AT RISK = positive, probable & suggestive

x^2 significant at $< .001$

It is possible to quantify the historic dimension of battering within this sample by considering the ratio of present active prevalence to historic prevalence. If many women were able to resolve a battering relationship in the contex of present social and political options, one would expect to find a present active prevalence which was significantly smaller than the overall historic prevalence. In fact, however, this is not true and one finds that for positive cases

$$\frac{\text{present active prevalence}}{\text{historic prevalence}} = \frac{7.5}{8.5} = .88$$

If all patients who are judged to be at risk are considered, the same trend is replicated. Adding the prevalences of positive, probable and suggestive cases gives the prevalence for those at risk

$$\frac{\text{present active prevalence}}{\text{historic prevalence}} = \frac{21.7}{23.4} = .92$$

The converse of the above data would be to calculate a

$$\underline{\text{resolution index}} = \frac{\text{(historic prevalence - present active)}}{\text{historic prevalence}}$$

positive resolution index = (8.7-7.5)/8.5 = .12

at risk resolution index = (23.4-21.7)/23.4 = .08

IMPACT UPON THE EMERGENCY ROOM SURGICAL SERVICE

The data presented on prevalence of battering is one measure of its impact on the emergency room. However, the prevalence data is based upon patient categories and, therefore, presumes that the impact or service utilization of battered women is the same as their non-battered counterpart. In order to understand more realistically the demands that battered women raise to emergency room trauma services, one needs an understanding of the difference between the rate or extent that battered and non-battered women utilize emergency medical services.

It has been shown that battering is a phenomenon with a time dimension. Therefore, to consider its overall impact upon emergency services one must recognize and use the time dimension.

In the collective lives of this sample of 481 women, 1419 injuries prompted emergency room visits. These injuries were coded and fell into the following categories:

positive	75	5.3%
probable	157	11.0%
suggestive	183	12.9%
negative	1004	70.8%
	1419	100.0%

When these same 1419 injuries are regrouped according to overall patient categories, it is clear that battered women account for far more injuries than their representation in the sample population would suggest:

PATIENT CATEGORY	% OF SAMPLE	# OF INJURIES	% OF TOTAL INJURIES
POSITIVE	9.6	319	22.5
PROBABLE	4.8	152	10.7
SUGGESTIVE	10.6	193	13.6
NEGATIVE	75.0	755	53.2
	100.0	1419	100.0

In other words, the mean number of injuries per patient is higher for battered than non-battered women. When one considers only injuries which have occurred in "medically" adult life (patient is 16 or older) the following is found:

MEAN TRAUMA INCIDENTS/PATIENT

POSITIVES	=	6.35
PROBABLE	=	6.26
SUGGESTIVES	=	3.08
NEGATIVES	=	1.83

In order to control for age and years of living in proximity to this emergency room in investigating the frequency of injury of battered and non-batterd women, one can calculate an adult trauma index for that portion of the sample which has at least two injuries reported in the medical records of this hospital:

$$\text{Adult Trauma Index} = \frac{\text{number of injuries}}{\text{span in years between first and last adult injury recorded in medical record}}$$

ADULT TRAUMA INDEX

POSITIVES	=	.973
PROBABLES	=	1.127
SUGGESTIVES	=	.822
NEGATIVES	=	.346

The adult trauma index represents the number of injuries per year. It furthermore helps to clarify the status of women in the suggestive category. On the basis of simply mean number of injuries, these women appear to be more similar to non-battered women. However, when these injuries are normalized over time, as by the adult trauma index, they clearly are injured at a rate which is more similar to battered women. They may well be women who are at

the beginning of a physically abusive relationship with an accumulated history to date of only a few injuries but these are being accumulated at a high rate in the course of only a few years.

It is clear then why it is that battered women account for an abnormally high percentage of the total injuries within the sample. They are injured more frequently, and these more frequent injuries are the result of battering, not accidents. The following table supports this conclusion:

POSITIVE PATIENTS (9.6% of caseload) ACCOUNT FOR:

100% of the POSITIVE INCIDENTS
48% of the PROBABLE INCIDENTS
25% of the SUGGESTIVE INCIDENTS
12% of the NEGATIVE INCIDENTS

The disproportionate need for emergency room surgical services by battered women appears to be due to repeated deliberate assault. The slight disproportion of negative incidents may be a reflection of methodological error or may in fact represent the real increase risk of accidental injuries incurred within a violent household.

But the reader must understand the data in personal terms as well. Most women do not experience many injuries which demand emergency room intervention and for 60% of the non-battered women in the sample, the event of December 1975, was their first such injury. But, this was true for only 6% of battered women. If we continue this line of arguement, the contrast between these women is even more marked:

# OF PRIOR INJURIES	% OF NON-BATTERED	% OF BATTERED
NONE	60%	6%
ONE	24	11
TWO	9	16
THREE	4	15
	97%	45%

In order to include 97% of the battered population in the above table, it would have to be expanded to include twenty prior injuries.

DESCRIPTION OF INJURIES AND EVENT

As in every other arena of medicine, there is no substitute for a thorough medical history using both medical records and patient interviews in order to identify battered women. There are factors however, which appear to contribute to the development of an "index of suspicion."

Common sense would dictate that most people seek emergency room attention for a particular, discrete injury at a discrete location. Automobile accidents and falls are obvious exceptions because multiple injury locations are to be expected. Deliberate physical assault is likewise an exception. In fact, one can find a relationship between multiple injuries and battering as the following graph displays:

INJURY CATEGORY	NUMBER OF SITES OF INJURIES				
	4	3	2	1	
% OF POSITIVE	4	16	31	49	100%
% OF PROBABLE	3	8	27	62	100%
% OF SUGGESTIVE	2	3	17	78	100%
% OF NEGATIVE		1	11	88	100%

A further confirmation of this trend is evident when one considers that while patients may present with discrete injuries, they may well be described in medical notes as simply "multiple contusions, lacerations, etc. For instance, a given encounter may read "3 cm. occipital laceration and multiple contusions." In such a case, the patient was considered to have

one "discrete" injury and multiple contusions. An independent consideration of those patients with such designation shows that

% OF INJURY CATEGORY DESCRIBED BY "MULTIPLE" INJURIES

POSITIVE	16%
PROBABLE	19%
SUGGESTIVE	8%
NEGATIVE	4%

The injury patterns of battered women appear to be significantly different from that of non-battered women. This is to be suspected if one considers a "body map" for risk of injuries. If the source of injury is work or household accidents, feet and hands are the most common location for injury. Deliberate physical assault however, carries a different "body map" of likely injury. As the following table of data indicates, battered women are more likely to present with injuries to the head, face, chest, breasts and abdomen while non-battered women are more likely to present with injuries to the forearm, hand, lower legs and feet.

% OF INCIDENTS WITH INJURY AT SITE

	POSITIVE	PROBABLE	SUGGESTIVE	NEGATIVE	TOTAL	X^2 significant at
HEAD	18	15	17	9	9	< .001
FACE	50	52	22	11	14	< .001
CHEST, BREASTS ABDOMEN	26	16	9	2	4	< .001
FOREARM OR HAND	12	10	22	30	21	< .001
LEG OR FEET	4	7	22	23	17	< .001

A further analysis of the data on this table will quantify in a different manner the relative risk of injury at a particular site for battered women.

$$\text{RELATIVE RISK OF INJURY} = \frac{\text{probability of injury at site in positive events}}{\text{probability of injury at site in negative events}}$$

SITE	RELATIVE RISK OF INJURY
HEAD	2.0
FACE	4.5
MULTIPLE	4.0
CHEST, BREAST OR ABDOMEN	13.0
FOREARM OR HAND	.4
LOWER LEG OR FOOT	.2

The problem facing a clinician in the emergency room is not so clear as the "relative risk map" (above) might suggest. In order to evaluate the usefulness of such a risk map from the standpoint of a clinician, it is necessary to analyze the data from another perspective. For example, while it is true that 50% of injuries-events positively attributed to battering entail facial injuries, it does not follow that 50% of all facial injuries are due to battering.

The following table displays the data from a clinician's view:

SITE	POS	PROB	SUGG	NEG	TOTAL	X^2 significant at
HEAD	8%	15%	14%	63%	100%	< .01
FACE	13%	31%	10%	46%	100%	< .001
CHEST BREAST OR ABDOMEN	24%	32%	15%	29%	100%	< .001
FOREARM OR HAND	2%	5%	8%	85%	100%	< .001
LOWER LEG OR FOOT	1%	4%	8%	87%	100%	< .001
MULTIPLE	12%	33%	10%	45%	100%	< .001
(ALL EVENTS	5%	11%	13%	71%	100%)	

Two points must be understood about such injury mapping tables. First, there do appear to be injury patterns which are disproportionately related to battering, either positively or negatively, and this should serve to heighten the clinician's index of suspician in the case of injuries which are multiple, facial, head, chest, breast or abdominal injuries. Secondly, the clinician ought not to be lulled into an abandonmeat of his/her index of suspician solely on the basis of injury location. The fact that a patient presents with injuries to the feet, hands or head does <u>not</u> rule out battering as a possible etiology. In other words, this data is presented in order to encourage the heightening of the clinicians index of suspician, but is not to be understood as a substitute for a careful history and sympathetic patient interview.

A final note on injury patterns and description concerns the question of general severity of injury. One might postulate that battering leads to more severe injuries than other accidental causes. However, the clinician who uses such a standard or depends upon simple severity of

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injury to raise his/her index of suspician is making a serious error. If we consider hospital admission as one measure of severity of injury, we find that the incidence of hospitalization for injuries caused by battering does not differ from the incidence of hospitalization for injuries of other etiologies. For all the positive battering incidents in this caseload, surgical admission rate was 4%. For all the negative incidents in the caseload the surgical admission rate was also 4%.

This is not to deny or dispute Fonseka's finding that battering tends to escalate in its severity over time. Early in an abusive relationship, battered women may come to the emergency room for primary intervention in the abusive relationship rather than medical attention for an injury per se. In 11% of cases where a woman complained of assault by spouse or boyfriend, no evidence of specific injury was noted in the medical record, whereas only 2% of the negative population evidenced no specific injury (as, for example, women "to be checked" following a motor vehicle accident). Fonseka's suggestion of an escalating severity of attacks should serve to caution the naive physician against ignoring the real risks battered women face, and understand instead the severity of injury which is likely to occur if intervention is not available.

CONTEXTUAL DESCRIPTION OF POSITIVE EVENTS

The development of one's index of suspician is not, of course, limited to a consideration of injuries. One might suspect that battering is a function of age - and within certain limitations this is obviously true and a truism ie) children abused at age 6 are not considered battered women. However, considering the medically adult population, there does not appear to be any correlation between a patient's age and the likelihood of being battered:

Mean age of adults with injuries	33.7 years
at positive incidents	28.01
at probable incidents	28.27
at suggestive incidents	32.29
at negative incidents	35.46

X^2 is not significant

One might also postulate that the presence of children, and the number of children, in a home might have a positive or negative effect upon the likelihood of battering (that is children contribute to the stability or turmoil of a relationship). However, analysis of this sample reveals that the number of children in the family does not differ significantly between battered and non-battered women:

	Mean number of children
Total sample	2.626
Positives	2.697
Probables	2.533
Suggestives	2.552
Negatives	2.634

Pregnancy however, does appear to be related to battering. Pregnancy at time of trauma was established either positively or negatively by evidence from the medical records. Those cases where no definitive evidence was available to either establish or discount gravidity at the time of trauma were considered as blanks, but for purposes of data analysis, they were considered as not pregnant.

MINIMUM %AGE OF INCIDENTS WHERE PATIENT WAS GRAVID

POSITIVE	7%	OF	TOTAL	ALTHOUGH	(DATA AVAILABLE IN ONLY 55%)
PROBABLE	8%	"	"	"	(DATA AVAILABLE IN ONLY 40%)
SUGGESTIVE	2%	"	"	"	(DATA AVAILABLE IN ONLY 30%)
NEGATIVE	2%	"	"	"	(DATA AVAILABLE IN ONLY 74%)

These figures give a minimum estimate of the relationship between battering and gravidity. A maximum estimate can be reached by extrapolating

the above figures to 100% of the incidents in each category, and would show the following:

	ESTIMATE OF MAXIMUM %AGE OF INCIDENTS WHERE PATIENT WAS GRAVID
POSITIVE	7/55 = 12.7%
PROBABLE	8/40 = 20.0%
SUGGESTIVE	2/30 = 6.6%
NEGATIVE	2/74 = 2.7%

MARITAL STATUS AT TIME OF INJURY

Battering is not confined to the legal relationship of husband and wife. While this constitutes the most common relationship of battering, other relationships both familial and extra-familial may be involved. The following table displays the range of relationships found in the present sample of positive cases.

RELATIONSHIPS IN POSITIVE CASELOAD	
HUSBAND	54%
BOYFRIEND	32%
FATHER	5%
SON	4%
BROTHER	1%
FATHER IN LAW	1%
UNCLE	1%

Extrication from the legal constraints of matrimony however, does not necessarily guaranty an end to an abusive relationship. In fact, women who are separated or divorced as well as married are over-represented in the positive caseload:

MARITAL STATUS AT TIME OF INJURY AS % OF CATEGORY

	POSITIVE	PROBABLE	SUGGESTIVE	NEGATIVE
MARRIED	47%	16%	33%	30%
SEPARATED	11%	18%	13%	8%
DIVORCED	12%	15%	15%	6%
ENGAGED	1%	1%		
SINGLE	21%	32%	33%	43%
WIDOWED	1%	3%	2%	8%
NO DATA	7%	15%	4%	5%
	100%	100%	100%	100%

Calculation of the ratio of $\frac{\%\text{ of positive incidents}}{\%\text{ of negative incidents}}$ gives a rough estimate of the risk entailed vis a vis battering which is conferred by a particular marital status.

RELATIVE RISK INCURRED BY MARITAL STATUS

MARRIED	1.57
SEPARATED	1.37
DIVORCED	2.00
ENGAGED	can not be computed
SINGLE	.49
WIDOWED	.13

It is interesting to note that divorce increases the relative risk of battering and this should serve to underscore the difficulties that women face in safely extricating themselves from abusive relationships. A macabre note would call attention to the fact that, once married, the risk of battering falls significantly only for the widowed.

DISPOSITION AND TREATMENT

At the present time there is no therapeutic alternative for battered women seeking help at this emergency room yet as a composite group, they appear to receive treatment and disposition which are different than women injured in other contexts.

Battered women are more likely to leave the emergency room with a prescription for pain medication and/or minor tranquilizers than non-battered women. In fact, nearly one in four (24%) women who complain to medical personel "My husband (or boyfriend) beat me" leave with such prescriptions while less than one in ten (9%) of clearly non-battered women receive such medications. The distribution of medication at time of emergency room visit:

	PAIN AND/OR MINOR TRANQUILIZERS RX	
	% OF CASELOAD	% OF RX
POSITIVES	(5%)	10.0%
PROBABLES	(11%)	16.5%
SUGGESTIVES	(13%)	15.8%
NEGATIVES	(71%)	57.7%
	100%	100.0%

X^2 sign at < .001

No doubt that injuries deliberately inflicted by an intimate are more painful and upsetting; but pharmacologic salve appears to be a poor therapeutic choice given the previously presented evidence of the historic dimensions of battering and a dangerous choice in light of evidence to be presented on the risk of suicide attempts among battered women.

Disposition of cases also appears to be significantly different for battered and non-battered women. What is the present therapeutic alternative utilized by the surgical staff? Two points appear to be important. On the one hand, battered women are less likely to be followed in ER or surgery clinic for attention to their injuries. This may reflect the phenomenon previously discussed (pg. 22) of women seeking emergency room aid for intervention in the abusive relationship as opposed to aid for injuries that are the result of abuse. On the other hand, battered women are more likely than nonbattered women to be referred or committed to various psychiatric facilities by surgical staff. One is left with the undeniable data that, according to the surgical staff, a woman who complains "My husband (or boyfriend) beats me" has a psychiatric problem. It is not just a problem among the surgical staff however, as is revealed in the notes of a battered woman who was sent to the ER psychiatrist and was offered a short term stay in the Connecticut Mental Health Center. The woman refused with the retort, "But HE is crazy, not me."

CASE DISPOSITION

	POSITIVES	NEGATIVES
HOME	60%	75%
ADMIT SURG	4%	4%
F/U CLINIC	11%	20%
ER PSYCH	5%	1%
PSYCH CLINIC	3%	3%
CMHC	4%	-
CVH	3%	-

PSYCHIATRIC CONTEXT OF BATTERING

Clearly, psychiatric facilities are at present utilized as referral points for battered women. An immediate hypothesis which some might argue, is that psychiatric disorder among women is a cause or context for battering i.e. continued physical assault is the response of frustrated men to their

emotionally disturbed wives. If this were the case one would expect to find the incidence of psychiatric problems among battered women prior to the onset of battering was significantly greater than the incidence of psychiatric problems among non-battered women.

For purposes of this analysis, the date of onset of battering is taken to be the date at which a woman first presented to the emergency room with injuries suggestive of battering.

COMPARISON OF PROBLEM INCIDENCE/100 WOMEN

	NON-BATTERED	PRIOR TO BATTERING*	X^2 significant at
PSYCH ER	7	9	NS
CMHC	3.6	4	NS
CVH	1	2	NS
SUICIDE ATTEMPT	3	6	NS
DRUG ABUSE	1	2	NS
ALCOHOL ABUSE	1	7	< .001

*POSITIVE CASES

The problem incidence/100 women is slightly increased in the battered population, but is not statistically significant. Evidence on the incidence of such problems after the onset of battering is to be presented and will substantiate the probability that the slightly increased prevalence of such problems is most likely a methodological error due to the inaccuracy of dating the onset of battering from emergency room records.

Alcohol abuse is the one exception in the above table and it appears that in a subset of battered women, alcohol abuse is significantly more frequent prior to the onset of abuse than it is in a non-battered population.

It seems therefor that prior psychiatric disorder is not a sufficient explanation of the general cause or context of battering; though alcoholism among women may constitute a specific context which describes a small subset of the battered population prior to the onset of battering.

PSYCHIATRIC IMPACT OF BATTERING:

The failure of adequate medical-social intervention has been alluded to in previous sections above; the consequences of such failure are widespread. In fact, one could argue that the isolation imposed upon battered women by medical personnel re-enforces, contributes and in this sense imposes a psychiatric dilemma upon battered women with explosive repercussions.

If we consider specific psychiatric disorders such as suicide attempt, alcoholism and drug addiction on the one hand and psychiatric facility utilization as a marker of more general disorders on the other, we find that the frequency of such problems is markedly increased among battered women only subsequent to the development of a trauma history indicative of deliberate physical assault. Note that within this methodology this means such problems emerge subsequent to a woman's seeking aid in the emergency room for injuries resulting from battering.

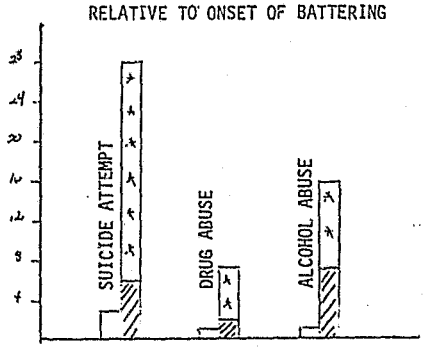
COMPARISON OF PROBLEM INCIDENCE/100 WOMEN

	NON-BATTERED	SUBSEQUENT TO BATTERING	X^2 sig. at
SUICIDE ATTEMPT	3	26	< .001
DRUG ABUSE	1	7	< .001
ALCOHOL ABUSE	1	16	< .001
PSYCH ER	7	37	< .001
CMHC	3.6	26	< .001
CVH	1	11	< .001

OVER

A graphic display of the comparative frequencies of such problems serves to underscore the impact of battering.

FREQUENCY OF PSYCHO-SOCIAL PROBLEMS /100 WOMEN
RELATIVE TO ONSET OF BATTERING

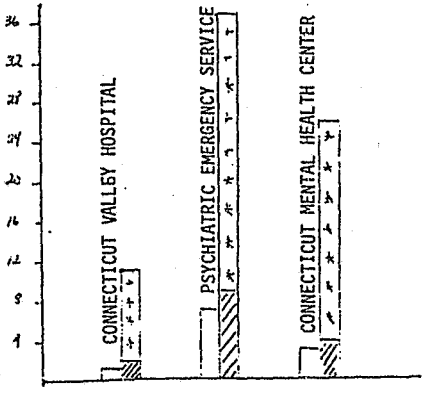


☐ FREQUENCY IN NEGATIVE POPULATION

▨ FREQUENCY IN POSITIVE POPULATION PRIOR TO BATTERING

⊞ FREQUENCY IN POSITIVE POPULATION AFTER BATTERING

FREQUENCY OF PSYCHIATRIC FACILITY USE /100 WOMEN
RELATIVE TO ONSET OF BATTERING



In short, we have shown that battered women are not only subjected to injuries far more frequently than non-battered women, but also that the present social service network interventions are inadequate to prevent the development of significant psychiatric sequelae.

In this sample:

28% of battered women tried to commit suicide

15% of battered women abused alcohol

9% of battered women abused drugs

37% of battered women used the psych ER

28% of battered women used the CMHC

15% of battered women were sent to CVH

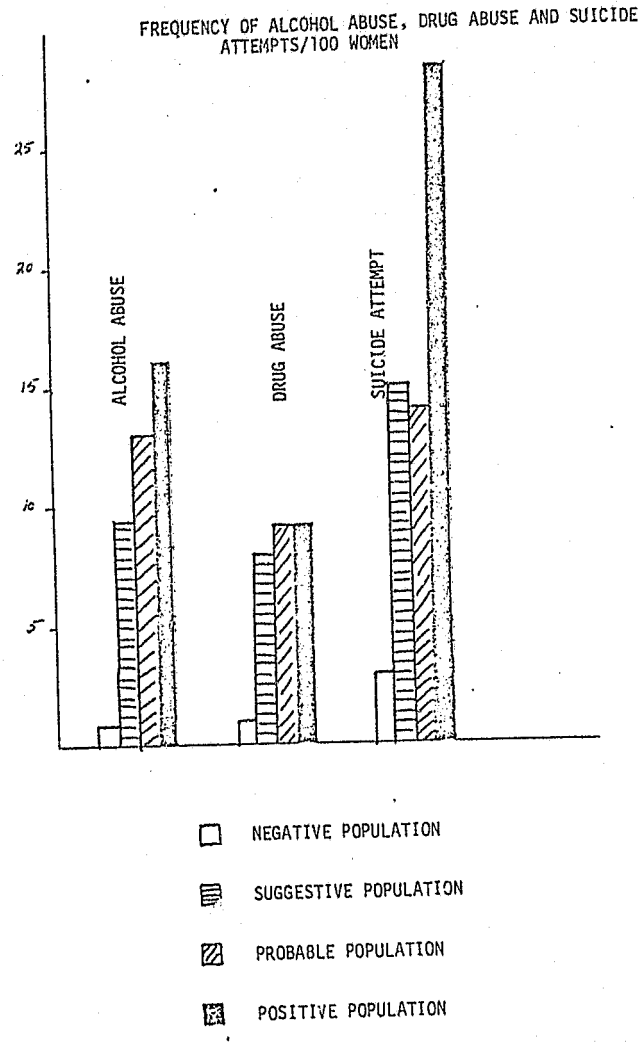
and as shown above, the vast majority of such problems began after first seeking aid for injuries suggestive of battering. In other words, had medical personnel recognized the significance of battering and utilized an index of suspician in the management of such cases, the serious sequelae noted above might well have been prevented.

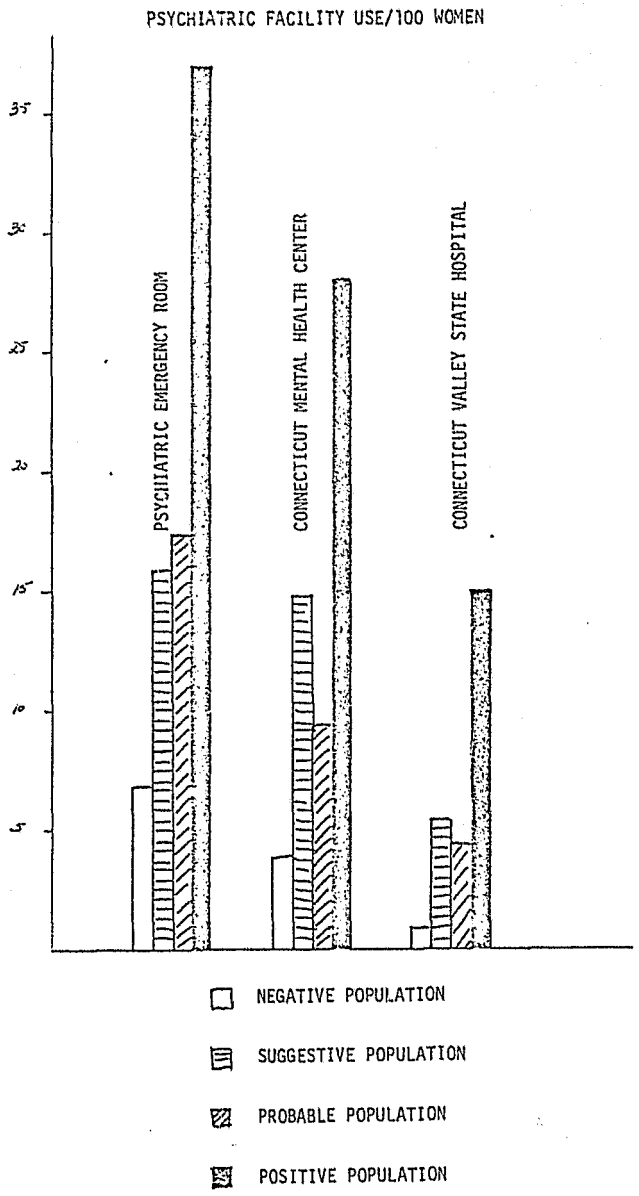
DESCRIPTION OF PROBABLE AND SUGGESTIVE POPULATIONS:

If, as hypothesized, injury patterns can be used to categorize deliberate physical assault then women who were categorized as suggestive or probably battered women should also manifest similar patterns of risk for the various psychiatric problems outlined above.

We might further hypothesize that those women who directly told medical personnel that injuries were inflicted by a spouse or boyfriend might well be those women for whom continued assault presented the gravest dilemma, either because of the magnitude or frequency of assault or the woman's own isolation.

Are the suggestive and probable caseloads actually battered women? As has been shown in previous sections on frequency of injury, and injury patterns, the suggestive and probable caseloads fall, as aggregate data, in an intermediate position between clearly non-battered and battered caseloads. A graphic display of psychiatric problems and psychiatric facility utilization reveals the same intermediary trend:


FREQUENCY OF ALCOHOL ABUSE, DRUG ABUSE AND SUICIDE ATTEMPTS/100 WOMEN
25
20
15
10
5
ALCOHOL ABUSE
DRUG ABUSE
SUICIDE ATTEMPT
NEGATIVE POPULATION
SUGGESTIVE POPULATION
PROBABLE POPULATION
POSITIVE POPULATION


PSYCHIATRIC FACILITY USE/100 WOMEN
PSYCHIATRIC EMERGENCY ROOM
CONNECTICUT MENTAL HEALTH CENTER
CONNECTICUT VALLEY STATE HOSPITAL
NEGATIVE POPULATION
SUGGESTIVE POPULATION
PROBABLE POPULATION
POSITIVE POPULATION

Further research is necessary to clarify the precise nature of the relationship between battering and the development of significant psychiatric problems in these intermediary caseloads, but it appears that they too are at risk for severe sequelae and at present ought to be considered battered. When one considers the generally fewer number of traumatic incidents in these caseloads it suggests that they are battered, but are in the early part of an abusive relationship. If this is true, one would expect that they also manifest fewer problems to date. Proof would of course, depend upon re-analysis of these at risk populations at some future date. A second possibility is that the intermediary samples are a composite of both battered and non-battered women and the relative numberical proportion of battered women in the probable and suggestive caseloads explains the intermediate status of the aggregated data.

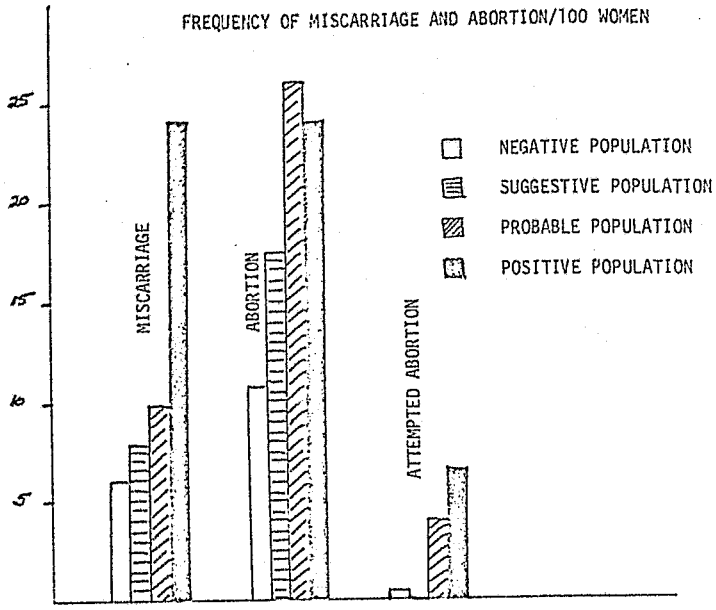
MEDICAL IMPLICATIONS OF BATTERING:

As has been demonstrated above, battered women utilize both the surgical emergency room and various psychiatric facilities at a higher rate than non-battered women. The frequency of injury, suicide attempts, drug or alcohol addictions and referral patterns of the surgical and psychiatric staff appear to contribute to this utilization pattern.

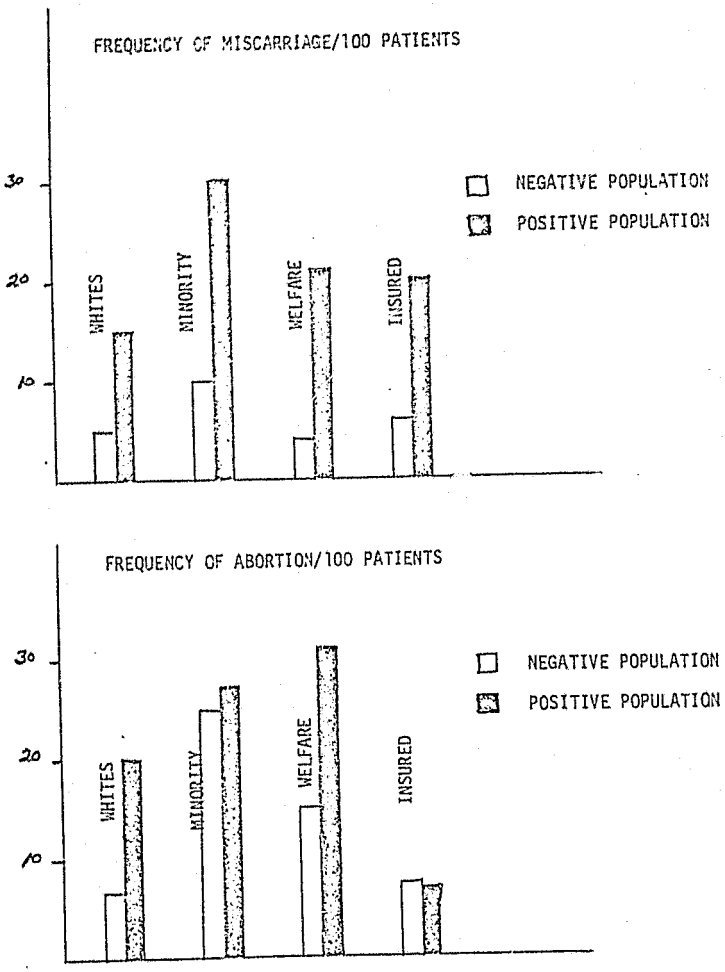
Battering is associated with a wide range of medical problems as well.

The injury pattern map for battered women revealed a high incidence of chest and abdominal injuries while analysis of pregnancy data showed that women were more likely to be injured while pregnant. It is not surprising to find therefor, that the rate of miscarriage is much higher for battered women. Nearly one in four battered women has suffered at least one miscarriage, while only one in fifteen of non-battered women in this caseload had miscarried. Again, the suggestive and probable cases fall in an intermediary position.

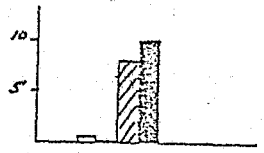
Whatever the dynamic that appears to contribute to an escalation of battering during pregnancy, it has been recognized by battered women for a long time. Prior to the advent of legalized abortion, battered women attempted abortion more frequently than non-battered women and with legalized abortion, battered women continue to choose abortion more frequently.


FREQUENCY OF MISCARRIAGE AND ABORTION/100 WOMEN
25
20
15
10
5
MISCARRIAGE
ABORTION
ATTEMPTED ABORTION
NEGATIVE POPULATION
SUGGESTIVE POPULATION
PROBABLE POPULATION
POSITIVE POPULATION

This appears to be a relatively consistent trend, regardless of race or rough socio-economic status:


FREQUENCY OF MISCARRIAGE/100 PATIENTS
30
20
10
WHITES
MINORITY
WELFARE
INSURED
NEGATIVE POPULATION
POSITIVE POPULATION
FREQUENCY OF ABORTION/100 PATIENTS
30
20
10
WHITES
MINORITY
WELFARE
INSURED
NEGATIVE POPULATION
POSITIVE POPULATION

As suggested above, this may be due to the association between pregnancy and further physical assault. It appears as well to be due to concern for the child's welfare. One in ten battered women have evidenced concern to medical personnel about abuse of their children:



CONCERN ABOUT CHILD ABUSE

A final note on the apparent relationship between intimate relations and battering is the finding that battered women in this caseload were raped eight times as frequently as their non-battered counterparts. The absolute number of rape cases in this sample is too small for statistical analysis, but the investigation of this finding is now underway. It suggests, of course, that women are not only beaten by their husbands and boyfriends, but raped as well. Note that as women had to struggle for legalized abortion, they are now having to struggle for recognition that rape is possible within a marriage and that prior association with a man does not grant him claim over sexuality within that relationship.

Thus far the problems of battered women have been shown to touch upon the surgeon, obstetrician, psychiatrist and pediatrician. But in order to complete the picture of the impact of battering upon medical services the internist must be considered. As background to this discussion the growing understanding of the relationship between stress and disease is important, as is the recognition that the physician-patient interaction may well be the sole confidential contact that battered women find possible. These two factors may help to explain the fact that battered women seek medical help more frequently than non-battered women, and rely upon the emergency room to a great extent.

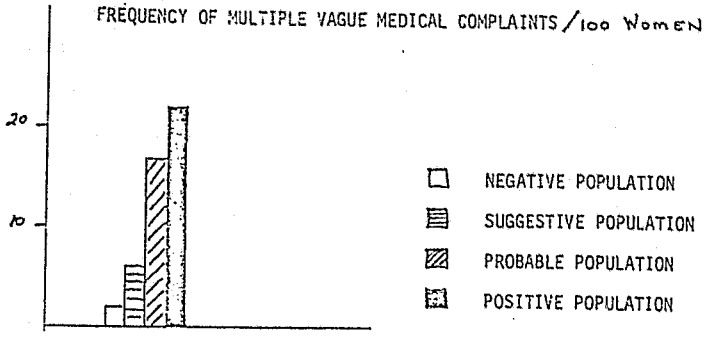
OVER

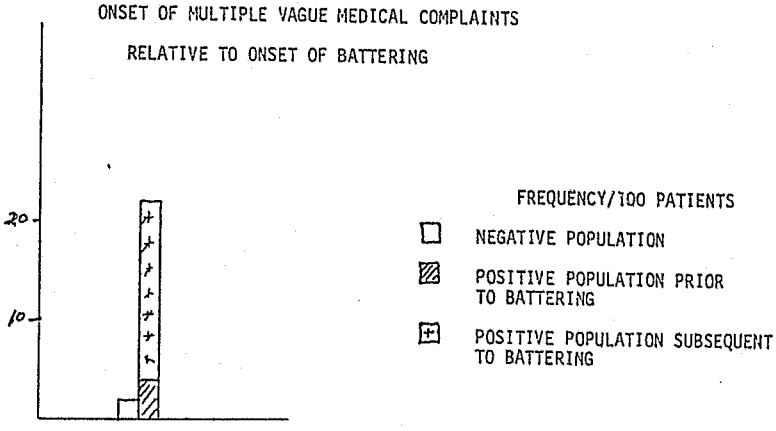
	MEAN NUMBER OF MEDICAL ER VISITS
POSITIVES	12.6
PROBABLES	9.5
SUGGESTIVES	6.2
NEGATIVES	2.8

Again, if this is normalized over time we can compute a "non trauma ER index" = number of visits/span in years.

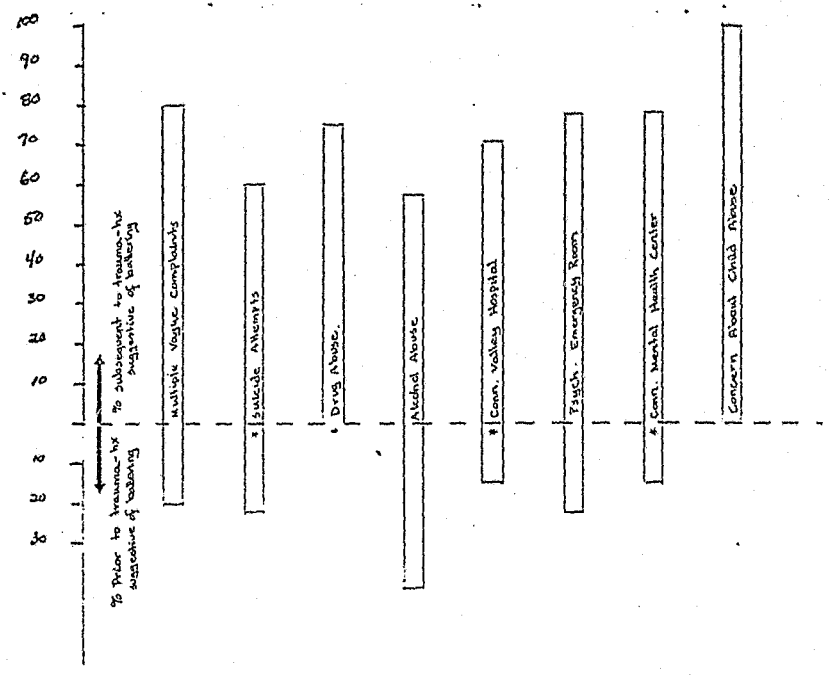
	NON TRAUMA ER INDEX
POSITIVES	1.6
PROBABLES	1.8
SUGGESTIVES	1.0
NEGATIVES	.7

Women present with a variety of complaints and problems, but in spite of the fact that a brief review of the medical record would enable the physician to understand a complex home situation, this appears not to be the case and not an arena in which internists care to intervene. What does appear to be the case however, is a consistent labeling process wherein headaches, bowel disorders, painful intercourse, and muscle aches with normal x-rays, GI series, scans and sed rates are the basis of a diagnosis of "hysteria", "hypochondriasis", "neurosis" or simply "well known patient with multiple vague medical complaints." All such diagnoses of course lead the internist to prescribe minor tranquilizers and sleeping medications rather than any serious consideration of battering as the real problem. Such labeling appears in aggregate data to represent a consistent trend among internists and we find, as in psychiatric disorders, that this appears to be a problem which arises subsequent to battering and is not therefor an indication of underlying personality characteristics.


FREQUENCY OF MULTIPLE VAGUE MEDICAL COMPLAINTS/100 WOMEN
20
10
NEGATIVE POPULATION
SUGGESTIVE POPULATION
PROBABLE POPULATION
POSITIVE POPULATION


ONSET OF MULTIPLE VAGUE MEDICAL COMPLAINTS
RELATIVE TO ONSET OF BATTERING
20
10
FREQUENCY/100 PATIENTS
NEGATIVE POPULATION
POSITIVE POPULATION PRIOR TO BATTERING
POSITIVE POPULATION SUBSEQUENT TO BATTERING

A summary of the relationship between battering and the onset of a host of other problems is best conveyed in the following graph which considers the relative percentage of problems within the positive caseload which occur prior to and subsequent to battering. As has been shown above, the incidence of such problems prior to battering is not significantly different than the incidence among a non-battered population except for alcohol addiction.



ONSET OF PROBLEMS OF BATTERED WOMEN

RELATIVE TO ONSET OF BATTERING

* % Of Cases where onset could not be determined

Suicide Attempts	7%
Drug Abuse	25%
CVH	14%
CMHC	8%

AN INVESTIGATION OF CULTURAL AND ECONOMIC VARIABLES:

If battering has its roots in the overall status of women within the society, one would expect that it would appear within all social classes, but with a greater frequency among those women who are oppressed not only on the basis of their biological status, but racial and economic status as well.

The data supports both aspects of this hypothesis as we find that battering does occur within all classes and races:

	% OF POSITIVES
METHOD OF PAYMENT	
Insurance	33.3
Welfare	42.2
Self	17.7
Other or none	6.6
	100.0
RACIAL	
White	43.5
Minority	56.5
	100.0

And it does appear from the vantage point of the emergency room that poor and minority women are at significantly greater risk for battering than their white and insured counterparts:

	RACE		PAYMENT	
	WHITE	MINORITY	INSURED	WELFARE
% POSITIVE	6.2%	17.5%	9.6	19.8
PROBABLE	2.2%	10.8%	.6	10.4
SUGGESTIVE	7.6%	17.6%	7.6	21.9
NEGATIVE	84.0%	54.1%	82.2	47.9
	100.0	100.0	99.0	100.0

However, it is likely that the decision to use emergency room service is in part determined by cultural, economic and geographic considerations

which may account, in part, for the apparent high rate of battering among impoverished and minority women. Analysis of geographic data underscores the complexity of thoretical generalization from the simple data given above for it appears that proximity to the emergency room contributes to the above data:

	PLACE OF RESIDENCE	
	NEW HAVEN	OTHER
POSITIVES	73.9	26.1
PROBABLES	95.0	5
SUGGESTIVES	66	34
NEGATIVES	43	57

Further evidence for such a distinction in perception of the usefulness of an emergency room can be seen if one considered the entire spectrum of battering and associated problems. Race and economic status appears to determine, in part, the point at which women seek emergency room intervention and aid. Minority and welfare patients appear to seek aid early in the development of battering, prior to the onset of significant psychiatric or medical illness while the white and insured populations manifest a significantly greater incidence of multi-institutional use and psychiatric problems before seeking aid in the emergency room for injuries which result from battering.

While on a aggregated basis, the pattern appears clear that women who are battered are at significant risk for the development of a range of problems including alcoholism, drug addiction, suicide attempts and psychiatric hospitalization the point of apparent relationship with the emergency room staff differs according to class and cultural determinants. In other words, white and insured patients are likely to present to the emergency room with a

history of severe problems in which battering is but a part of a complex situation while poor and minority women are more likely to present early in the syndrome with few problems other than battering. Note, however, that the end result of battering within the minority and poor population is more severe and this should underscore the importance of adequate protection and intervention at first presentation.

The alternative hypothesis, of course, is that battering itself represents an entirely different syndrome within social classes. It may well mark the point of isolation from social norms within a poor and minority population and, therefore, herald the onset of other problems which accompany such isolation. While in wealthier communities battering may emerge as a result of prior isolation and socially deviant contexts. A final conceptual framework is to consider the emergency room the point of last resort.

In such a case, poor or minority women may simply have fewer places to turn for aid and, therefore, come to this emergency room while white and insured women first explore the options of mental health facilities, counseling and self-destructive behavior. The emergency room clearly carries a different "meaning" for different populations and one of the challenges to any development of a crisis intervention team will be its capacity to overcome the distance between the emergency room and women of the more affluent classes.

COMPARISON OF THE FREQUENCY/100 PATIENTS OF PROBLEMS RELATIVE TO THE ONSET OF BATTERING WITHIN RACIAL AND ECONOMIC SUBPOPULATIONS

	TOTAL SAMPLE			WHITES			MINORITY			INSURED			WELFARE		
ALCOHOL ABUSE	1	7	16	1	10	15	1	4	15	2	7	13	1	5	21
DRUG ABUSE	1	2	7	1	0	10	1	0	4	1	0	0	2	0	11
SUICIDE ATTEMPT	3	6	28	3	10	25	3	4	27	3	7	7	9	10	46
MULTIPLE COMPLAINTS	2	4	22	2	10	20	1	0	30	1	13	13	7	0	36
PSYCHIATRIC ER	7	9	37	6	15	45	7	4	31	3	6	20	20	10	47
MENTAL HEALTH CTR	4	4	26	3	10	25	5	0	20	2	6	13	17	5	47
STATE MENTAL HOSP	1	2	11	1	5	15	1	0	12	1	0	7	4	5	27
	NEGATIVE	POSITIVE PRIOR TO BATTERING	POSITIVE AFTER BATTERING	NEGATIVE	POSITIVE PRIOR TO BATTERING	POSITIVE AFTER BATTERING	NEGATIVE	POSITIVE PRIOR TO BATTERING	POSITIVE AFTER BATTERING	NEGATIVE	POSITIVE PRIOR TO BATTERING	POSITIVE AFTER BATTERING	NEGATIVE	POSITIVE PRIOR TO BATTERING	POSITIVE AFTER BATTERING

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END