

# Guardians under Fire: Unveiling Violence on Emergency Healthcare Professionals: A Multicenter Questionnaire Based Cross Sectional Survey

HUMA NASIR<sup>1</sup>, PATRICIA C. MENDES<sup>1</sup>, ALAM SAWWA<sup>1</sup>, IMRAN ALI<sup>1</sup>, ASIF HASSAN<sup>2</sup>, MUHAMMAD ARSLAN ZAHID<sup>3</sup>

<sup>1</sup>Department of Emergency Medicine, Ziauddin University Hospital Karachi.

<sup>2</sup>Indus Hospital and Health Network, Karachi.

<sup>3</sup>Consultant, National Medical Centre Karachi.

Correspondence to Dr. Huma Nasir, Email: [humanasir00@gmail.com](mailto:humanasir00@gmail.com) Contact: 03318098860

## ABSTRACT

**Background:** It focuses to identify the factors related to workplace violence who, what and where and to evaluate the knowledge of reporting among healthcare staff.

**Aim:** To establish the common types of workplace violence that health care workers in emergency departments of tertiary care hospitals in Pakistan are vulnerable to.

**Methodology:** Cross-sectional research study methodology was adopted in this study in assessing the proportion of healthcare practitioners who encounter workplace violence. The study was carried out in the emergency facilities in tertiary care hospitals in Pakistan, from March 2023 to August 2023. The 383 emergency department healthcare professionals who had worked for at least 6 months were surveyed for the study. Due to the pilot nature of the study and to increase participation, the questionnaire was made available online, though participants orally assented to the study. Mean scores and standard deviations were used to describe the variables while independent samples t-tests, one-way analysis of variance (ANOVA) and logistic regression analysis were used to determine the differences, relationships and risk factors respectively.

**Results:** The survey revealed that 87.5% of doctors, nurses and other healthcare personnel accounting to workplace violence stated that had suffered verbal abuse at the workplace. Physical assault was 5.0%, bullying or mobbing 5.2% and sexual harassment only 0.5%. Similarly, health care workers that are male and those with more than a decade of practice in the profession were more vulnerable to violence with odds ratios of 1.37 and 2.25 respectively. As for the reporting behavior, it was not very high – 28.7% of participants reported actual incidents of violence at work.

**Conclusion:** Emergency staff experience workplace violence in the workplace and verbal aggression is the most prevalent type of violence. Experience for more than five years, work place setting and male gender emerged as antecedents to predicting workplace violence. The safety of the health care professional and increased safety for the patient requires attempts to be made to better a situation and to enrich a reportage process.

**Keywords:** Workplace violence, emergency healthcare, verbal abuse, cross-sectional survey, reporting behavior.

## INTRODUCTION

Violence at the workplace in the health care sector and more focusing in Emergency Departments has become rampant. Among different forms of aggression, the two most common types are verbal and physical and based on the experiences of healthcare workers, the occurrence of these types of aggression is quite high because the jobs of caretakers are already stressed environments<sup>1</sup>. Workplace violence refers to any act of violence that occurs wherever workers are abused, threatened or assaulted because of the nature of their job as defined by the World Health Organization<sup>2</sup>. Internationally, workplace violence in healthcare facilities is related to working environment, job stress and or even threats to patients and health care workers<sup>3</sup>. Emergency departments reflect increased vulnerability to violence due to the severity of illnesses treated and attendees, congestion and delays<sup>4</sup>. Violence in such environments results in increased psychological morbidity health care workers<sup>5</sup>.

In Pakistan, it is more worrying since there remains partiality or complete absence of health care facilities and shortage of staff knowledge over violence<sup>6</sup>. High patient to doctor ratios, insufficient resource and growing level of patient dissatisfaction for healthcare services in Pakistan possibly raises the risk of Workplace Violence<sup>7</sup>. The formal reporting is not implemented, very few Health care Worker report incidents because of reprisals or because they do not expect any consequences<sup>8</sup>. Studies conducted in India showed that this type of violence was rife but unreported by the affected employees<sup>9</sup>.

Of all the reported cases of workplace violence, verbal abuse is the most frequent type of workplace violence registered around the world, according to the different studies with regards to this problem indicating that verbal abuse takes more than 80% of violent episodes in healthcare facilities<sup>10</sup>. Physical violence is also

observed but rarer and remains a threat to healthcare workers' physical integrity<sup>11</sup>. Sex is also a very significant factor in workplace violence, where male health care workers are more vulnerable to physical assault than other forms of violence than their women counterparts are more vulnerable to verbal attacks. Interestingly, prior research indicates that junior and novice employees in healthcare facilities is also vulnerable<sup>12,13</sup>.

To address this crisis, a variety of international organizations including ILO, ICN and others demanded increased preventive measures, staff training, reporting system and legal protection for healthcare workers<sup>14,15</sup>. Realization of these recommendations has not fully eliminated workplace violence in many low- and middle-income countries-Like Pakistan<sup>16</sup>.

This study aims to fill the existing literature gap of workplace violence in Pakistani emergency departments by exploring the nature of different types of violence and the factors leading to these acts.

This study aims to find out how work-related violence depends on demographic characteristics, as well as professional background. The outcome of the study will contain significant information regarding violence management and prevention in Pakistani healthcare organizations.

## METHODOLOGY

This study used a cross-sectional descriptive survey design to participate, frequency and assess the nature of workplace violence and reporting experiences, as well as factors related to it among Health care workers in emergency departments. The cross-sectional approach makes it possible to have an estimate of the extent of workplace violence and have an identification of factors associated with it at a given time. This research was carried out in the tertiary care hospitals of Pakistan specifically in their emergency departments from March 2023 to August 2023 because working in emergency environment exposes staff to elevated levels of workplace violence.

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The study targeted doctors, registered nurses, allied health staff and other staff members who work in emergency departments. The inclusion criterion prescribed for subjects is that they should have at least six months of work experience and direct patient or family contact. This criterion was important to guarantee that all participants were exposed enough to emergency department environment to be included in the study. Collectively, 383 healthcare professionals participated in the study to achieve adequate assessment of the factors related to workplace violence.

With permission from the Ethical Review Committee (ERC), Ziauddin University data collection was commenced. Data was obtained through a structured questionnaire that incorporated both fixed and scaled response questions. The questionnaire contains questions about the demographic data of the respondent, exposure to workplace violence, perception on reporting incidence and contributory factors towards violence on workplace. The subjects for the present work were selected based on purposive sampling technique and only participants who met the inclusion criteria were contacted either face to face or by phone and informed about the research activity and then consent was taken before the participants were provided with the link of the online questionnaire.

The inclusion criteria were set to ensure that one has to have a minimum of 2 years' experience in the emergency departments and must give informed consent. Those we excluded from the study include, any health care worker with less than two years of practice or who had not been offering clinical care for more than a year. Health care professionals who did not give their consent to participate in the study were also excluded.

Descriptive and inferential statistics were used in the analysis of data. Frequency distributions were employed to describe the demographic information of the participants and the incidents of workplace violence. Descriptive statistics: chi-square test and independent t-test were used to test the relationship between workplace violence and a range of demographic/professional characteristics. Logistic regression was performed to capture independent predictors of workplace violence among the participants.

On the ethical aspect concerning the participants the following were observed, the identity of the participants was not revealed at any one time throughout the study. No individual details were taken. The study was personnel and conducted based on ethical considerations and the Ethical Review Committee approved the study to fully protect the participants.

**RESULTS**

**Demographic Characteristics:** Out of 383 respondents, there were 194 female (50.7%) and 189 male (49.3%) Health care professionals. Most of the participants were married, 54.3% while the remaining 45.4% of them were unmarried. Majority (76.2%) of the participants were physicians, followed by the nurses and supports staff 11.7% and 11.2% respectively. A large proportion of participants were from private healthcare organizations (58.5%) followed by government organizations and semi-government organizations (31.3%) and (9.9%) respectively. Regarding years of experience, 52.2% patients were attended by nurses having 1-2 years' experience working in the emergency department (ER) while 30.8% with 3-5 years of experience (Table 1).

**Prevalence and Types of Workplace Violence:** The type and frequency of workplace violence that was reported most commonly was verbal abuse as depicted in Figure 1 with 87.5% offenders. Other forms of violence concerned physical violence (5%), violent harassment (5.2%) and sexual violence (0.5%). Incidents took place in all types of facilities with violence in the private sector reported at 87.9% in contrast to the government (83.3%) and semi government (71.1%) sectors.

It was also found that the physicians suffered from verbal abuse most commonly (83.2%) followed by other medical officers who complained of verbal abuse 74.8% of the time while support

staff complained of physical assault most frequently (19.3%). Even so, the levels of violence were high, the respondents revealed that they only sometimes or always report the incidents: sometimes – 53.5% and always – 28.7% while 17.5% of the respondents had never reported any incidents (Table 2).

Table 1: Demographic Characteristics and Professional Background of Respondents

Demographic Variable	Frequency	%age
<b>Gender</b>		
Female	194	50.7
Male	189	49.3
<b>Marital Status</b>		
Single	174	45.4
Married	208	54.3
Divorced	1	0.3
<b>Tertiary Healthcare Setting</b>		
Government	120	31.3
NGO	1	0.3
Private	224	58.5
Semi-Government	38	9.9
<b>Professional Group</b>		
Physician	292	76.2
Nurse	45	11.7
Support Staff	43	11.2
<b>Years of Experience in ER</b>		
1–2 years	200	52.2
3–5 years	118	30.8
6–10 years	43	11.2
More than 10 years	21	5.5
<b>Highest Level of Education</b>		
Diploma	76	19.8
MBBS	169	44.1
FCPS	69	18.0
MCPS	30	7.8
Other (e.g., MD, BSc Nursing)	39	10.2

As shown in Figure 2, only a small portion of respondents (28.7%) always reported incidents of workplace violence while the majority reported sometimes or never which shows potential underreporting.

**Predictive Factors for Workplace Violence:** This study set out to establish the predictors of workplace violence in health care professionals, logistic regression analysis was used. Among demographic factors, only gender and years of experience predicted violence; gender (B = 0.315, p = 0.030, Exp (B) = 1.370) and experience more than 10 years (B = 0.812, p = 0.001, Exp(B) = 2.253) (Table 3).

Our findings illustrated that male healthcare professionals with more than 10 years of experience were more prone to work place violence and those who work in a government healthcare facility were less likely to report the incidents. Similarly, it was also found that working in a government healthcare sector has a negative influence on the chance of reporting violence than working in private sector (B = -0.512, p = 0.015, Exp(B) = 0.599). There were no variations made in the reporting behavior when it was compared between the education level.

An analysis of workplace conditions revealed that overcrowded emergency rooms, long waiting times and lack of security significantly contributed to the likelihood of violence. Overcrowded Emergency rooms were linked with a higher prevalence of violence having 73.1% of respondents identifying it as a contributing factor. Similarly, 49.3% of respondents quoted lack of security as a main factor and 46.5% identified lack of supervisor support.

When it comes to physical violence, the results of a one-way ANOVA indicated that there was statistical significance between the professional groups F=7.342, p=0.001, that is support staff and nurse received more physical violence than physicians. T-test also showed that male healthcare workers were more likely to say that they had ever been a victim of workplace violence than female healthcare workers (t = 2.21, p = 0.029) (Table 3).

Figure 1: Distribution of Types of Workplace Violence Experienced by Healthcare Professionals

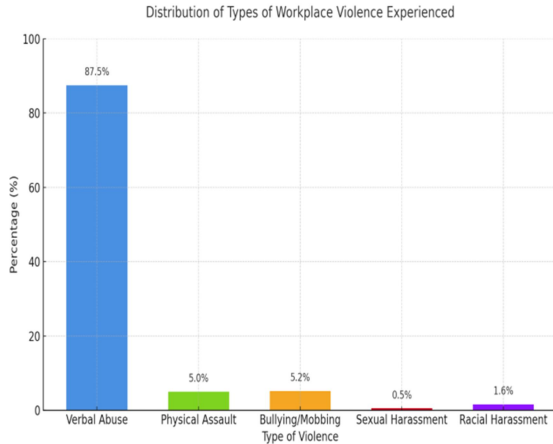


Figure 2: Reporting Behavior of Workplace Violence Incidents Among Healthcare Professionals



Table 3: Predictive Factors for Workplace Violence and Reporting

Predictor Variable	B	SE	Wald	p-Value	Exp(B)
Gender (Male)	0.315	0.145	4.712	0.030	1.370
Years of Experience (>10 years)	0.812	0.320	6.442	0.001	2.253
Education Level (Diploma vs. MBBS)	-0.252	0.177	2.013	0.056	0.777
Workplace Setting (Government)	-0.512	0.210	5.947	0.015	0.599
<b>One-Way ANOVA: Professional Group</b>		<b>F</b>	<b>Sig.</b>		
Between Groups (Violence Incidents)	7.342	0.001			
<b>T-Test: Reporting by Gender</b>		<b>t-Value</b>	<b>p-Value</b>		
Reporting Incidents (Male)	2.21	0.029			
<b>Workplace Environment Factors</b>					
Overcrowded ER (Violence Incidents)	280 (73.1%)				
Long Waiting Times	241 (62.9%)				
Lack of Security	189 (49.3%)				
Lack of Supervisor Support	178 (46.5%)				
High Patient Volume	280 (73.1%)				

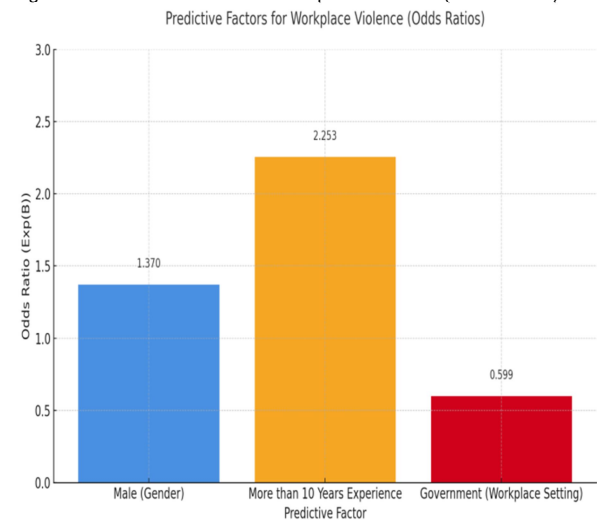
**DISCUSSION**

The findings of the results from the current study give substantial understanding about the incidence and probability factors in workplace violence among healthcare professionals in emergency in Pakistan. Regarding verbal abuse, the study found 87.5%, which is in concordance with international findings that nonphysical kinds of aggression are common in health care facilities, especially in stressful areas such as emergency departments (EDs)<sup>1,2</sup>. These findings are similar to those of the studies by other countries. A

Table 2: Workplace Violence Experiences and Reporting Patterns

Type of Workplace Violence	Frequency	%age	Cumulative(%)
Verbal Abuse	335	87.5	87.5
Physical Assault	19	5.0	92.5
Bullying/Mobbing	20	5.2	97.7
Sexual Harassment	2	0.5	98.2
Racial Harassment	6	1.6	100.0
<b>Workplace Setting and Violence</b>			
Government Setting	100 (83.3%)	5 (4.2%)	8 (6.7%)
Private Setting	197 (87.9%)	9 (4.0%)	10 (4.5%)
Semi-Government	27 (71.1%)	5 (13.2%)	
<b>Professional Group and Violence</b>			
Physicians	243 (83.2%)	29 (9.9%)	
Nurses	42 (93.3%)	4 (8.9%)	
Support Staff	50 (89.5%)	11(19.3%)	
<b>Frequency of Reporting Violence</b>			
Always Reported	110	28.7	28.7
Sometimes Reported	205	53.5	82.2
Never Reported	67	17.5	100.0

Figure 3: Predictive Factors for Workplace Violence (Odds Ratios)



study done in the United States established that 71% of the healthcare workers receive verbal abuse in the course of their duties<sup>3</sup>.

The lower proportion of physical assault (5%) has been observed by other authors, who identified physical violence in only one-fifth to one-quarter of health care workers in healthcare organizations with comparable sizes and characteristics as those in the present study while the majority of the violence they experienced was non-physical<sup>4,5</sup>. This means that even though physical aggression is an issue it is not as prevalent as verbal type

in emergency departments (EDs). Cases of bullying and mobbing (5.2%) and organizational justice (5.2%) were also found similar to the pattern as healthcare participants are known to have issues related to hierarchy and interpersonal relationship in workplace environment<sup>6</sup>.

The perceived incidence of workplace violence is grossly underreported by 71.3% and that the overall percentage of respondents reporting consistently on the incidence of workplace violence was only 28.7%, raises a major problem in managing the phenomenon of workplace violence<sup>7</sup>. Research also suggests low reporting levels in different areas of the world and possible reasons for that include: fear of getting a backlash, inadequate trust in management and the growing acceptance of workplace violence<sup>8,9</sup>. For instance, in a European-based survey, only 30% of the healthcare worker regularly reported incidents similar to those of the present study<sup>10</sup>. The situation could be solved either by reforming reporting systems or by promoting organizational culture towards openness and safety.

Logistic regression analysis was used to find risk factors related to workplace violence such as gender, years of working experience and environments in which people work. Male HCWs were 1.37 (95% CI 1.33–1.42) times more likely to experiencing workplace violence given other studies that have established that male employees are at an increased risk of verbal and physical violence in healthcare organizations<sup>11,12</sup>. Male workers are more capable of handling conflict situations as indicated by some researches done in Australia and United States<sup>13,14</sup>.

Years of experience were also an important predictor found; participants with more than 10 years of experience were 2.253 times more likely to experience violence than the others. This could be explained by a greater number of contacts with violent situations throughout the longer service, as pointed out in the prior studies<sup>15</sup>. The findings of available research indicate that experienced staff in HCWs is at the increased risk of experiencing violence with an added responsibility in leadership or stress-inducing positions<sup>16</sup>.

Employment in government healthcare facilities was significant and negatively correlated to workplace violence – experience or reporting (OR = 0.599). This is contrary to other studies conducted among healthcare workers in low and middle-income countries because most of the workers in the public sector report higher rates of experience violence because the facilities they work in are over stretched with inadequate resources<sup>17,18</sup>. Due to a relatively larger proportion in the industry the private sector workers in Pakistan may face higher patient demands and expectations and more frequently report conflict, as evidenced in comparative developing country healthcare systems researches.

The current study agrees with previous studies conducted in other countries which identified emergency departments as being at high risk of workplace violence. Factors unique to the cultural and structural setting in Pakistan, like patient to staff ratio and lack of appropriate means of resolving workplace conflicts most probably worsen the problem. Similar trends have been reported in a neighboring country like India and, therefore, region- and system-wide changes are needed to manage the root causes of violence.

Limitation of this study is that all information was provided by the respondents and may involve recall bias and underestimation of risks. This study was carried out only in a given region of Pakistan which might bring a geographical bias while comparing the results with a different region or a different health care system.

## CONCLUSION

Emergency department staff still faces severe workplace violence problems and more than 50% of staff members have encountered

verbal abuse on the job. Data from experience and reporting show that the probability of experiencing or reporting violence varies with the status of male gender, a longer experience and workplace setting. There is need for general improvement on reporting systems and safety policies of health care facility to safeguard members of staff and enhance delivery of services.

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1. Conception and design of or acquisition of data or analysis and interpretation of data.
2. Drafting the manuscript or revising it critically for important intellectual content.
3. Final approval of the version for publication.

All authors agree to be responsible for all aspects of their research work.

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