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Physical Assaults on Healthcare Workers in an Acute Care Ward of a Tertiary Psychiatric Hospital in India: A Retrospective Descriptive Study

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ABSTRACT

Background: Workplace violence is a recognized occupational hazard in psychiatric settings, especially in acute inpatient wards. The characteristics and circumstances of physical assault incidents need to be understood for developing preventive strategies.
Aim: To describe the demographic, clinical, and incident-related characteristics of physical assaults by psychiatric inpatients on healthcare workers in an acute care ward in a tertiary psychiatric hospital over a one-year period.
Methods: A retrospective, descriptive, observational study was conducted using data from the assault registers of an acute care ward at a tertiary psychiatric hospital in South India. All documented physical assault incidents between January and December 2023 were included. Demographic, clinical and assault-related data were analyzed using descriptive statistics.
Results: Eighteen physical assault incidents involving 24 healthcare workers were documented. Mean age of patients was 26.5 years (SD = 8.2; range 18–50), with a predominance of male patients (66.7%). Schizophrenia spectrum disorders accounted for the majority of assaults (72.2%). Demands for discharge or to leave the ward were the most common reasons for assault. Physical restraint was used in 88.9% of incidents, and chemical restraints in 72.2% of cases. Nurses were the most frequently assaulted staff (37.5%). Physical injuries were mild and infrequent.
Conclusion: Physical Assaults in acute psychiatric wards predominantly involve young male patients with psychotic disorders and nursing staff are commonly affected. Early intervention, prompt response, and structured aggression management protocols and training may help reduce workplace violence in psychiatric settings.

Keywords: Physical Assault, Healthcare Workers, Psychiatric Settings, Acute Care, Workplace Violence, Psychiatric Nursing

INTRODUCTION

Workplace violence against healthcare workers is recognised as a major occupational hazard, especially in psychiatric units.[1] Workplace violence encompasses acts of abuse, intimidation, coercion, or assault against staff that occur in connection with their professional duties. Physical assaults, i.e., intentional physical contact that is meant to intimidate or harm others, can especially cause physical injury

and psychological distress, among other negative consequences.[2] Studies report that between 24% to 48% healthcare workers have faced violence while working in acute psychiatric settings during their career.[3] A systematic review conducted in the United States identified higher numbers, with 25-85% of healthcare workers facing physical aggression while caring for psychiatric patients.[4]

Patients admitted to acute mental healthcare services often present with agitation and violence, which may increase the likelihood of aggressive behaviour toward frontline mental healthcare professionals.[5,6] It has been identified that nurses, across occupations, have the highest exposure to workplace violence.[7] They are particularly vulnerable due to the nature of their close and prolonged contact with patients as frontline health workers.[8]

There is sufficient evidence regarding assaults against healthcare workers in Western literature. However, in India, systematic documentation and reporting of workplace violence remains limited. There is a paucity of information on physical assaults, especially in psychiatric settings, and available studies often focus more on prevalence rather than contextual characteristics of such incidents.[9] Understanding the demographic, clinical, and situational features of assault incidents is essential to developing preventive strategies and improving workplace safety.

Aim:

This study aimed to describe the characteristics of physical assaults on healthcare workers by inpatients in an acute psychiatric ward over a one-year period, using data that is routinely maintained in ward assault registers.

Objectives:

1. To describe the selected demographic and clinical profiles of patients involved in physical assaults.
2. To document the characteristics and management of physical assault incidents.
3. To describe the healthcare workers involved in physical assault incidents and the types of injuries sustained

MATERIALS & METHODS

Study setting

The study was conducted in the acute ward setting of a tertiary psychiatric teaching hospital in Southern India. This is a 122-bed hospital, with 12 beds dedicated to psychiatric patients requiring acute care.

Study design

This study employed a retrospective, descriptive, observational design, utilising routinely documented clinical records available in the psychiatric acute care ward.

Data Collection

Data were obtained from the physical assault registers maintained in the acute psychiatric ward as part of the routine clinical and administrative practice. Data were collected for a period of 1 year, from January 1, 2023, to December 31, 2023. Any incident of physical aggression or attempted physical harm by a patient toward a healthcare worker, as documented in the physical assault registers, was considered a physical assault. Healthcare workers included hospital staff members, either directly or indirectly involved in patient management, such as nurses, doctors, security personnel, and hospital attendants. Any physical harm to a healthcare worker resulting from a physical assault, requiring first aid or medical attention, was considered an injury.

Variables that were collected included the patient age and gender, psychiatric diagnosis (grouped according to ICD-10 diagnostic categories), time to medical review after physical assault, category of healthcare worker assaulted, number of healthcare workers assaulted per incident and the presence or absence of physical injury.

Inclusion criteria

Documented incidents of physical assault by adult psychiatric inpatients on healthcare workers that occurred during the study period were included.

Exclusion criteria

- Incidents involving only verbal threats without physical aggression
- Incidents involving relatives or other patients
- Records with incomplete information
- Assaults by child and adolescent psychiatric patients.

Ethical considerations

This study is an interim analysis of a retrospective study that was approved by the College of Nursing Ethics Committee (minute no: 104/23.04.24). Appropriate permissions were obtained from the Heads of the adult units at the tertiary psychiatric hospital to access patient data. Informed consent was waived, as the study involved retrospective analysis of anonymised register-based data. No patient or staff identifiers were included in the analysis.

Statistical Analysis

Data were entered into a spreadsheet, and descriptive statistics were used to analyse the data. Categorical variables were summarised using frequencies and percentages and continuous variables were summarised using mean and standard deviation.

RESULTS

A total of 18 physical assault incidents by psychiatric patients, involving 24 healthcare workers were documented in the acute psychiatric ward during this one-year study period.

Patient Demographic & Clinical Characteristics

The mean age of patients who were involved in physical assault incidents was 26.5 years (SD = 8.2), with an age range of 18 to 50 years. The majority of patients were male (66.7%, n = 12), while female patients constituted 33.3% (n = 6).

Table 1. Distribution of Psychiatric diagnoses of patients involved in physical assaults (N=18)

S. No.	Diagnosis	N	%
1.	Schizophrenia	13	72.2
2.	Bipolar Affective Disorder Mania	1	5.6
3.	Mixed Personality Disorder	1	5.6
4.	Delusional Disorder	1	5.6
5.	Dissociative Disorder	1	5.6
6.	Psychosis NOS (not otherwise specified)	1	5.6

Reasons for Physical Assault

The most common factor for precipitating the physical assaults was unmet demands for discharge or to go home (n = 8), followed by requests to go out of the acute care ward (n = 5). Less common reasons for physical assault were also reported. One patient turned assaultive when he was prevented from absconding from the ward, and another became violent while refusing to attend occupational therapy. One more patient assaulted the healthcare members who were implementing physical restraints as a therapeutic technique for his behavioural dysregulation.

Physical Assault management

The majority of the physical assaults occurred in the afternoon and evening

(77.8%, n = 14). The mean response time from the onset of the physical assault to psychiatrist intervention and management was 2 minutes (SD = 4.2), with a range of 0–15 minutes. When patients demonstrated the initial warning signs of aggression, verbal de-escalation was first employed in all cases. Only when this failed were chemical restraints and, lastly, physical restraints, employed as per the order of the treating psychiatric team.

Physical restraints were used in 88.9% (n = 16) of incidents, while they were not required in 11.1% (n = 2) cases. All physical restraints were initiated only after obtaining informed written consent from the patients' relatives when the patients were admitted involuntarily (otherwise known as supported admission), considering the risk of harm to self or others. It is worth noting that these consents were only valid for 24 hours and had to be retaken if the patient required physical restraints again after this period. All events were carefully documented by both nursing and medical teams. Monitoring was conducted by nursing staff every 15 minutes, while ensuring that the patient's physical needs were met. Physical restraints were removed as soon as the patient calmed down.

Chemical restraint was administered in 13 (72.2%) incidents, with the most commonly used drugs being injectable haloperidol with promethazine (84.61%, n= 11), while regular medications were given earlier than scheduled in other cases. No medication was administered in 5 incidents. Physical and chemical restraints were used together in 72.2% (n = 13) of the cases.

Healthcare workers assaulted

A total of 24 healthcare workers were affected across the 18 incidents of physical assaults.

Table 2: Categories of healthcare workers assaulted (N= 24)

Sl No.	Category	N	%
1.	Nurses	9	37.5
2.	Doctors	7	29.2
3.	Hospital Attenders	6	25
4.	Security staff	2	8.3

Forms of physical assault and injuries

The most common forms of physical assault carried out by the patients were punching (n = 8) and kicking (n = 6), followed by slapping (n = 4), scratching (n = 2), and biting (n = 1). Despite the number of assault attempts, actual physical injuries that required medical attention or first aid were infrequent and minor. One healthcare worker sustained a scratch injury to the arm, requiring a tetanus toxoid injection, while another experienced mild bleeding of the left middle finger, which did not require significant medical intervention.

DISCUSSION

This study describes the physical assaults on healthcare workers in an acute psychiatric ward that took place over a one-year period. Patients involved in these incidents were predominantly young adults, with a male preponderance; the majority were diagnosed with schizophrenia spectrum disorders. These findings are consistent with previous research highlighting that there is a

consistent association between violence, male gender and psychotic conditions like Schizophrenia, owing to disease-related factors such as psychopathy, insight and impulsivity. [10,11] Being one of the few tertiary-level psychiatric teaching hospitals of repute in South India, many patients with severe, debilitating, chronic mental illnesses, such as Schizophrenia, are admitted here for treatment and contribute to a large segment of patients with various psychiatric illnesses that present to this hospital.

The most common triggers for physical assault were unmet demands related to discharge or leaving the ward. The majority of the physical assaults took place in the afternoon or evening, which is similar to findings of a study conducted in the USA.[12] This may be due to the fact that there are fewer staff members working in later shifts compared to morning shifts, which may impact staff engagement with patients and early identification of escalating aggression. This underscores the importance and need for sufficient manpower who can implement structured communication, boundary setting, and early engagement with patients and families to identify potential violence scenarios and to diffuse the situation as quickly as possible with effective de-escalation techniques. Nurses were the most frequently assaulted group, which reflects their frontline role and sustained direct patient contact as compared to other healthcare workers, as has been previously reported.[13]

Physical or mechanical restraints have been widely used in the management of aggressive patients to prevent harm to self and others, and have always been advocated to be used in a sparing, need-based manner due to ethical, legal and clinical consequences.[14–16] In this study, the form of physical assault most commonly reported was punching and kicking, which is similarly noted in other literature.[2] This was tackled by the use of physical restraints, in combination with chemical restraints, in the majority of physical assaults in this study. As reported, physical restraints were used as a necessary last resort when all other measures failed to de-escalate, keeping in line with the ethical and legal mandate that patients with mental illnesses be treated in the least restrictive setting possible.[17,18] The frequent use of physical and chemical restraints, combined with a prompt response from the nursing and medical team and quick decision-making, likely contributed to the low rate and mild nature of injuries observed in this study. The emergency response team that attends to such assaults usually consists of at least 4-5 healthcare team members who intervene as quickly as possible and hence are more efficient in managing violent patients in a swift and safe manner, thereby contributing to minimising injuries; such response teams have also been identified as highly effective and supportive.[19] However, the high reliance on restraints highlights the need for ongoing healthcare training in de-escalation and alternative behavioural management strategies to minimize the negative effects of coercive measures.

Implications for nursing practice

As nurses are the ones who spend the most time handling patients directly, emphasis must be given to early identification of agitation to prevent physical assault incidents. Clear, therapeutic communication strategies must be employed when dealing with such patients. Nurses and other healthcare workers in psychiatric settings will benefit from regular training in de-escalation and aggression management, and seek to identify alternative methods that can be used in place of physical restraints. Psychiatric hospitals must also ensure adequate staffing and rapid response systems in acute wards to be able to manage inevitable aggression and violence situations in an effective, timely and safe manner.

Limitations

The study is limited by its retrospective design, small sample size, and reliance on register-based documentation, which may result in an underestimate of the true frequency of assault incidents. The study focused only on physical assault and did not focus on other types of assaults. Other clinical and demographic variables were not available for analysis, which could have provided a more in-depth understanding and description.

CONCLUSION

Physical assaults on healthcare workers in acute psychiatric wards predominantly involve young male patients with schizophrenia. Nurses are the most exposed to assaults followed by doctors. While injuries were generally minor, the findings highlight the ongoing need for preventive strategies, staff training, and system-level interventions to enhance workplace safety in psychiatric settings.

Declaration by Authors

Ethical Approval: Approved

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