Characteristics of Violent Patients Admitted to Public Hospitals*

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Introduction

Violence can be directed toward others or toward one's self. In systematic studies of these forms of violence, suicide has received the most attention.[1-4] There have been some studies describing the characteristics of assaultive persons, but these have involved a small number of patients and have been limited to specific diagnostic groups.[5-7] Furthermore, assault and suicide rarely have been studied together except in the extreme forms; that is, cases resulting in death.[8,9]

This paper focuses on persons who have been admitted to psychiatric hospitals following assaultive or suicidal behavior. Some authors have suggested that these persons are at greater risk of subsequent violent behavior.[10-13] The present paper will describe the characteristics of the assaultive patients and compare them to other patients who were admitted. By virtue of our interest in trends for large numbers of patients rather than individual case studies, this study uses official data which is routinely collected for psychiatric patients in New York. It is to be hoped that the quantitative data in this paper will be of value to geographic areas where an official data system does not exist. The implications and recommendations regarding intervention in the community by mental health and law enforcement agencies will be discussed in light of the findings.

Methods

The study population included all patients admitted during a one-year period from April 1, 1974 through March 31, 1975 to public psychiatric hospitals in the suburban counties of Nassau and Suffolk on Long Island in New York State. These hospitals account for a majority of psychiatric admissions in this geographic area, which has relatively few non-public hospitals for psychiatric patients. The source of data was the admission form (MS-5) which is completed for each patient admitted to a public hospital in New York.[14] The form contains a wealth of demographic and clinical data. In addition to diagnosis, the hospital staff indicate the presence of one or

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more "problem areas" for a patient at the time of admission or up to two weeks prior to admission. These problem areas cover signs and symptoms usually found in the mental status examination. The problem areas of interest to this study were the presence of assaultive acts, suicidal acts or suicidal thoughts. Assaultive acts included only assaultive behavior against persons. Less clearly defined problems such as anger, belligerence, neagtivism, agitation, hyperactivity or non-assaultive anti-social acts were excluded. The presence of assaultive behavior or suicidal problems was analyzed in relation to clinical and demographic characteristics of patients. All of the results presented in this paper were found to be statistically significant, with a "p" value less than or equal to .001 using chi square.

Results

During the study period, there was a total of 9,365 patients admitted to hospitals in this region. Approximately 21% of these patients had problems with violence; that is, assault and/or suicide attempt prior to admission. Eight per cent of patients had assaultive problems alone, 11% suicidal problems alone, and 2% both assaultive and suicidal problems. The finding of 10% of patients with assaultive behavior with or without suicidal problems approximates the 12% of "attacks on persons" found in a study by Lagos,[15] who looked at a smaller number of patients, but assessed the presence of violent aggressive behavior in more depth than our study.

The frequency of assaultive behavior differed by sex. Male patients were more likely to have problems with assault prior to admission; and females were more likely to have suicidal problems. Furthermore, males who were assaultive were twice as likely to have suicidal problems than were males who were not assaultive. The rest of the analysis was stratified by sex.

As seen in Table 1, many assaultive patients were in the younger age groups so that 58% of male and 45% of female assaultive patients were under 34 years old. Both assault and suicidal problems were found to be over-represented in the younger age groups when compared to non-violent patients. In addition, there was a relative increase of assaultive behavior in the age group 65 years and older. This latter finding will be discussed later in relation to a diagnosis of organic brain syndrome and source of referral to hospitals.

TABLE 1
AGE DISTRIBUTION OF ASSAULTIVE PATIENTS

Age	Males (N=597) %	Females (N=326) %
Less than 18 years	15	13
18-24 years	19	10
25-34 years	24	22
35-44 years	16	18
45-64 years	14	18
65 years and above	12	19
	100	100

Table 2 presents the diagnostic distribution of assaultive patients. It should be noted that organic brain syndrome did not contain alcohol or drug-related disorders, and the affective disorders were primarily depressive

in nature. The category of "other disorders" included predominantly non-psychotic disorders such as transient-situational disturbances, maladjustment reactions and personality disorders. This diagnostic distribution for assaultive patients differed from the diagnostic distributions for other patients in that assaultive patients were more likely diagnosed as paranoid-schizophrenia and organic brain syndrome. For males only, assaultive patients also were increased in the non-paranoid schizophrenia categories. The diagnoses with increased risk of assaultive behavior represented a substantial number of patients, 52% for male and 33% for female patients.

TABLE 2
DIAGNOSTIC DISTRIBUTION OF ASSAULTIVE PATIENTS

Primary Diagnosis (DSM-II)	Males (N=597) %	Females (N=326) %
Organic brain syndromes	13	15
Paranoid schizophrenia	15	18
Non-paranoid schizophrenia	24	20
Affective disorders*	8	16
Alcoholism & drug abuse	20	10
Other diagnoses	20	21
	100	100

*Predominantly depressive disorders

Table 3 presents the educational and racial characteristics of the assaultive patients. The unknown category was high, but trends regarding other characteristics of patients in the unknown category tended to resemble those of patients in the lower levels of education. When controlled for age, the categories of education below the eighth grade and of unknown educational level were found to be associated with increased problems with assault as well as suicide for males. Female patients in these educational categories were found to have a relative increase only of assaultive behavior. As seen in the second part of Table 3, whites were predominant in our sample. However, when race was analyzed with stratification by education, there was a statistically significant association only at the high school level of education. Blacks were more likely to have assaultive behavior and whites were more likely suicidal in the high school level.

TABLE 3
EDUCATIONAL AND RACIAL CHARACTERISTICS OF ASSAULTIVE PATIENTS

Education	Males (N=597) %	Females (N=326) %
Eighth grade and lower	27	25
High School (9-12th grade)	32	32
Some College	11	8
Unknown	30	35
	100	100
Race		
White	77	75
Black	19	19
Others	4	6
	100	100

As seen in Table 4, 10% of male patients and 14% of female assaultive

patients had received care sometime in the past from a private psychiatrist or other private therapist. These percentages for assaultive patients were definitely lower than percentages found for non-assaultive patients in this study. This finding is in agreement with previous studies by Tardiff,[16,17] which suggested that psychiatrists in private practice are reluctant to see assaultive patients unless financial barriers are overcome. Table 4 also shows that only 3% of male and 1% of female assaultive patients had been incarcerated sometime in the past. Although these percentages are low, they are relatively higher than those found for other patients admitted in this study.

TABLE 4
PRIOR CONTACT WITH PRIVATE CARE AND PENAL INSTITUTIONS FOR ASSAULTIVE PATIENTS

Prior Contact with Private Care	Males (N=597) %	Females (N=326) %
Yes	10	14
No	90	86
	100	100
Prior Incarceration in Penal Institution		
Yes	3	1
No	97	99
	100	100

Table 5 shows the types of persons or agencies who referred assaultive patients to hospitals. Overall, when compared to other patients, assaultive patients were more likely referred by the police, courts and mental health and social agencies and less likely by themselves. There were no differences in terms of being referred by family or medical sources. Considering only assaultive patients, analysis of their ages by sources of referral revealed three basic patterns. Assaultive patients under the age of 25 years were more likely referred by their families and by mental health and social agencies. These patients were more likely diagnosed either as non-psychotic disorders such as adjustment reactions and personality disorders or as non-paranoid schizophrenia. The source of referral probably was related to diagnosis in that the family referred non-psychotic patients with interpersonal or family problems, and the mental health agencies referred psychotic patients.

The second pattern involved the intermediate age groups (25-34 years and 35-64 years). These patients were more likely referred by the police or courts. Of those referred by police, 98% had not been in a penal institution, while of those referred by the courts, 25% had been in a penal institution at some time in the past. In addition to greater referral by the police or courts, patients in the intermediate age groups were more likely than patients in other age groups to be referred by themselves. In the intermediate age group, there was a greater proportion of paranoid and non-paranoid schizophrenia as well as alcoholism and drug dependence. It appeared that non-psychotic patients were more likely to be self-referred.

The third pattern involved assaultive patients over the age of 65 who had increased diagnoses of organic brain syndromes. Medical practitioners and other sources in the community such as nursing homes were the prime sources of referral. These admissions were usually the first admission to a

psychiatric hospital in the patient's lifetime.

TABLE 5
SOURCES OF REFERRAL TO HOSPITAL FOR ASSAULTIVE PATIENTS

Source	Males (N=596) %	Females (N=326) %
Self	13	12
Family	18	25
Police	11	10
Courts	3	1
Medical	7	12
Other mental Health & social agencies	48	40
	100	100

Discussion

This paper has described the frequency of assaultive and suicidal problems in patients admitted to a large public system of psychiatric hospitals and has pointed out how assaultive patients differ from non-assaultive patients. We believe that these findings are generalizable to other geographic areas in the United States and, by virtue of the sparsity of other types of hospitals in the area studied, may be extrapolated with caution to non-public hospitals. This study used official, routinely gathered data and duplicated the findings of smaller studies in regard to the frequency of assaultive behavior and suicidal problems in relation to age and sex. It is reassuring to find that the use of this utilization data is reliable, for it is an efficient method of studying trends of violence as well as other problems in large populations of patients. The results of the present study could lead to profuse speculation regarding trends in assaultive behavior by age, sex, education, race and diagnosis; however, we will restrict ourselves to a few comments concerning intervention.

Schizophrenia and assaultive behavior loom as an important issue, for such behavior is not as predictable as in non-psychotic disorders and is often the product of delusional or generally disorganized thinking. In this study, schizophrenics represented a higher relative risk as well as a higher absolute number in regard to assaultive behavior. Rapid hospitalization and treatment with medication are essential. Interpersonal intervention is secondary and should follow stabilization with medication. Following discharge from hospital, aftercare by clinic staff who are willing to reach out to these patients and support them through psychological and social intervention is necessary to insure continuation of medication, social adjustment, and decreased subsequent hospitalization.

Increased assaultive and suicidal problems in the younger age groups once again call attention to the urgency of problems facing our youth. Intervention by mental health professionals should be directed towards families and schools for those young people facing interpersonal difficulties associated with adolescence. A successful school consultation and intervention program using group therapy was described by Ponce, who pointed out the interaction of economic deprivation and stress in families in relation to violence in high school.[18]

In the intermediate age groups, the police and courts replace the family as a source of referral to hospitals for assaultive patients. In our study the police appeared to refer assaultive patients directly to hospitals with infrequent incarceration in penal institutions. As mental health professionals, we have the responsibility of assisting police with assaultive and suicidal persons. There are indications that such assistance in the form of consultation and education as well as crisis intervention will be welcomed, for these were ranked as top priorities by police in a survey by Brown which assessed their views on the role of mental health professions in law enforcement.[19] Once therapy begins, special efforts should be made to involve spouses in treatment, given the frequency with which spouses are the target of assault by psychiatric patients as well as the general population.[20]

Last, the importance of medical consultation and intervention for the elderly in the community is underscored in this study. Often confusion, assaultive behavior, and other manifestations of organic brain syndrome are due to reversible but unrecognized medical conditions such as incipient congestive heart failure or infection.[21] Although assaultive behavior in the elderly may not be as lethal as in youth, perhaps increased medical consultations in nursing homes and other facilities in the community could have prevented hospitalization of some of the patients with organic brain syndromes in our study.

In conclusion, we have presented demographic and clinical trends regarding assault, suicide and hospitalization using routinely gathered, official data. Public concern regarding confidentiality of data banks may impair the collection of such data in the future. The balance between the need for research and the protection of the rights of individuals always has been a delicate one. We hope that a mechanism to insure confidentiality of patient records will not jeopardize the ability to implement research for planning services aimed at diminishing violence and other problems in the community.

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