Violence in a general hospital psychiatry unit for men

Ranil Abeyasinghe¹ and Rasika Jayasekera²

(Index words: Alcohol dependence and withdrawal, overcrowding in ward, lack of planned activities)

Abstract

Introduction General hospitals are increasingly providing psychiatric services in Sri Lanka. They face special challenges and patient violence is one of them.

Objective To find out the extent of violence and factors that are associated with such violence in general hospital psychiatry units.

Setting General Hospital, Peradeniya, male psychiatry ward.

Methods All violent incidents were prospectively recorded in the male psychiatry unit for one year. The daily patient total, diagnoses and patient activity levels were also tabulated.

Results 118 incidents of serious violence were recorded over one year. 42% of this violence was directed at the

nurses. Alcohol withdrawal was the commonest cause of violence (45.7%), and schizophrenia and mania accounted for 43.0%. The other most important factor associated with violence was overcrowding of the wards.

Conclusions Patient violence is a common problem in general hospital psychiatry wards. Alcohol withdrawal is an important cause of patient violence in this setting. Steps to reduce overcrowding and treatment of alcohol dependence in special alcohol units are likely to reduce such violence.

Introduction

In Sri Lanka psychiatric services are increasingly provided by general hospital and district hospital based psychiatry units, away from mental hospitals. At present there are 12 General Hospital and District Hospital based

¹Senior Lecturer, Department of Psychiatry, Faculty of Medicine, University of Peradeniya, and ²Staff Nurse, General Hospital, Peradeniya. (Correspondence RA. Received 18 August 2002, revised version accepted 20 March 2003).

psychiatric services and 2 large mental hospitals. These units admit acutely mentally ill patients and as a result are likely to face more violence (1). This is especially so with who have more florid psychotic symptoms (2,3). These units face particular challenges, compared to mental hospitals when dealing with violent patients for the following reasons.

- They have no facilities to isolate violent patients
- The wards get overcrowded when the demand is high for admissions
- They admit a disproportionate number of acutely confused patients.

Due to increasing reports of violent incidents in general hospital psychiatry wards (1,3), we carried out a prospective study of the incidence of violence in a male psychiatric ward of a general hospital over a period of one year.

Methods

A violent incident was defined as one where the patient physically assaulted another patient or a staff member or caused physical damage to property. The observations were made prospectively from July 1997 to June 1998 by maintaining a register of violence, which was filled by the nurses at the end of their shifts. The patient total was calculated by dividing the total of midnight count for the month, by the number of days of the month. The diagnosis was the primary diagnosis that the patient received at the time of discharge based on ICD 10. In order to calculate the number of hours spent on planned activities, 25 patients were selected randomly and observed for 3 days for the activities engaged in the wards. Three such groups were observed for 3 days during a period of 6 months.

We have examined these incidents of violence in relation to known risk factors, namely overcrowding, diagnosis and the absence of planned activities.

Results

A total of 118 incidents of violence were caused by 92 patients. 42% of the violence was directed at nurses, and the rest was directed at patients and property, a rate of 5 incidents for one nurse for a year. Violent incidents occurred at a mean frequency of 2.46 per week (table 1). The injuries were medically serious only in 12.7%, but 28% sustained minor injuries (table 2). As the figure shows, there is a linear relationship between ward total and the number of incidents of violence. These two variables showed a Pearson correlation of $r=0.634$, significant at a level of 0.05.

Alcohol withdrawal syndrome accounted for 45.7% of the patients who were violent in the ward. Schizophrenia and bipolar disorder accounted for 30% and 13% of the violence (table 3).

Table 1. Mean number of patients and number of violent incidents per month

Month	Mean number of patients	Incidents of violence
July	40.3	6
August	48.5	10
September	40.8	6
October	45	8
November	45.2	8
December	39.1	10
January	47.5	13
February	61.9	14
March	50	8
April	44.8	10
May	51.1	12
June	45.1	13
Total		118

Table 2. Nature of injury

Nature of injury	Number (%)
Serious, requiring medical attention	15 (12.7)
Minor injuries	33 (28.0)
No injuries	70 (59.3)

Table 3. Diagnosis in relation to violence

Diagnostic category	Number (%)	ICD 10 category
Organic disorder	6 (6.5)	Complex partial epilepsy 4 Hypoglycaemia 1 Brain tumour 1
Substance abuse disorder	42 (45.7)	All had alcohol withdrawal syndrome 4 had additional cannabis abuse
Schizophrenia	22 (30.0)	Paranoid schizophrenia
Bipolar disorder	12 (13.0)	Manic episode 10 Depressive episode 2
Mental retardation	2 (2.3)	All had psychosis
Other	8 (8.7)	These patients left ward in 24 hours and no diagnosis was possible.

Discussion

The 118 violent incidents in one year is an underestimate as only serious incidents of physical violence were recorded. Many incidents of verbal abuse, violence insufficient to damage property and unreported incidents of violence towards patients were not counted. Even with such low estimates, there was a rate of 2.6 incidents of serious violence a week in the ward. Nurses are the most important human targets of patient violence. This is a rate higher than the rate of 3.9 per nurse per year, reported for mental hospital wards in Australia (6).

Figure. The above scatter diagram shows a linear relationship between the monthly average number of patients (per day) and monthly total number of violent incidents, with a Pearson's correlation coefficient of 0.634, significant at 0.05 level.

Alcohol dependence emerged as the most important cause of patient violence in our general hospital study. 45.7% of the patients who were involved in violence had an alcohol dependence problem. All of them were violent due to the alcohol withdrawal phase in the first 3 days of admission. The next common disorder that caused violence was paranoid schizophrenia which constituted 30% of violent patients. Mania contributed 10.6% of violent patients. All the other disorders were unimportant causes of violence. Hence the disorders that cause most perceptual disturbances are principally associated with violence. Similar findings have been reported by Whittington and Wyke (5). The high prevalence of alcohol withdrawal syndrome as a cause of violence is a problem that is peculiar to general hospital psychiatry wards as there is a high referral rate of alcohol dependence to psychiatry wards. Though substance abuse has been reported as a common cause of violence (1,2,3) alcohol withdrawal has not been reported previously.

Ward overcrowding was another important cause of violence as shown in the figure. This high correlation is likely to be due to two reasons. One is that there is a high level of agitation in the surrounding environment caused by overcrowding (4). The second is that the patients are more likely to show aversive responses at times of overcrowding. General hospital psychiatry wards are more likely to face this problem due to high referral rates from other units. As table 1 shows this is particularly so in the month of February.

Violent patients spent 70% of their time sleeping or lying on bed. It is not surprising, with such few planned activities, that the patients became violent. The average

stay in the ward for a patient was 10.3 days, which also made it difficult to plan activities for them. The constant admission of acutely ill patients made it difficult for the nurses even to continue with planned activities.

It can be concluded that prevalence of violent incidents is quite high in general hospital psychiatry units in Sri Lanka. This is mainly due to the high proportion of patients with alcohol withdrawal syndrome, ward overcrowding and lack of planned activities in the wards. Patient violence and risk to staff are unrecognised problems although general and district hospital units increasingly provide psychiatric care, away from large mental hospitals.

References

1. Arboleda FJ. Mental illness and violence: an epidemiological appraisal of the evidence. *Canadian Journal of Psychiatry* 1998; 43: 989-96.
2. Young MH, Justice J, Erdberg P. Risk appraisal and management of violent behavior. *Assessment* 1999; 6: 243-58.
3. Tardiff K, Marzuk PM, Leon AC, Portera L, Weiner C. Violence by patients admitted to a private psychiatric hospital. *American Journal of Psychiatry* 1997; 154: 88-93.
4. Kralowski M, Czobor P. Violence in psychiatric patients: the role of psychosis, frontal lobe impairment, and ward turmoil. *Comprehensive Psychiatry* 1997; 38: 230-8.
5. Whittington R, Wykes T. Aversive stimulation by staff and violence by psychiatric patients. *British Journal of Clinical Psychology* 1996; 35: 11-20.
6. Cheung P, Schweitzer I, Tuckwell V, Crowley KC. A prospective study of assaults on staff by psychiatric in-patients. *Medicine, Science and the Law* 1997; 37: 46-52.