

Psychiatrists Injured by Patient Attack

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The seven staff psychiatrists injured by patient attack in a large forensic hospital in five years were compared with the 47 who were not injured by attack. Thirteen percent of the psychiatrists were injured by patient attack (2.6 percent per year); 5.5 injuries per 100 person-years occurred. This rate is comparable to the rate of injury from patient attack noted among ward nursing staff during the same period. Younger psychiatrists, and psychiatrists more recently out of residency, were more likely to be injured. Male psychiatrists were injured at a rate approximately 50 percent higher than female psychiatrists, and graduates of university-affiliated residencies were three times as likely to be injured as graduates of public-sector residencies, though these differences did not reach statistical significance. A slightly higher rate of injury was noted among graduates from non-North American medical schools. Board-certification and length of service in the hospital were not related to being injured.

Violence against psychiatrists and other staff in mental health settings is an important issue in modern mental health policy.¹⁻⁴ Such violence affects the atmosphere, programs, staff, and patients of hospitals caring for the mentally ill. It may be difficult to conduct therapeutic programs or retain effective staff in an environment colored by violence against staff.

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The literature on patient violence against psychiatrists is limited. The most common report has provided the lifetime prevalence in a surveyed group. In a survey of the 115 psychiatrists on the University of Maryland faculty, 41.7 percent reported having been assaulted—and two-thirds of these during their residency.⁵ Forty-two percent of the psychiatrists in a sample of psychotherapists in the San Diego area reported having been assaulted by patients.⁶ In response to a questionnaire, 20.2 percent of 391 Philadelphia psychiatrists and 24.4 percent of 45 London psychiatrists reported having been assaulted.⁷ In a national survey, 3.2 percent of 156 psychiatrists reported having been assaulted by outpatients.⁸

In a recent survey of Oregon Psychiatric Association members with a 56

percent response rate, 11 percent reported being assaulted by a patient with a result serious enough to require medical attention. Of the sample, 38 percent reported assaults with mild physical harm not requiring medical attention, 47 percent reported assaults with the potential for harm, and 55 percent reported assaults with aggressive intent.⁹

Miller¹⁰ conducted a survey of members of the American Academy of Psychiatry and the Law, with a 48 percent response rate. Of the respondents, 3 percent reported having been attacked "in connection with their involvement as expert witnesses in forensic cases." Seventeen percent had been threatened with physical harm, 13 percent had been threatened with nonphysical harm, and 12 percent had been threatened with both physical and nonphysical harm.

While these studies provide an estimate of lifetime prevalence of assault by patients, these do not permit calculation of the rate of assault by year. The following studies presented data on person-years of exposure, which permits calculation of rates of assault per person-year.

In the one study that compared psychiatrists who had been attacked with peers who had not, Ruben *et al.*¹¹ interviewed 19 second- and 12 third-year University of Southern California psychiatry residents. Forty-eight percent of the sample had been attacked at least once. With a total of 21 attacks in at most 74 person-years, a rate of at least 28.4 physical attacks per 100 person-years can be obtained.

In a recent survey of psychiatric residents in Pennsylvania,¹² 41 percent of

155 respondents reported having been assaulted during training; 21 percent reported having been assaulted in the past year. In Haffke and Reid's¹³ survey of Nebraska psychiatrists, 31.5 percent stated they had been the victim of assault at some point in their careers, 16.7 percent in the previous year.

In a survey of mental health professionals in the Cincinnati area,¹⁴ 53 psychiatrists reported 33 assaults (for a rate of 62.3 assaults per 100 person-years), a much higher rate of assault than the psychologists and social workers surveyed, who experienced 18.8 assaults per 100 person-years.

We found no injuries from patient attack among psychiatrists in our previous one-year study at a large California forensic hospital.¹

As we have commented elsewhere,¹ there are a number of limitations of previous studies: first, few studies permit the calculation of rates of violent event by person-years of exposure; second, the definition of violent event is not always specified; and third, only one study has compared psychiatrists attacked with a comparison group. The current study was conducted to (1) determine the rate of injury from patient attack (a standard definition of violent event) among staff psychiatrists at a large state forensic hospital, and (2) compare psychiatrists injured from patient attack with psychiatrists at the hospital who were not injured during this period.

Methods and Study Site

This article is part of an ongoing study of staff injuries from patient violence at

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Atascadero State Hospital, a 973-bed forensic hospital located on California's Central Coast. The characteristics of the hospital, all of whose patients are men, are described elsewhere.^{1, 15} We studied the staff psychiatrists employed at the hospital in the five years from January 1984 through December 1988, comparing the psychiatrists injured by patient attack with those not injured by attack.

Injuries from patient attack are reported by the hospital's Health and Safety Office when they cause "one or more of the following: lost workdays, loss of consciousness, restriction of work or motion, termination of employment, transfer to another job, or medical treatment (other than first aid)." This definition of injury, identical to that used in OSHA-mandated reports, is standard in occupational health. As in our previous study, this definition of an assaultive event was used for its precision and usefulness in a quantitative study, and because it describes an event with a higher threshold of severity than the sometimes less-clearly defined "assault." We calculated the person-months of exposure (in our previous work,¹ we calculated person-years).

The staff psychiatrists employed at the hospital between January 1, 1984, and December 31, 1988, were identified. For these psychiatrists, the following data were obtained: (1) gender, (2) date of birth, (3) start and finish dates of employment at the hospital, (4) name and date of completion of psychiatric residency, (5) name and date of completion of medical school, and (6) ABPN board-certification status. This study was

approved by the appropriate hospital committee for the protection of human subjects.

Study Population In the five years studied, 54 staff psychiatrists were employed by the hospital for 1,542 person-months (128.5 person-years, an average of 25.7 full-time equivalent psychiatrists a year). Forty-two (77.8 percent) were male; 12 (22.2 percent) were female.

Twenty-six graduated from university-affiliated psychiatric residencies (50 percent of those for whom information was available); 26 graduated from public-sector residencies (50 percent). Thirty were ABPN board-certified (57.7 percent of those for whom information was available); 22 were not (42.3 percent). Thirty-five graduated from American medical schools (one additional psychiatrist was a Canadian medical graduate) (69.2 percent); 16 graduated from medical schools located outside North America (30.8 percent).

Of the staff psychiatrists, nine were born between 1946 and 1956 (and would have been between 30 and 40 years of age in 1986, the mid-point of the study period); 11 were born between 1936 and 1945 (and would have been between 41 and 50 years old); 21 were born between 1926 and 1935 (51 to 60 years of age); 10 were born between 1916 and 1925 (61 to 70 years old); and two were born before 1916 (over 71 years).

Thirteen completed their psychiatric residency after 1976 (less than 10 years before 1986, the mid-point of the study period); 10 finished between 1971 and 1975; 11 between 1966 and 1970; and eighteen before 1966.

In the five years studied, 37 person-years were experienced by staff psychiatrists in their first year at the hospital; 28 person-years by psychiatrists in their second year; 20 by psychiatrists in their third year; 21 by psychiatrists in their fourth and fifth years; 16 by psychiatrists in their sixth through 10th year; and seven by psychiatrists in their 11th through 15th year.

Results

Injuries In the five years, seven staff psychiatrists were injured by patient attack (13.0 percent of the staff psychiatrists employed during the five years—2.6 percent per year). The rate of injuries per 100 person-years was 5.5. All injuries resulted from a weaponless attack. Five of the injuries were head injuries; the other two were related to stress response, although the initial event was an assault to the head. In six cases, the psychiatrist was struck in the head; in the seventh, a patient attempted to choke the psychiatrist. In two instances, the assault occurred during an interview (in one case, the psychiatrist was accompanied by a member of the ward nursing staff, who sat between the psychiatrist and patient and was also assaulted in the episode); two psychiatrists were assaulted by a patient in the hospital's main hallway in a single incident; two psychiatrists were assaulted by patients in ward encounters unrelated to patient interviews; and one psychiatrist was assaulted during a group therapy session.

Age Psychiatrists born in 1949 or later (who would have been under 36 years of age in 1986, the mid-year of the

period studied) were more likely to be injured by patient attack than psychiatrists born before 1949 (over 37 years old in 1986) (22.6 injuries per hundred person-years vs. 3.5 injuries, Fisher exact test = .0290).

Years out of Residency Psychiatrists who completed residency in 1976 or later (less than 10 years before 1986, the mid-year of the study) were more likely to be injured by patient attack than psychiatrists completing residency before 1976 (13.9 injuries per 100 person-years vs. 3.1 injuries, Fisher exact test = .05).

University vs. Public Sector Psychiatric Residency There was a tendency for graduates from a university-affiliated psychiatric residency to have a higher rate of injury from patient attack than graduates of public sector psychiatric residencies (Fisher exact test = .16). Five of 26 psychiatrists who completed university-affiliated residencies were injured by patient attack (rate = 8.7 injuries per hundred person-years), compared with two of 26 psychiatrists who completed public-sector residencies (rate = 2.9).

Years of Service in the Hospital There was no relation between years of service in the hospital and injury from patient attack. Two injuries occurred in the first six months of service (for a rate of 5.3 injuries per 100 person-years in the first year); no injuries occurred in the second six-month period. One injury occurred in the second year (for a rate of 3.6); none in the third year; three occurred in the fourth and fifth year (rate = 14.3); one in the sixth through 10th year (rate = 6.1); and none in the

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11th through 15th years (chi-square = 4.313, $df = 5$, p not significant).

Gender Six of the seven injured psychiatrists were male. Male psychiatrists experienced 5.9 injuries per 100 person-years; the rate for female psychiatrists was 3.8; 14.3 percent of male psychiatrists and 8.3 percent of female psychiatrists employed in the hospital were injured during the five years (Fisher exact test not significant).

Board Certification There was no relation between board certification and injuries from patient attack. Four of 30 staff psychiatrists with certification were injured (rate = 5.6 injuries per hundred-person years) vs. three of 22 staff psychiatrists without (rate = 5.5) (Fisher exact test not significant).

Foreign vs. North American Medical School There was no relation between graduation from foreign vs. North American medical school and injuries from patient attack. Three of 16 graduates of foreign medical schools were injured (7.6 injuries per 100 person-years); four of 36 graduates of North American schools were injured (rate = 4.7) (Fisher exact test not significant).

Fellows In addition to the staff psychiatrist injuries reported above, one forensic psychiatry fellow was injured by patient attack during this period, in which fellows were at the hospital for 6.2 person-years. This yielded a rate of injury of 16.1 per 100 person-years.

Discussion

While this is the largest study comparing psychiatrists injured from patient attack to psychiatrists at the same hospital

who were not injured by patient attack, the 128.5 person-years observed is relatively small. Therefore, the data reported here permit only tentative conclusions.

In addition, not all aggressive patient behavior toward psychiatrists was included in this study: only injuries from attack, as defined in a standard manner. As has been discussed elsewhere,^{1, 3, 9, 16} patient aggression against staff includes a wide variety of behavior, with varying degrees of potential and actual harm. In our study, an aggressive act against a psychiatrist was more likely to be recorded as an injury than a similar event against nursing staff. The threshold for defining an aggressive act as an "injury" seems to be lower with psychiatrists than when the other staff are involved.

We found that younger psychiatrists and psychiatrists with less experience (as measured by time since completing psychiatric residency) were more likely to be injured by patient attack. While no previous study has been able to explicitly examine the issue of age and experience, this is compatible with previously reported data regarding attacks on psychiatric trainees.^{5, 11}

However, even though two of the injuries occurred in the first six months in the hospital, we found that length of experience in the hospital was unrelated to the rate of injury from patient attack. This suggests that youth and relative inexperience as a psychiatrist—although not necessarily inexperience in a given hospital—are risk factors for injury from patient attack.

The association between age and experience of clinician and the likelihood

of being the target of patient aggression is complex. One set of factors is related to the degree to which the clinician works in settings and with patients in which the issue of aggression is salient. It has been hypothesized that younger psychiatrists may be at greater risk, in part, because early stages of psychiatric careers often include work in settings in which patient aggression is more likely.³ Our study provides evidence that, in the same setting, younger and less experienced psychiatrists still experienced a higher rate of injury. We should note that, while difficult to quantify, the younger and less experienced psychiatrists who were injured tended to be working with patients who were more acute clinically. Thus, even within the same hospital younger psychiatrists may be assigned to more challenging populations.

Another factor may be that the younger psychiatrists in this study were close in age to the mean age of the hospital's patient population. Patients may be more aggressive toward psychiatrists more similar to them in age and, possibly, other characteristics.

Finally, it seems likely that as psychiatrists gain experience with potentially aggressive patients, specific skills are learned which are useful in avoiding injury from attack. The specific effects of experience on psychiatrist's behavior that might provide protection from patient aggression need to be studied. In effect, what do we learn in post-residency practice, as opposed to in residency training, which is of value in preventing patient assault?

We found a trend for graduates of public-sector psychiatric residencies to be less likely to be injured by patient attack than graduates of university residencies. This implies that factors which may be related to public-sector residencies, such as experience with more severely ill populations, may be related to psychiatrist behavior that lowers the risk of injury from patient attack. It is also possible that university-affiliated residencies are not as successful as public-sector programs in training psychiatrists in behavior that lowers the risk of injury from patient attack. Should this finding be confirmed in other studies, this implies that in some residency programs curricula on management of violent patients should be revised. Further study of this issue, with a larger sample, is needed.

Our finding of a higher rate of injury from patient attack among male psychiatrists is compatible with our finding that male nursing staff were more likely to be injured by patient attack.^{1, 17}

Board-certification was unrelated to injury from patient attack. This implies that cognitive knowledge, as measured by ABPN certification, is unrelated to risk of injury from patient attack. Similarly, graduation from an American vs. foreign medical school was not significantly related to injury from patient attack.

This study did not examine the personality characteristics or clinical styles of the staff psychiatrists. These factors are certainly relevant to injuries from patient attack. One study provided impressionistic data which "indicated that

the personality of the psychiatrist was related to being attacked, namely, psychiatrists who are highly irritable, who speak up when mildly angry, and who are likely to fight when faced with a physically threatening situation are substantially more likely to be attacked than psychiatrists who do not have these attributes.¹¹ Otherwise, the literature to this point is largely silent. Further study is needed.

It is worth considering the nature of the risk of injury from patient attack in a public or institutional setting. It is plausible that the rate of injury in such a setting is higher than that experienced by psychiatrists working in private sector or outpatient settings. A psychiatrist working in the latter settings may be less likely to be struck by an assaultive patient—but when an assault occurs it is more likely to pose the risk of very serious injury. In such a setting, there is less control over issues relevant to the potential lethality of an attack, such as patient access to weapons¹⁸ and patients' potential access to the clinician in vulnerable settings (such as street, car, or home).¹⁹ In a well-run inpatient setting, these factors are more likely to be controlled; the clinician in such a setting, while exposed to a higher risk of verbal and physical assault, may be at somewhat lower risk of a potentially lethal assault. Inpatient aggression in the institutional setting generally occurs in a context in which everyone involved knows that the violent episode will be contained by clinical staff. Thus, the dangers are more likely to be limited. Such limits may not be available in noninstitutional settings.

But as we consider the risk of injury from attack by patients in a setting such as a public forensic hospital, we should pay attention to our profession's responsibility to care for needy and underserved psychiatric populations. Responding to this challenge includes increasing one's exposure to potentially aggressive patients. Therefore, the psychiatrist must find an ethical balance between appropriate concern for one's personal safety and a moral response to the needs of underserved psychiatric patients.

This report documents a noteworthy rate of injury from patient attack, 5.5 injuries per 100 person-years, among staff psychiatrists in a forensic hospital. As we report elsewhere, this rate is equivalent to the rate of injury from patient attack among nursing staff at the hospital:¹⁷ although, as we comment above, we believe that psychiatrists were subject to a lower rate of patient assault than nursing staff. We do not believe that the hospital studied is an unusually hazardous work setting for public-sector hospital psychiatrists; in fact, the rate of injury at this hospital may be lower than at other state hospitals.

The implications of this risk of injury from patient attack—with its attendant sequelae, both psychological and physical—on recruiting and retaining skilled and dedicated staff in public sector psychiatric settings need to be acknowledged as a public policy issue.

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