

AGGRESSION AND VIOLENCE TOWARDS MEDICAL DOCTORS AND NURSES IN A PUBLIC HEALTH CARE FACILITY IN LAHORE, PAKISTAN: A PRELIMINARY INVESTIGATION

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ABSTRACT

OBJECTIVE: to examine the frequency, possible associated factors & consequences of workplace violence towards doctors and nurses in a public healthcare facility in Lahore, thereby providing a basis for appropriate intervention.

METHODOLOGY: We conducted a retrospective exploratory cross sectional study in a public sector hospital in Lahore, employing self-administered questionnaire to collect data on various aspects of workplace violence against doctors and nurses, in 12 months preceding the study. The sample covered 164 respondents (response rate 65.6%). Suggestions for restricting future violent incidents were also sought. The data was analyzed using the statistical package for the social sciences (SPSS) version 17.

RESULTS: More than 2/3rd of the respondents (n=121/164, 73.8%) were the victims of violence in the preceding 12 months with verbal abuse (n=104/121, 86%) being the main aggression type encountered. Only 72/121 (59.5%) victims of violence reported the violence and majority of incidents (n=29/72, 40.3%) were reported to colleagues only. "No previous action" (73%) was the commonest reasons cited for not reporting the incidents. Workers exposed to violence & aggression, experienced high level of psychological distress. Most common assailants were patients' relatives (n=86/121, 71%) followed by patient themselves (n=37/121, 30.5%). Overcrowding and lack of security were cited as the main reasons for such incidents.

CONCLUSION: Health care workers in public sector hospital setting in Lahore are frequently exposed to aggression and violence & it is associated with many adverse consequences including high level of stress. Appropriate preventive measures including occupational support are required to make hospitals safer environments.

KEY WORDS: Workplace violence, Aggression, Health care workers, Work stress.

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INTRODUCTION

Workplace violence and aggression is considered to be an important occupational hazard in healthcare settings worldwide,¹ and is a subject of increasing interest lately, both in the developed and developing countries.²

Despite the steadily growing body of literature, there is no standard agreed definition of violence. *World Health Organization* (WHO) defines violence as 'the intentional use of force that makes threats to individuals or groups, which may result in injury, death or psychological harm'.³ Another definition of workplace violence by *International Labour Organization* (ILO) used in previous studies is 'incidents where staff are abused, threatened or assaulted in circumstances related to their work'.⁴ Differences in the definition of violence used and population studied, as well as variation in perception of what constitutes violent behavior across different cultures and societies make it difficult to compare results of previous studies.

Exact prevalence rates of violence and aggression towards *Health Care Workers* (HCW) are unknown as under reporting is common.⁵ Furthermore many Health Care Workers have been observed to accept violence and aggression as an integral part of their clinical work.⁶ Still, some studies indicated up to 90% of health care workers reporting exposure to violence at work, which is quite alarming.⁷ Evidence suggests that violence and

aggression towards HCW results not only in negative impact on affected person's physical and emotional well-being but also has serious consequences for patients care & effective health care delivery.⁸ In addition it leads to deterioration of working environment with dissatisfaction and low productivity.^{9,10}

Many studies have focused on violence and aggression prevalence and associated factors in Psychiatric hospitals,^{11,12} emergency departments,¹³ public sector hospitals,¹⁴ welfare sectors¹⁵ and nursing homes¹⁶ but majority of these studies were done in the developed world. The results of these studies can only be applied to developing world including Pakistan to a limited extent mainly because of different organizational structure of healthcare settings. Violence and aggression in health care settings in Pakistan constitutes a serious problem but knowledge gap in research needs to be addressed in order to develop preventive measures. Another area which needs clarification is reporting of these incidents as well as institutional policies and training to deal with such incidents.

The aim of the study thus was to examine the frequency, type, causes and consequences of violence and aggression towards doctors and nurses in a public sector tertiary care facility in Lahore city of Pakistan. Furthermore suggestions to prevent such incidents in future were also sought.

METHODOLOGY

Ethical approval for the study was granted by the institutional review board. Data was collected by visiting the various major departments of the hospital twice during the data collection period at different timings to ensure representation of various shifts staff. We used non-probability convenience sampling and all the staffs (doctors and nurses) present in the wards on the respective days were approached and

invited to participate in the study. A verbal and written explanation of the purpose of the study was provided to the participants, and informed consent was sought before the participants completed the questionnaire. The questionnaire was anonymized in order to encourage participation. It was administered and collected immediately upon completion by the data collection team.

The study questionnaire was in English and consisted of 4 sections. The first section sought information about general demographics of respondents (age, gender, years of experience in the health care sector, occupation, educational level and their departments). The second section asked respondents to give a binary (yes/no) response to a stem question about whether they had been exposed to any violent event in the past twelve months. Those who answered in the affirmative were requested to identify the type of violence (physical aggression, verbal aggression, threats, harassment and both verbal and physical; terms defined as in a previous study on this topic,¹⁷ source of violence as well as place and timings of violent incident.

The respondents who were exposed to violence were also asked to identify possible reasons of the violent act, they had encountered and its possible consequences on their well-being using a closed check list based on the literature

review of the topic. The next section sought information about whether the violent incidents were reported by the victims and if not, the reasons behind it.

In the last section, respondents were asked to rate the institute training against violence and support levels in three categories i.e., low, intermediate and good and suggestions were sought to prevent such incidents in future at their workplace.

Data was analyzed using the statistical package for the social sciences version 17 (SPSS Inc, Chicago, IL, USA). Descriptive statistics were used to report the results. Chi square test was used to compare the frequency of violence in both genders as well as between different specialty groups. P value <.05 was considered as significant.

RESULTS

Among the 250 healthcare professionals approached a total of 164 agreed to participate in the study (response rate 65.6%). No further data was collected from those who refused to participate, and it was therefore not available for analysis.

Respondents were predominantly young with mean age of 30.58 ± 8.02 years. Males (n=102, 62.2%) constituted the majority of respondents. Doctors comprised 82.3% (n=135) and nurses

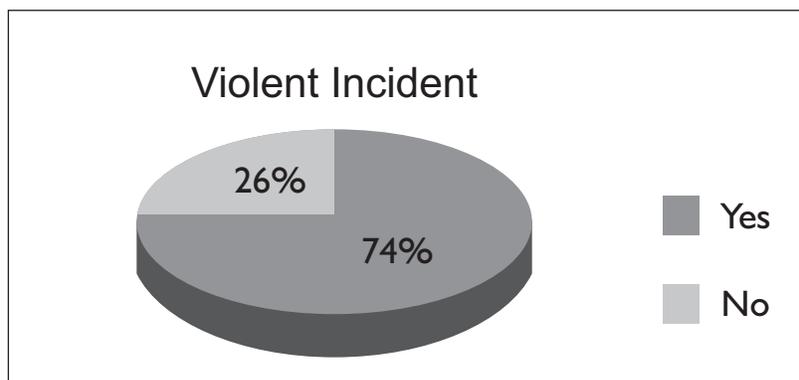


Figure 1: Frequency of violence and aggression faced by the Respondents in 12 months preceding the study

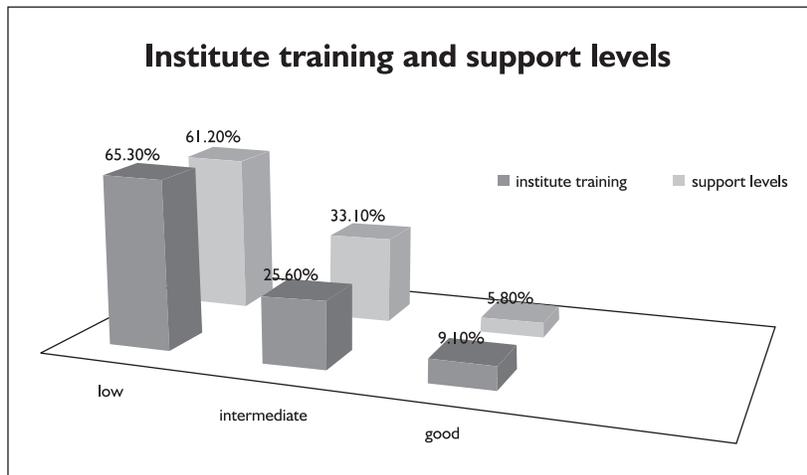


Figure 2: Rating of respondents regarding institutional training and support levels related to violence and aggression

TABLE I: TYPE, PLACE, TIME, SOURCE & PERCEIVED CAUSES OF VIOLENT INCIDENTS ENCOUNTERED BY RESPONDENTS IN TERTIARY CARE PUBLIC SECTOR HOSPITAL IN LAHORE

Variable	Frequency	%age*
Place of violent act (n= 121)		
Emergency department	93	76.8
Ward	37	30.5
Outdoor	13	10.7
Time of violent act (n= 121)		
Day	58	47.9
Evening	47	38.8
Night	47	38.8
Source of violence (n= 121)		
Patients' relatives	86	71.0
Patient	37	30.5
Co-workers	64	52.8
Others	4	3.30
Possible Reasons for violence (n= 164) (all respondents)		
Overcrowding	59	36
Lack of security	57	34.8
Negative media impact	55	33.5
Excessive time	50	30.5
Shortage of staff	43	26.2
Unmet patients demands	37	22.6
Patients health	33	20.1
Lack of space	31	18.9
Poor work organization	21	12.8
Staff workload	20	12.2
Irritating staff attitude	11	6.7
Inexperienced caregivers	4	2.4

*Values do not add up to 100% as respondents were allowed to tick more than one option, if applicable

17.7% (n=29) of the study sample. Respondents were recruited from three departments; medicine and allied (n=91, 55.4%), surgery and allied (n=63, 38.4%) and accident & emergency department (n= 10, 6.0%).

Frequency and types of violence and aggression

More than two thirds of the respondents (n= 121/164, 73.8%) were victims of some type of violence and aggression in the past year. (Figure 1)

Verbal abuse (n= 104/121, 86%) was reported to be the main violence type encountered by respondents followed by threats (n=42/121, 34.7%). Physical abuse, both verbal and physical abuse and harassment were other types of aggression faced by the respondents in decreasing frequencies respectively. No statistically significant difference regarding exposure to aggression and violence was observed in our study between genders, or according to the specialties i.e. medicine and allied or surgical and allied or emergency. However very few respondents in our sample were from emergency to have a meaningful comparison.

The most common source of violence was patients' relatives (n=86/121, 71%) or patients themselves (n=37/121, 30.5%). Table I shows the various aspects of violent incidents as well as their perceived causes as reported by the respondents.

Reporting of the incidents

Out of 121 victims of violence, only 72 (59.5%) reported the violence and majority of incidents (n=29/72, 40.3%) were reported to colleagues only (Table II). "No previous action" (73%) and "felt it as part of job" (38.7%) were the most common reasons cited for not reporting the incidents.

TABLE II: REPORTING OF VIOLENCE AND REASONS FOR NOT REPORTING BY THE HEALTH CARE PROFESSIONALS (N= 121)

Aspect	Frequency	%age	
Reporting violent event (n= 121)	Yes	72	59.5
	No	49	40.5
To whom reported* (n=72)	Colleagues	29	40.3
	Direct supervisor	20	27.8
	Hospital management	18	25
	Police	3	4.2
	Relatives	2	2.8
Reasons for not reporting* (n=49)	No previous action	36	73.4
	Feel it as part of job	19	38.7
	Fear of consequences	5	10.2
	Perpetrator apologized	5	10.2
	Lack of evidence	4	8.1

*Respondents were instructed to select as many items as applicable.

TABLE III: CONSEQUENCES OF VIOLENCE & AGGRESSION IN WORKPLACE AS IDENTIFIED BY THE STUDY RESPONDENTS

EFFECT OF VIOLENCE	Frequency (n= 164)	Percentage
Fear	32	19.5
Anger/ rage	66	40.2
Distress	52	31.7
Anxiety/self-doubt/insecurity	37	22.6
Humiliation	36	22
Guilt	7	4.3
Disappointment	42	25.6
Helplessness/sadness	20	12.2
Depression	16	9.8
Became careful	20	12.2
Physical impairment	—	—
Intention to quit workplace	16	9.8
Intention to change behavior	9	5.5
Desire for revenge	3	1.8
No reaction	9	5.5

Consequences of violence at work

Seventy five respondents (45.7%) felt extremely stressed due to violence. Various consequences of exposure to violence were identified by the respondents (Table III). Anger and rage was reported by 40% indicating high emotional distress. Almost 6% of respondents expressed intention to quit work as a result of exposure to violence at work.

Majority of the respondents rated their institutions training to deal with violence at workplace (65%) as well as support level (61%) as low. (Figure 2)

Suggestions to prevent future violent incidents in workplace:

Adequate security measures (n = 106/164, 64.6%), policy making by the hospital management against violence

(n=72, 43.9%), educating patients and their families (n=71, 43.3%) were some suggestions given by the respondents for prevention of such violent incidents against health care professionals in the hospital setup. (Table IV)

DISCUSSION

A significant proportion (74%) of respondents in the study experienced workplace violence in the last 12 months. Literature review reveals that prevalence of verbal and physical aggression faced by HCW ranges from 0.4% to 91%.¹⁸⁻²⁰ Some studies have looked at the frequency of verbal and physical aggression separately like 70.7% of HCW experienced physical and 81.4%, verbal aggression in previous 12 months in Germany.¹⁶ One out of ten workers reported physical assault and one out of three, exposure to non-physical violence in a public health care facility in Italy.¹⁷ Direct contact of HCW with highly stressed patients and families because of illness,^{8,9} unrestricted movements of visitors in the hospitals,¹⁰ overcrowding,¹¹ and lack of staff training in prevention and management of aggression and violence,¹⁰ are identified as some of the contributing factors towards this high prevalence of workplace violence in healthcare settings.

Differences in study settings and healthcare systems and population studied makes it difficult to compare results of various studies but still the very high figures reported in our and previous studies underscores the importance of issue of violence and aggression faced by HCW in workplace.

Negative consequences of violence and aggression on physical and psychological wellbeing have been well demonstrated in previous studies. Studies found HCW responses to aggression to be similar across different countries, cultures and settings and include immediate reactions like fear, anger, anxiety,^{25,26} as well as intention to quit profession.²⁷ As

TABLE IV: SUGGESTIONS BY RESPONDENTS FOR PREVENTION OF FUTURE VIOLENT INCIDENTS IN HOSPITAL SETTINGS IN LAHORE, PAKISTAN

Suggestions*	Frequency (n= 164)	Percentage
Adequate security measures	106	64.6
Policy making by hospital management	72	43.9
Educating patient and families	71	43.3
Restricted access to public	64	39
Environmental upgrade	54	32.9
Change of time tables and job shifts	48	27.4
Special clothing/equipment	17	10.4

*respondents were instructed to select as many items as applicable.

expected, our study respondents reported many negative effects of exposure to violence like anger, distress and guilt as well as high work related stress, which in turn translates into staff dissatisfaction and poor patient care in an already vulnerable healthcare delivery system.

Our study result corroborates previous reports of under reporting of violence and aggression incidents faced by HCW, to the institutional authorities. Staff mostly appears to get support from colleagues in informal discussions. Only a fraction of actual cases gets reported,^{5,28} a trend seen also in studies of bullying faced by junior doctors in Pakistan.²⁹ Causes for low rates of reporting may be lack of support from seniors, unclear reporting procedures, and institutional policies in this regards and possible acceptance of violence and aggression as an integral part of clinical work.⁶

Majority of the respondents felt unprepared to deal with aggression and violence at workplace. Institutions should offer better training for managing violence and effectiveness of the training should be assessed by regular feedback from the staff.

Several limitations need to be taken into account in interpretation of our study results. Firstly as our study was limited to one institution, generalizability

of results is limited. However our results are in line with previous literature on this topic and we have no reason to believe that situation in other public healthcare institutions in Lahore is too different.

Retrospective nature of the study also leads to recall bias. We relied on staff report measure thus focusing on HCW perspective which may not be accurate in all situations, but absence of records and under reporting made it difficult for us to use any objective criteria. Furthermore how an incident is perceived rather than the actual event itself has been observed to have significant consequences for the individual.³⁰

In conclusion, violence in healthcare institutions in Pakistan is a hidden phenomenon. Our results indicate that it exists and should be prevented. There is need to train staff in good working practices, de-escalation techniques which alongside Institutional policies and organizational safety policies may also be a way forward in decreasing likelihood of workplace violence. Supportive workplace and teamwork can further be helpful and effective in this regards.

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AUTHOR'S CONTRIBUTION

Following authors have made substantial contributions to the manuscript as under:

- NI:** Conception and design, data analysis & interpretation, drafting the manuscript and final approval of the version to be published
- MHP, RF:** Design, acquisition and analysis of data & final approval of the version to be published
- ARA:** Acquisition of data, critical revision & final approval of the version to be published

CONFLICT OF INTEREST

Author declares no conflict of interest

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