

Patient Violence in Psychiatric Residency: A Nationwide Survey

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Abstract

Twenty percent of current psychiatric residents (N = 517) responded to a nationwide survey about patient violence. Thirty six percent of responders reported 630 assaults, with 74% of residents receiving 1,853 threats. While age and training level were correlated to each other ($r = .35$, $p < .001$), no correlations were found between gender, age, height, weight, number of hours of violence management training and the occurrence of assault and threat. A smaller proportion of first year residents reported assaults and threats, and more males (79%) had been threatened (females = 69%). Sources of study bias are identified and future research directions are outlined.

(Suggested Keywords, Index Medicus MeSH: Assault, Threat, Psychiatric Residency)

A growing body of research suggests that psychiatric residents are at significant risk for experiencing patient violence during their training (1,2,3). Fink, Shoer, and Burin (1991) reported that 41% had been assaulted and 48% had been threatened of 333 psychiatric residents surveyed in Pennsylvania (4). More recently, Black et al. (1994) found that a significant proportion (56%) of residents in an Eastern psychiatry program had been assaulted, with nearly all residents receiving verbal threats (5).

While research to date consistently documents a high rate of violence against psychiatric residents, findings regarding the relationship between gender and chance of assault have been mixed. Four studies suggest that females are more apt to be assaulted (1,2,3,6). However, gender differences in rate of assault were not found by Fink et al. (1991). While reasons for inconsistent findings are unclear, an important factor in appraising the relationship between gender and assault is resident size (height and weight). Only one study has assessed the correlation between height and weight and assault, and no significant relationship was found (2). However, the small sample size ($n = 31$) raises questions about the reliability of the finding.

The relationship between resident age, training level, and patient violence is also indefinite. While younger psychiatrists have been found to be at greater risk for assault, only one survey of psychiatric residents has reported a relationship between age and assault rate (1,7,8). Yet, the relationship was not statistically significant. In

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other studies, age and number of attacks have not been correlated (2,4). Research by Madden, Lion, and Penna (1976) suggests that level of experience (year in training) may be associated with assault. Thus, for psychiatric residents, training year and hours of violence management training may be salient in understanding the relationship between age and assault.

Collectively, research to date suggests that psychiatric residents are at significant risk for experiencing patient violence during residency training. However, because there have been only a handful of studies conducted, and most have had small sample sizes of limited geographical scope, additional research is clearly warranted to confirm, clarify, and extend previous findings, particularly in terms of the importance of resident characteristics for patient violence.

The present study aimed to quantify and qualify assaults and threats made against psychiatric residents using a nationwide sample. In addition, this study aimed to clarify the relationship between gender, height, weight, age, training level, and number of hours of violence management training and patient violence.

Based upon previous findings, it was expected that: (1) the assault rate would be between 40 and 50%; (2) the threat rate would be greater than the assault rate; (3) <10% would report serious assaults; (4) <30% would report multiple assaults; and (5) females and residents reporting fewer hours of training would report receiving more assaults. As residents' size was expected to elicit different patient reactions, significant relationships between height, weight, assault, and threat were not predicted.

METHOD

Subjects/Procedures

A survey developed by the authors at SUNY Health Science Center at Syracuse, New York was mailed to a sample of current residents enrolled in American Psychiatric Association (APA) accredited psychiatry training programs in the United States. The surveys were mailed between 1-97 and 4-97, and due to financial constraints, only 50% of residents ($n = 2,553$) were surveyed. Program sites were randomly surveyed. Surveys were mailed directly to residency directors with an enclosed letter requesting random survey distribution to half of currently enrolled residents.

All subjects received a survey packet including a brief cover letter describing the nature and purpose of the study, a survey, and a pre-addressed return envelope. Initially, stamps were not provided on return envelopes. However, due to the meager response rate after the first mailing, a pilot study with stamped return envelopes was conducted. Comparison of the return rates revealed only a slightly higher response rate with stamps. For methodological consistency, half of the remaining packets were mailed with stamps on the return envelope.

Survey

The one page, confidential survey was constructed using previous research as a guide (9,10). The survey requested demographic data, information about the number

and nature of assaults and threats received during residency, and the number of hours of violence management training received. In addition, information pertaining to perceived reasons for assault and threat, resident reactions to violence, and general training experiences were also solicited.

Analyses

Resident characteristics were assessed using the Statistical Package for the Social Sciences (SPSS for Windows). Descriptive statistics were used to tabulate demographic characteristics and rates of assault and threat. Correlational and logistic regression analyses were used to assess the relationship between demographic characteristics and assault and threat.

RESULTS

Completed surveys were received from 517 (20%) of current residents. To correct for selection bias, demographic and outcome data were weighted by residency program size ($\text{Total } N \times .5/100$).

Sample Characteristics

The sample was 51.5% male, ranging in age from 25 to 61 years (average age = 33.1 years). Average age of males (32.9 years, $SD = 6.28$) and females (33.4 years, $SD = 6.6$) was not significantly different from national data (11; average age male = 35 years, female = 34 years). There were no significant differences in the number of males and females in each training year. Average program size was 38 residents ($SD = 15.9$), with 13.3% in first year of training, 30.9% second, 27.7% third, and 25.4% fourth.

Dividing the U.S. by time zones, 52.8% were received from the East, 25.5% Mideast, 5.2% Midwest, and 16.4% West. Lower percentages for the Midwest and West were explained in part by the fact that four states in Midwest were not randomly selected to be surveyed and that there are only four states in the West coast time zone. Fifty four percent (277) of the envelopes received had been pre-stamped revealing nearly equal response rates for the stamped and unstamped return envelope conditions.

PREVALENCE AND INCIDENCE OF VIOLENT ACTS BY PATIENTS

Assault

Table 2 summarizes the results of the survey for assault. Approximately 36% of residents reported a total of 630 assaults. Thirty four percent of females and 37% males had been assaulted. Fifteen percent were in the first year of residency, 34% second, 22% third, and 28% fourth. The number of assaults reported did not differ

TABLE 1.

National Statistics for Psychiatric Residents

Year	Total <i>N</i>	Female (<i>n</i>)	Male (<i>n</i>)	Unknown
PGY1	1172	521	572	79
PGY2	1336	592	713	31
PGY3	1346	564	756	26
PGY4	1340	591	746	3

Note. Data obtained from FREIDA (Fellowship and Residency Electronic Interactive Database System), 1996. PGY-postgraduate year.

significantly between males and females across training levels. While age and training level were significantly correlated ($r = .35, p < .001$), Spearman rho correlations and logistic multivariate analyses investigating the relationship between age, training level, hours of violence management training, height, weight and assault were not significant.

Approximately 1% of assaults involved serious physical harm requiring immediate medical attention (e.g., stabbing), 1% involved moderate physical harm requiring medical treatment (e.g., eye patch), 20% involved mild physical harm not requiring medical attention, (e.g., scratch or bruise), 46% involved potential to harm (e.g., actions with aggressive intent in which no physical contact made), and 32%

TABLE 2.

Resident Assault and Threat Characteristics

Item	Assault	Threat
Percent	35.9% (54)	73.9% (112)
<i>N</i> of Acts	630	1,853
Age Group		
<30 years	38.8% (19)	73.6% (37)
30–34.9	38.7% (21)	75.5% (42)
35–35.9	34.9% (07)	76.2% (15)
40–44.9	24.6% (03)	64.4% (08)
45–49.9	24.3% (02)	77.3% (05)
50–54.9	28.8% (01)	71.2% (01)
55–59.9	0.0% (00)	100% (01)
60–65	0.0% (00)	100% (01)
Gender		
Male	37% (29)	79% (62)
Female	34% (25)	69% (50)
Training Year		
PGY 1	15% (08)	13% (14)
PGY 2	34% (18)	31% (34)
PGY 3	22% (12)	28% (31)
PGY 4	28% (15)	27% (30)

Note. Weighted sample size data in parentheses.

TABLE 3.

Severity and Types of Violence

Severity	
Serious Injury	2% (03)
Moderate Injury	1% (02)
Mild Injury	20% (35)
Potential to Harm	46% (81)
Aggressive Intent	32% (58)
Types of Violence	
Throwing	20% (29)
Spitting	13.7% (21)
Pushing	12.8% (19)
Grabbing	12.1% (18)
Punching	7.4% (11)
Slapping	4.6% (07)
Kicking	4.1% (06)
Wrestled to ground	1.1% (02)
Pinned to wall	.9% (01)
Pinned to floor	.5% (01)

Note. Weighted sample size data in parentheses.

involved aggressive intent (e.g., shove). Additionally, 26% of residents had been attacked more than once.

Types of violence included throwing (20%), spitting (13.7%), pushing (12.8%), grabbing (12.1%), punching (7.4%), slapping (4.6%), and kicking (4.1%). Only 1.1% had been wrestled to ground, .9% pinned to the wall, and .5% pinned to the floor.

Threat

Seventy four percent of residents reported a total of 1,853 threats. A larger proportion of males (79%) had been threatened (females = 69%), and this was consistent across training years. Of residents reporting threats, 13% were in the first year of residency, 31% second, 28% third, and 27% fourth. Seventy six percent of threats were described as verbal threats made face-to-face, 12% had been reported to a third person, 9% were verbal threats made over the phone, and 2.7% were written. Finally, age, training level, number of hours of violence management training, height, weight, were also not significantly related to threat rates.

TABLE 4.

Threat Types

Type	Percent	Weighted N
Verbal face to face	76%	425
Third person	12%	66
Verbal by phone	9%	51
Written	2.7%	15

DISCUSSION

Despite our low response rate, we were able to recruit the largest sample of psychiatric residents to date. Of the 517 residents responding, 36% had been assaulted at least once during their training. This estimate is lower than all previous studies, but it is still an alarmingly high rate suggesting a high potential for injury due to patient violence at the residency level. Fortunately, very few assaults involved serious harm, with most involving mild physical harm or actions suggesting potential to harm (throwing, pushing, spitting, and grabbing). Furthermore, the majority of assaulted residents had only one violent encounter. Nonetheless, residents are clearly not immune to severe attacks and carry a small yet significant risk of actual physical injury due to patient attack.

A potential gender effect was not confirmed, with males and females having similar assault rates. This finding confirms those of Fink et. al (1991) suggesting equal risk of patient violence for male and female residents. It is possible that previous significant findings reflected spurious effects due to methodological problems (e.g., small sample sizes). However, it is possible given the limited response rate of the present study that the current findings may underestimate the number of females assaulted, particularly if a significant number of assaulted female residents chose not to return this survey.

While a resident may never experience an assault during their training, the chances for being threatened are quite high. Three out of four residents in our survey had been threatened during their training suggesting that verbal attacks are very common. Given the nature of the work, this finding is far from surprising. However, since most threats were made face-to-face, residents would be wise to be prepared to handle heated words from patients. A cold, unsympathetic, upset, or anxious resident is likely to be perceived very differently compared to a calm and reassuring resident. Observation of other professionals may help residents develop skills for responding to verbal threats. Also helpful may be role playing with colleagues which may facilitate the development of an appropriate verbal and behavioral style for interaction with violent patients.

Height and weight were not found to be related to assault and threat. While it is not surprising that residents' physical size was not related to the incidence of physical and verbal violence, the lack of relationship between number of violence management training hours and number of assaults and threats was unexpected. This suggests that the number of allotted program hours in violence management training did not relate to the occurrence of assault or threat. However, it is possible that informal/on the job training may be related to resident's chances of experiencing patient violence. Additionally, treatment setting (i.e., high risk versus low risk facility) and patient characteristics (e.g., psychotic versus neurotic) are also likely to influence residents' chances of attack or threat (5).

Finally, fewer surveys were completed by first year residents, which was not unexpected in light of national statistics showing declines in 1996 enrollments (Table 1). It is possible that fewer first year residents were sampled. Alternatively,

fewer first years may have responded to the survey, potentially viewing it as irrelevant at their point in training.

Before concluding, a note of caution is raised in the interpretation of these findings given that rates of assault and threat may have been affected by several sources of potential bias (survey distribution by resident directors, sampling, memory for assault/threat, response rate). The need for study replication is underscored. However, the strengths of this study included its broad geographic scope, large sample size, and detailed documentation of the types of violence experienced by psychiatric residents.

While the focus was on resident characteristics, equally important to consider in future investigations are patient, institutional, and situational variables. Future research would do well to consider both sides of the violence issue. For example, examining personality variables of both patients and professionals concomitantly may help to explicate the nature, origins, and consequences of patient violence. As additional research findings are integrated into current research, priority groups for potential intervention may be identified. Furthermore, once the size and burden of patient violence is better understood, program directors and policy boards may be better able to estimate funding and training requirements, as well as identify priority groups for potential intervention. These are very important issues related to the safety of current and future professionals in the field of psychiatry.

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