Research Article

Determinants of Workplace Violence against Doctors in Public and Private Setting: An Analytical Cross-Sectional Study

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Abstract:

Background: Workplace violence (WPV) among medical workers, especially doctors, is one of the most alarming trends in the global healthcare system. This topic has been extensively researched around the world due to its frequent occurrence and importance.
Objectives: Objectives of this study were to focus on the prevalence and types of workplace violence, and psychosocial effects on physicians, determine the factors contributing to workplace violence and see the effect of different socio-demographic variables on the type of violence faced by the physicians.
Methodology: An analytical cross-sectional study was carried out in Lahore, Peshawar, Islamabad and Gujranwala, Pakistan. Data was collected online using google forms. A total of 255 doctors took part in the study. The chi-square test was used to find the association of demographic factors with different forms of WPV.
Results: Of 14 final papers, various categories were created. With few overlaps, two studies focused on customized healthcare services for older, physically disabled people. Three studies focused on the importance of interventions in exercise. Three studies focused on how improvements in wheelchair control mechanisms affected their lives. Four studies focused on using technology to address their needs and accessibility to better services. One study focused on genetic testing of the disabled. One study focused on the ontology model for the rescue of LTC residents.
Conclusion: Since workplace violence has a great impact on doctors, improvement of healthcare facilities, strong legislative measures and unbiased media reporting can be suggested to mitigate the violence inflicted upon doctors.

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INTRODUCTION:

One of the most concerning trending events in the healthcare system, around the world, is workplace violence among healthcare professionals, especially doctors. Its level of severity can be judged by the fact that 56-80% of doctors all over the world have been victims of workplace violence (1). Workplace Violence, as defined by WHO, is: "incidents where staff is, threatened or assaulted in circumstances related to their work, including commuting to and from work, involving an explicit or implicit challenge to their safety, well-being or health" (2). Violence against healthcare workers was declared a major public health problem in the Forty-Ninth World Health Assembly in 1996 (3); thus, understanding which factors can influence violence against doctors is necessary for its de-escalation.

Due to its high prevalence and importance, this topic has been studied in depth worldwide. A study done in Karachi showed that almost two-thirds of the participants (65.6%) had experienced or witnessed some kind of violence during the last twelve months (4). Although studies suggest that physicians working in public hospitals have to face a more strenuous environment than in private hospitals (5). However, within the last 10 years, a 50% increase in the private sector has also been observed (6). Healthcare workers are susceptible to violence usually from faculty members and then patients followed by their relatives (7). Some common precursors of violence against doctors include the dissatisfaction of patients or their attendants, communication gap, the poor role of administration and differences in services between private and public hospitals (8). Many doctors have also been targeted on religious and sectarian grounds (9). This harms the efficacy of the over healthcare system. Most of the studies done in Pakistan were based in Karachi (7,10), a city located in the province of Sindh.

Previous studies done on this topic involved all healthcare workers including doctors. Not many of the previously done studies focused on WPV solely against doctors. Since doctors are frontline workers of the healthcare system, it is important to highlight the prevalence and impact of WPV against them. Moreover, different predictors of violence i.e. age, gender, years of experience, public and private hospital settings and their influence on the type of violence faced by physicians have not been analyzed.

The objectives of this study were to focus on the prevalence and types of workplace violence, psychosocial effects on physicians and factors contributing to workplace violence. The effect of different socio-demographic variables on the type of violence faced the physicians is also studied. Awareness of this issue and preparation to handle it are the keys to managing workplace violence (11). Thus, this cross-sectional study not only addresses the present knowledge gap in research but also serves as a guiding scientific document for policymakers and higher authorities to formulate effective strategies for the control of workplace violence against physicians.

METHODS AND METHOD:

A cross-sectional study was conducted from March 2022 to December 2022 among the doctors of public and private hospitals in Lahore, Peshawar, Islamabad and Gujranwala. The sample size was estimated to be 243, calculated using Raosoft.com (12), keeping a 5.5% margin of error, 95% confidence interval and a response distribution of 73.8% based on a previous study done in Lahore (13). The actual sample size of this study was 255. The snowball sampling technique was used for data collection. Any medically certified doctor who came in direct interaction with the patients during the last 12 months before the study, was included in the study. Following exclusion criteria were applied: i) doctors not having direct interaction with patients (e.g. doctors working in basic health sciences and teaching departments), ii) doctors working in military health care institutions.

The questionnaire employed in our study was a reliable and validated questionnaire developed by Kumari A. et al. (14), and consent was obtained from the author to use it for our research. The questionnaire included six sections: *1) Demographic data*: It included age, marital status, gender, workplace setting, department, experience and position in the hospital e.g. HO, MO, resident, member of faculty. *2) Different forms of violence experienced by the doctors:* This section included different forms of violence including verbal altercations (verbal abuse, offensive comments), physical violence, (e.g., slapping, beating, thrashing, vandalizing, attack with weapons etc.), sexual harassment (Any unwanted, unreciprocated and unwell-come behavior of a sexual nature that is offensive to the person involved), racial harassment (threatening conduct that is based on race, color, language, national origin, religion, association with a minority) that were experienced by the doctors. *3) Impact of Incidence of Violence:* This section assessed the impact of the incidence of violence on various aspects of a doctor's life including personal well-being and self-care, family life, social life, mental and psychological well-being. *4) Reporting of Incidence:* This section assessed why doctors didn't report the violence experienced them. *5) Mitigation Strategies:* This section focused on various mitigation strategies that could help in preventing experiences in the future. *6) Risk factors related to incidents of WPV:* This section included various risk factors e.g. unrealistic expectations of patients/ attendants, inappropriate knowledge of patients/ attendants about the disease/health condition, poor communication skills of doctors etc. that were contributing towards violence against doctors in their opinion.

The questionnaire was distributed via the Google form for two months from October 1, 2022 to November 30, 2022 and confidentiality was maintained. It required 5-10 minutes to complete this questionnaire. Incomplete questionnaires were not part of this study.

Data were compiled with the help of Microsoft Excel and analysed using SPSS version 25. Independent variables used in our research were age, gender, position in the hospital and work experience whereas

dependent variables are physical violence, verbal altercations, sexual harassment and racial harassment. The variables in our research were categorical in nature, so we calculated frequencies and percentages for these variables in descriptive statistics. For the association of different forms of violence against doctors with socio-demographic factors like age, gender, position in the hospital and work experience, the Chi-square test was used and a p-value less than 0.05 was considered significant.

All respondents were informed of the study's purpose and method. All the respondents participated in the investigation after voluntarily agreeing to fill out the anonymous questionnaire, and were explained research objectives and confidentiality. The respondents understood the purpose, method, and use of the collected data. The study protocol was reviewed and approved by the Institutional Review Board (IRB), King Edward Medical University, Lahore.

RESULTS:

Table 1 presents the socio-demographic characteristics of participants. Most of the respondents were males (n=148; 58%) aged 20-29 years (n=180; 70.6%) and single (n=157; 61.6%). The majority of the participants were from medicine (n= 60; 23.5%) and surgery (n=42; 16.5%) departments followed by pediatrics (n=21; 8.2%) with more than two-thirds (n=163; 69.3%) having 1-5 years of experience. 39 (15.3%) of the doctors were working in other specialties like cardiology, radiology, anesthesia, urology, etc. One-third of the participants were house officers (n=87; 34.1%). 202 (79.2%) research participants belonged to public hospitals.

The frequency of various forms of WPV i.e. verbal, physical, sexual and racial are shown in table 2. More than four-fifths of the participants reported that they had faced verbal altercations a minimum of once a year. Almost half of them faced it either once a week or once a month. One-third of the participants faced physical violence. Among those who had faced sexual and racial harassment, most of them faced these about every six months.

Table 3 shows the impact of WPV on self-care, family life, social life and psychological well-being of the individual. Psychological well-being was the most affected aspect of majority of the participants followed by self-care.

As is evident from table 4, "belief that no action will be taken" was considered significant or somewhat significant by almost 95% of the respondents. Lack of organizational support was another significant factor that led to the under-reporting of the WPV. The majority (n=94) didn't consider "the feeling of being ashamed of reporting" as the factor behind the under-reporting of WPV.

Overcrowding and inadequate security arrangements were thought to be the most important factors behind WPV, as is evident from Table 5. More than two-thirds of the participants were of the view that inappropriate knowledge of patients/attendants was another very important risk factor in causing WPV.

Improving healthcare facilities and unbiased media reporting were the two most useful mitigation strategies in the opinion of participants. Regarding other mitigation strategies, strong legislature

measures, and regular training of healthcare workers regarding soft skills followed by controlling the number of attendants visiting the hospitals were regarded as other very useful strategies to reduce WPV against doctors as shown in Table 6.

Table

Table 1: Socio-demographic characteristics of participants

Characteristics	*N*	*%*
Age		
20-29	180	***70.6***
30-39	52	***20.4***
40+	23	***9***
Marital Status		
Single	157	***61.6***
Married	97	***38***
Gender		
Male	148	***58***
Female	107	***42***
Workplace Setting		
Public/ Govt.	202	***79.2***
Private	53	***20.8***
Position in Hospital		
House officers (HOs)	87	***34.1***
Medical officers (MOs)	67	***26.3***
Residents	62	***24.3***
Faculty Members	39	***15.3***
Department of Working		
Administration	10	***3.9***
Cardiology	5	***2.0***
Medicine	60	***23.5***
Emergency	17	***6.7***
ENT	18	***7.1***
Eye	10	***3.9***
Surgery	42	***16.5***
Gynae and Obstetrics	11	***4.3***
Pediatrics	21	***8.2***
OPD	20	***7.8***
Pulmonology	2	***0.8***
Others	39	***15.3***
Experience (Years)		
Less than a year	35	***13.7***
1-5 year	163	***63.9***
6-10 years	30	***11.8***
11-15 years	14	***5.5***
16 + years	13	***5.1***

Table 2: Frequency of various forms of workplace violence

Frequency	**Verbal altercations**		**Physical violence**		**Sexual Harassment**		**Racial Harassment**	
	n	***%***	***n***	***%***	***n***	***%***	***n***	***%***
Nearly daily	34	*13.3*	3	*1.2*	6	*2.4*	11	*4.3*
About once a week	60	*23.5*	10	*3.9*	14	*5.5*	17	*6.7*
About once a month	60	*23.5*	22	*8.6*	21	*8.2*	32	*12.5*
About once every 6 months	28	*11*	26	*10.2*	25	*9.8*	27	*10.6*
About once a year	32	*12.5*	15	*5.9*	2	*4.7*	15	*5.9*
Never	41	*16.1*	179	*70.2*	177	*69.4*	153	*60*

Table 3: Impact of Violence on Various Aspects of Individual's Life

Aspects of Life	Not Affected	Mildly Affected	Moderately affected	Severely Affected
Self-care	81 ***(31.8%)***	104 ***(40.8%)***	52 ***(20.4%)***	18 ***(7.1%)***
Family life	104 ***(40.8%)***	106 ***(41.6%)***	28 ***(11%)***	17 ***(6.7%)***
Social life	116 ***(45.5%)***	92 ***(36.1%)***	34 ***(13.3%)***	13 ***(5.1%)***
Psychological well-being	70 ***(27.5%)***	108 ***(42.4%)***	50 ***(19.6%)***	27 ***(10.6%)***

Table 4: Factors leading to Under-Reporting of WPV

Factors	Significantly		Somewhat Significantly		Insignificantly	
	n	***%***	***n***	***%***	***n***	***%***
Felt ashamed of reporting	75	***28.6***	91	***35.7***	94	***36.9***
Belief that no action will be taken	151	***59.2***	92	***36.1***	16	***6.3***
Lack of organizational support	156	***61.2***	79	***31***	25	***9.8***
Lack of provision to report such incidences	124	***48.6***	104	***40.8***	27	***10.6***
Process was time consuming	125	***49.0***	91	***35.7***	43	***16.9***
Fear that appraisal or promotion avenues will be affected	95	***37.3***	115	***45.1***	50	***19.6***

Table 5: Risk Factors Leading to WPV

Risk Factors	Very important		Somewhat important		Not important	
	n	***%***	***n***	***%***	***n***	***%***
Unrealistic expectations of patients/attendants	155	***60.8***	88	***34.5***	12	***4.7***
Inappropriate knowledge of patient/attendants about disease	181	***71.0***	67	***26.3***	7	***2.7***
Poor communication skills of doctors	134	***52.5***	108	***42.4***	13	***5.1***
Lack of resources & facilities	170	***66.7***	80	***31.4***	5	***2.0***
Overcrowding	198	***77.6***	49	***19.2***	8	***3.1***
Inadequate security arrangements	184	***72.2***	59	***23.1***	12	***4.7***
Inadequate action on receiving complaints of WPV	163	***63.9***	85	***33.3***	7	***2.7***
Negative & Inappropriate media reporting	162	***63.5***	81	***31.8***	12	***4.7***
Lack of provision of harsh punishment for offenders	177	***69.4***	72	***28.2***	6	***2.4***
Lack of organizational support	173	***67.8***	75	***29.4***	7	***2.7***

Table 6: Usefulness of Mitigation Strategies

Mitigation Strategy	Very useful		Somewhat useful		Not useful	
	n	***%***	***n***	***%***	***n***	***%***
Controlling no. of attendants visiting the hospital	183	***71.8***	64	***25.1***	11	***4.3***
Educating patients & attendants about limitations of medical sciences and available infrastructure	174	***68.2***	71	***27.8***	12	***4.7***
Regular training of healthcare workers regarding soft skills	188	***73.7***	63	***24.7***	8	***3.1***
Self-defense training of doctors	148	***58.0***	85	***33.3***	29	***11.4***
Improving healthcare facilities	206	***80.8***	43	***16.9***	6	***2.4***
Strong legislature measures	187	***73.3***	59	***23.1***	11	***4.3***
Unbiased media reporting	191	***75.0***	50	***19.6***	18	***7.1***

Table 7: Data Analysis

Characteristics	**Physical violence**	**Verbal altercations**	**Sexual Harassment**	**Racial harassment**
Participants who faced violence minimum once a year	n=76 n (%)	n=214 n (%)	n=78 n (%)	n=102 n (%)

Age				
Less than 30 years	55 (72.4%)	152 (71%)	63 (80.8%)	85 (83.3%)
30-39 years	14 (18.4%)	41 (19.2%)	12 (15.4%)	12 (11.8%)
40 years or more	7 (9.2%)	21 (9.8%)	3 (3.8%)	5 (4.9%)
p-value	*0.88*	*0.38*	***0.04***	***0.001***
Gender				
Male	55 (72.4%)	128 (59.8%)	42 (53.8%)	59 (57.8%)
Female	21 (27.6%)	86 (40.2%)	36 (46.2%)	43 (42.2%)
p-value	***0.003***	*0.19*	*0.37*	*0.96*
Position in hospital				
House officers	23 (30.3%)	65 (30.4%)	30 (38.5%)	38 (37.3%)
Medical officers	26 (34.2%)	65 (30.4%)	25 (32.1%)	34 (33.3%)
Residents	19 (25.0%)	52 (24.3%)	15 (19.2%)	19 (18.6%)
Members of faculty	8 (10.5%)	32 (15.0%)	8 (10.3%)	11 (10.8%)
p-value	*0.19*	***0.003***	*0.16*	***0.04***
Work experience				
Less than a year	23 (30.3%)	65 (30.4%)	29 (37.2%)	38 (37.3%)
1-5 years	38 (50.0%)	99 (46.3%)	37 (47.4%)	49 (48.0%)
More than 5 years	15 (19.7%)	50 (23.4%)	12 (15.4%)	15 (14.7%)
p-value	*0.35*	***0.01***	*0.17*	***0.04***

Data Analysis:

The relationship between different demographic variables with workplace violence was analyzed using the Chi-square test, as shown in Table 7. Physical violence was significantly associated to be more common among male doctors (p-value: 0.03). Verbal violence was significantly more common among medical officers (p-value: 0.003) and doctors with work experience of 1-5 years (p-value: 0.01). The analysis also showed that sexual harassment was

more prevalent among the doctors in the age group 20-29 with a statistically significant p-value of 0.04, and was not associated with gender. Racial harassment was associated more with doctors less than 30 years of age (p-value 0.001), house officers and medical officers (p–value 0.04), and those with work experience less than a year or 1-5 years (p-value: 0.04)

DISCUSSION:

Our study reported that verbal violence was the predominant form of violence faced by doctors as reported by four- fifth of the participants, followed by racial harassment faced by two-fifth of the participants. The results of this study are comparable with past studies done within Pakistan as well as internationally. When asked about how violence affects their life, nearly half of the participants agreed that violence faced by them at the hospitals affected their psychological well-being. The psychological effect of WPV can vary from stress and guilt to anxiety and depression if overlooked. A study conducted by Kaur et al. showed that half of the participants who were victims of violence faced issues of low self-esteem, depression, anxiety, and stress (15). A systematic review by Lanctôt N. et al. showed that among the various negative consequences that could occur after the violence, psychosocial effects including depression and anxiety were the most significant (16).

In the majority of cases, the victims of violence prefer not to report it due to various reasons. Lack of support from the organization and fear that no action will be taken place even if the case is reported were the two important causes leading to underreporting of events in the opinion of respondents of this study. Almost half of the doctors were of the view that reporting the incident could deprive them of promotion and could create hurdles in their job. A study conducted in Pakistan by Baig LA et al. (4) had findings in conformity with ours i.e. doctors feared that reporting the incidence could have adverse consequences on their job. The participants of our study believed that overcrowding, inadequate security arrangements, and lack of knowledge about the disease among the patients as well as the attendants were the three main contributors to the violence faced by them. This finding is consistent with a study conducted by Imran N. et al. in Lahore. (13)

Shafran- Tikva S. et al. (17) emphasized that an authoritative demeanor and no empathy from the side of the organization contribute significantly to violence against doctors. The provision of better healthcare facilities, impartial media reporting, and training of staff for better communication and soft skills could fend off such incidents in the future. Physical violence was associated with gender (p-value: 0.003) in our study, as males experienced more physical violence as compared to females. This is consistent with the findings of Kitaneh M. et al (18). Verbal violence and sexual and racial harassment were also associated with young age and less experience. The same finding was also observed by Kumar M. et al. who did their study in India (19).

Various strategies that we can recommend in view of our results to prevent WPV include organizational

support i.e. the organization should come into action whenever such an incident is reported and should provide every kind of support to the victims. In a country like Pakistan where public care hospitals have a huge influx of patients and overcrowding cannot be avoided, appropriate security arrangements should be ensured and a check and balance should be kept on the number of attendants to mitigate such incidents. Doctors should be encouraged to report violence even if it is not physical because such incidents can cause significant psychological damage in the future. Training of doctors especially the young ones is important in this regard as they are new to the hospital environment and do not know how to tackle such stressful situations.

The strength of our study lies in the fact that it is one of the fewest studies that focus on workplace violence solely against doctors. The findings of this study highlight the current prevalence of workplace violence against doctors thus enabling the policymakers to make new and effective policies. The limitation of our study is the sampling technique as it was conducted online through Google forms. Our sample mainly included young doctors ranging from 20 to 29 years of age which can lead to potential biases. Doctors were asked to report the incidents based on their recollection which can contribute to recall bias. Due to various stigmas associated with reporting violence, especially sexual harassment, reporting bias could also have affected our results. Future studies should consider these biases.

CONCLUSION:

WPV is a rampant issue affecting the psychological well-being of doctors adversely, and verbal violence is its predominant form. Authorities should focus on providing adequate support to the victims and encourage reporting of incidents of violence. Effective preventive strategies are required to be adopted in light of this research.

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