

A Cross-Sectional Survey to Study the Prevalence and Risk Factors of Workplace Violence against Doctors in Public Tertiary Care Hospital in Gujarat

Dr. Bhavesh R Sureja¹, Dr. Gaurav D Bhambhani^{2*}

¹Assistant Professor, General Medicine Department, GMERS Medical College, Junagadh, Gujarat, India

²Professor and Head, General Medicine Department, GMERS Medical College, Junagadh, Gujarat, India

Original Research Article

***Corresponding author**

Dr. Gaurav D Bhambhani

Article History

Received: 21.09.2018

Accepted: 27.09.2018

Published: 30.10.2018

DOI:

10.36347/sjams.2018.v06i10.006



Abstract: The rising trend of work place violence (WPV) against doctors is endangering the doctor-patient relationship and quality of care. Such violence negatively impacts the psychological as well as physical well-being of the doctors and overall productivity of health system. Hence an institution based cross sectional study was conducted to know the magnitude of such problem and to find the out the risk factors associated with it, among the doctors working in tertiary care hospital attached to GMERS Medical College, Junagadh. All 73 faculty doctors working in the hospital were included in the study after obtaining consent. A pre-tested questionnaire was used for the interview assessing the type, frequency and causes of WPV. The types of violence were categorized into verbal abuse, threats to assault and physical assault. Overall, the prevalence of WPV was 67%. Surgery and allied branches had significantly higher proportion of doctors who experienced work place violence as compared to other branches. The prevalence of WPV was significantly higher among male doctors. The prevalence as well as the frequency of verbal abuse was higher than other types of violence. The commonest cause for WPV was long waiting period, and the most suggested measure to prevent such violence was strengthening of security system. It is high time that doctors are protected from incidences of work place violence for their own safety and to ensure sustained quality of healthcare services.

Keywords: Work place violence, Doctor patient relationship, Threat to doctors.

INTRODUCTION

The health care model in India, particularly in Government Institutions works as a welfare model. This ensures affordable health care delivery to the community as a whole. A conducive hospital environment and a cordial doctor-patient relationship is essential for proper treatment of the patients as well as for doctors to work without any fear or stress [1]. However, the rising trend of work place violence is endangering the present situation. Work place violence (WPV) is considered to be an important occupational hazard in healthcare settings worldwide and is a subject of increasing interest lately, both in the developed and developing countries [2-5].

WPV was defined by the National Institute for Occupational Safety and Health (NIOSH) as: violent acts, including physical assaults, threats or verbal abuse, directed towards a person at work or on duty [6]. Verbal abuse through words, manner or tone, leaves the recipient feeling personally or professionally humiliated, attacked or devalued [7]. Physical abuse is reported to occur within health care facilities four times

more often than all other industries [8]. Among health care personnel, emergency workers are at a greater risk of violence than other hospital personnel, perhaps due to their frontline nature of works and to their 24-hour accessibility [3,9].

Work place violence is of grave concern for health organization as a system dysfunction. It negatively impacts the psychological as well as physical well-being of doctors [10]. It also adversely affects the overall productivity of health system [11]. Studies have revealed that exposure to WPV caused depression, insomnia, post-traumatic stress disorder and work absenteeism due to fear [12]. The mental health of healthcare workers and their level of job satisfaction are also negatively affected by work place violence [13]. Patient aggression affects healthcare quality and may, in extreme situations, be the cause of medical malpractice [13]. Thus, experiencing violence at work has many negative impacts both at the organizational and individual level, creating a hostile work climate and results in the suboptimal care to patients.

These rising phenomenon of violence against doctors has gathered attention of researchers all over the world. According to the World Health Organization (WHO) report, Attacks on Health Care: Prevent, Protect, and Provide, over the 2-year period from January 2014 to December 2015, there were 594 reported attacks on healthcare workers that resulted in 959 deaths and 1561 injuries in 19 countries [14]. Several independent studies all over the world have reported the prevalence of workplace violence among physicians to be 56%–75% [15]. A recent Lancet article about a survey done by Indian Medical Association revealed that as many as 75% doctors in India have faced some form of work place violence in hospitals [16].

In spite of recommendations suggested by many researchers, cases of violence against doctors are gradually increasing. This deranged doctor-patient relationship will soon start showing its effect at a large. Hence, a viable and practical solution has to be sought at the earliest. In recent years, a few studies have been conducted to find out the magnitude of the problem in India, however such studies are limited and none has been conducted in Gujarat state. There has been an increasing outrage among doctors of Government hospitals in different parts of Gujarat over rising incidence of work place violence. Therefore, this study was conducted with the objective to know the prevalence of work place violence in tertiary care hospital and to find out the causes and risk factors associated with it.

METHODOLOGY

This was an institution-based cross-sectional study done among faculty doctors working in a tertiary care hospital attached to a GMERS Medical College, Junagadh in the state of Gujarat. The hospital has around 700 beds in all the medical and surgical specialties catering to a large population of Junagadh and neighbouring districts. The hospital has a highly skilled and trained workforce. The study was conducted over a period of two months from July to August 2018.

The study population included doctors involved in direct interaction with patients: faculties of medical and allied branches, surgery and allied branches and para clinical branches. Under graduate students, faculties in non-clinical branches (i.e., Anatomy, Physiology and Pharmacology), faculties on leaves during the study period and those who did not volunteer to participate in the study were excluded from the study. There were 73 eligible faculties in our hospital during the period of study. All of them were approached at their respective work places to be included in our study. The non-response rate was zero. Hence, the final sample size obtained was 73.

The purpose of the study was informed to each participant. An informed verbal consent was

obtained from each participant. A predesigned and pre-tested questionnaire was used for the interview. Professional information of the doctors like degree of doctor, area of practice, specialty, etc. was collected. Demographic details of all study subjects were collected. Information related to work place violence, frequency of violence, type of violence was also collected. Open ended question was asked to know their perception about the causes of this type of incidences. The doctors were also asked about security set-up at the hospital in general and their work area in particular. Ethical clearance for the study was taken from Institutional Ethical Committee.

The definition of workplace violence used in our study was that given by National Institute for Occupational Safety and Health (NIOSH) as: violent acts, including physical assaults, threats or verbal abuse, directed towards a person at work or on duty [6]. The WPV was categorized into “Verbal abuse”, “Threat of assault” and “Physical assault”. Verbal abuse was defined as the behaviour that departs from reasonable conduct. It includes verbal harassment and bullying. Threat to assault was defined to encompass the menace of death, or the announcement of an intention to harm a person or to damage their property. Physical assault/attack was defined as any attempt at physical injury or attack on a person including actual physical harm [17]. The frequencies of violence were categorized as “Rarely” (only once in 12 months), “Occasionally” (once per month), “Often” (more than once per month), “Frequently (once or more per week)”.

The data was compiled, analyzed and tabulated using the Microsoft Excel 2013 software. Appropriate statistical tests were applied using Epi Info 7 software. The p-value of <0.05 was considered to be statistically significant.

RESULTS

A total of 73 faculty doctors working in tertiary care hospital attached to GMERS Medical College, Junagadh were interviewed. Demographic profile of the doctors showed that 35% of the doctors were of the age 30 years or younger, whereas 65% were older than 30 years. More than two-third (70%) of the study participants were males (Table 1).

Overall, 49 (67%) doctors experienced work place violence at least once during last 6 months of the interview. The prevalence of WPV was higher (73%) if the doctor was younger as compared to the doctor with age more than 30 years (63%). However, this observed difference was statistically non-significant. The prevalence of WPV was significantly higher among males (76%) as compared to females (45%). Surgery and allied branches experienced most cases of work place violence (84%), followed by medicine and allied branches (75%) and lastly para clinical allied branches

(46%). This distribution was found to be statistically significant (Table 1).

Table-1: Profile of doctors who participated in the study (N=73)

Characteristics	Experienced WPV N=49	Not experienced WPV N=24	Total	P value
Age group				
≤ 30 years	19 (73.1)	7 (26.9)	26	0.423
> 30 years	30 (63.8)	17 (36.2)	47	
Sex				
Male	39 (76.5)	12 (23.5)	51	0.009
Female	10 (45.5)	12 (54.5)	22	
Speciality branch				
Medicine and allied	15 (75.0)	5 (25.0)	20	0.006
Surgery and allied	21 (84.0)	4 (16.0)	25	
Para clinical	13 (46.4)	15 (53.6)	28	
Figures in parenthesis are percentages				

Of those who experienced WPV, 77% of the doctors experienced verbal abuse, 24.5% faced threats to assault and 18.4% faced physical violence (Table 2).

It was observed the cases of verbal abuses occurred more frequently as against threats to assault and physical assault (Figure 1).

Table-2: Prevalence of different types of violence (N=49)

Types of WPV	Frequency
Verbal abuse	38 (77.5)
Threat to assault	12 (24.5)
Physical assault	09 (18.4)
Total	59 (100.0)
Figures in parenthesis are percentages	
Multiple responses were possible, hence total is different than N	

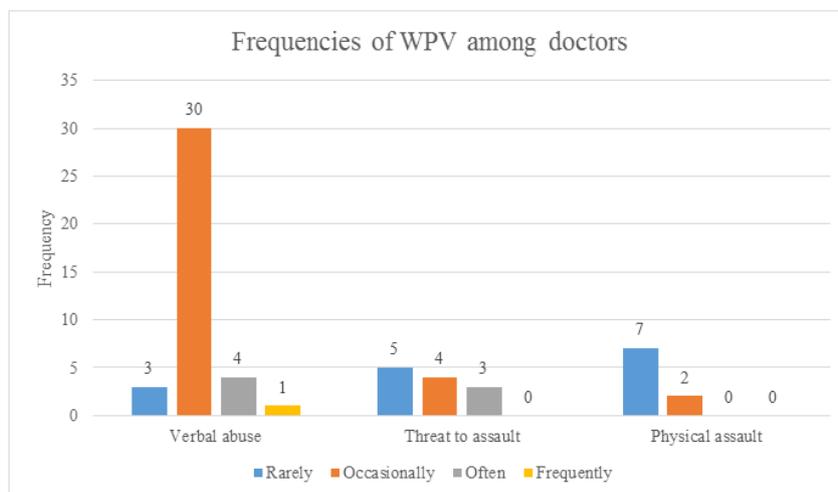


Fig-1: Frequencies of work place violence among the doctors (N=49)

Most of the doctors perceived anxiety due to long waiting periods (34%) as the commonest cause for workplace violence, followed by non-coordination by patient party (26%), lack of security (24%), aggressive relatives (22%) and violation of visiting hours (20%). Causes related to health system issues like delay in care, denial of admission and poor attitude of staff or doctors were reported less (Table 3).

The most common measure for prevention of workplace violence as suggested by the doctors was improvement of the security system (82%) followed by minimizing workload (75%), establishing legal punishment for violence makers (65%), maintaining optimum staff strength (56%) and establishing good rapport and communication with patients (52%).

Table-3: Perceived causes of violence according to the doctors (N=49)

Perceived causes	Frequency
Patient related	
Aggressive relatives	11 (22.4)
Influence of alcohol	4 (8.2)
Violation of visiting hours	10 (20.4)
Non-coordination	13 (26.5)
Anxiety due to long waiting periods	17 (34.7)
Dissatisfaction with the level of care	3 (6.1)
Health system related	
Delay in provision of care	5 (10.2)
Denial of admission	2 (4.1)
Lack of proper infrastructure support	3 (6.1)
Lack of proper security	12 (24.5)
Poor attitude/behaviour of doctor	2 (4.1)
Poor attitude/behaviour of supporting staff	3 (6.1)
Inadequate staff	8 (16.3)
Figures in parenthesis are percentages calculated out of 49 Responses were not mutually exclusive	

Table-4: Measures suggested by the doctors for the prevention of work place violence (N=73)

Suggested measures	Frequency
Improved security	60 (82.2)
Good communication	38 (52.1)
Legal punishment for violence	48 (65.8)
Minimize workload	55 (75.3)
Improvement in infrastructure	07 (09.5)
Maintain optimum staff strength	41 (56.2)
Figures in parenthesis are percentages calculated out of 73 Responses were not mutually exclusive	

DISCUSSION

Work place violence has become a big issue among the healthcare professionals. This study was done to find out the prevalence of violence against the doctors in a tertiary care hospital. The hospital caters mostly to the patients who are referred from the adjoining districts and are seriously ill and most of them need specialized care involving specialists. Despite the best efforts, there are increasing evidences of doctors being victims of violence at work place.

The overall prevalence of work place violence in our study was 67%. This finding is similar to a study conducted in Maharashtra [12] where the prevalence of work place violence among urban and rural doctors was 63%, and higher compared to a study in South Delhi [10], in which prevalence was 47%. The prevalence of work place violence against junior doctors in Manipur medical college was 50% [18].

In our study there was no significant association between the age of participants and the risk of work place violence. Similar findings were observed in studies done at South Delhi [10] and Manipur [18]. However, Schlabon *et al.* [19] observed that younger workers under 30 years run a higher risk of being affected by verbal aggression (OR 1.9, 95% CI 1.3 to 2.9) than older colleagues.

In this study, males were significantly at higher risk of work place violence as compared to females. This finding is similar to Sun P *et al.* [11] where males (73%) are significantly affected more than females (67%) (p=0.022), but contrast to studies done by Pund SB *et al.* [12], Kumar M *et al.* [10] and Eker HH [20].

In our study we observed that surgery and allied branches had significantly higher proportion of doctors who experienced work place violence as compared to medicine and allied branches, and para-clinical branches. Studies done by Kumar M *et al.* [10] and Alexander and Fraser [21] found no statistically significant differences among different allied health professional disciplines with regards to work place violence.

Verbal abuse (77%) was more common than physical form of violence (18%) in our study. Pund S B *et al.* [12] observed that the prevalence of verbal abuse to be 62.20%, and that of physical violence to be 3.66% which was lower than our study. Schablon *et al.* [19] reported that 56% of respondents had experienced physical violence and 78% verbal aggression. Kumar M *et al.* [10] in their study showed that about 87.32% of the incidents were of verbal violence while 8.4% were of physical violence. The reason for higher prevalence

of verbal abuse could be explained by the situation where the patients or their relatives feel dominant when they are more in numbers compared to the on-duty staff.

Various causes that are responsible for instigating violent episodes have been revealed in different studies. In other countries (Turkey, Israel) the main cause for violent episodes was long waiting period [20,22]. Others included lack of adequate physical conditions or spaces or health care personnel, patients' dissatisfaction with the treatment etc. In our study, long waiting periods (34%), non-coordination by patient party (26%), lack of security (24%), aggressive relatives (22%) and violation of visiting hours (20%) were pointed to principal perceived causes of work place violence. This finding is similar to study done in South Delhi [10] where commonest cause was long waiting time.

In most instances, these violent episodes were not properly investigated or handled which caused dissatisfaction among the doctors. Some of the suggestions given by the participants to prevent workplace violence include improvement of the security system, minimizing workload, establishing legal punishment for violence makers, maintaining optimum staff strength and establishing good rapport and communication with patients. A study done in Manipur [18] also revealed similar suggestions by doctors for improving doctor-patient relationship and decreasing overall work place violence.

Limitation of the study

Our study has a few limitations. It was done in only one Government run tertiary care hospital and included only faculty doctors, and hence limits the generalization of our findings. Participants self-reported violence and relevant exposures and hence there is a potential for bias. There is scope of further studies involving both private and government hospitals, and including nurses and other supporting staff.

CONCLUSION

With a prevalence of 67%, work place violence against doctors is a serious and a frequent problem. Verbal abuse was more prevalent and more frequent as compared to physical assault. Such frequent verbal abuse can lead to long term mental agony. The commonest perceived cause for such violence was long waiting periods, and the most suggested measure to prevent such violence was strengthening of security system. It is high time that doctors are protected from incidences of work place violence for their own safety and to ensure sustained quality of healthcare services.

ACKNOWLEDGEMENT

We acknowledge the Dean of GMERS Medical College, Junagadh and Medical Superintendent

of the Hospital for providing administrative support to conduct this study.

REFERENCES

1. Roche M, Diers D, Duffield C, Catling-Paull C. Violence toward nurses, the work environment, and patient outcomes. *J Nurs Scholarsh.* 2010;42(1):13–22.
2. Di Martino V. Relationship of Work Stress and Workplace Violence in the Health Sector. Geneva: ILO/ICN/WHO/PSI Joint Programme on Workplace Violence in the Health Sector. 2003.
3. Krug EG, Mercy JA, Dahlberg LL, Zwi AB. World report on violence and health. *Lancet.* 2002;360(9339):1083-8.
4. Zafar W, Siddiqui E, Ejaz K, Shehzad MU, Khan UR, Jamali S, Razzak JA. Health care personnel and workplace violence in the emergency departments of a volatile metropolis: results from Karachi, Pakistan. *The Journal of emergency medicine.* 2013 Nov 1;45(5):761-72.
5. AL Bashtawy M, Aljezawi M. Emergency nurses' perspective of workplace violence in Jordanian hospitals: A national survey. *Int Emerg Nurs.* 2016;24:61-5.
6. Pai HC, Lee S. Risk factors for workplace violence in clinical registered nurses in Taiwan. *J Clin Nurs.* 2011;20(9-10):1405-12.
7. Oweis A, Diabat KM. Jordanian nurses perception of physicians' verbal abuse: Findings from a questionnaire survey. *Int J Nurs Stud.* 2005;42(8):881-8.
8. Abou-ElWafa HS, El-Gilany AH, Abd-El-Raouf SE, Abd-Elmouty SM, El-Sayed Hassan El-Sayed R. Workplace violence against emergency versus non-emergency nurses in Mansoura university hospitals, Egypt. *Journal of interpersonal violence.* 2015 Mar;30(5):857-72.
9. Kitaneh M, Hamdan M. Workplace violence against physicians and nurses in Palestinian public hospitals: a cross-sectional study. *BMC Health Serv Res.* 2012;12(1):1-9.
10. Kumar M, Verma M, Das T, Pardeshi G, Kishore J, Padmanandan A. A study of workplace violence experienced by doctors and associated risk factors in a tertiary care hospital of South Delhi, India. *Journal of Clinical and Diagnostic Research.* 2016 Nov; Vol-10(11):LC06-LC10.
11. Sun P, Zhang X, Sun Y, Ma H, Jiao M, Xing K, Kang Z, Ning N, Fu Y, Wu Q, Yin M. Workplace violence against health care workers in North Chinese hospitals: a cross-sectional survey. *International journal of environmental research and public health.* 2017 Jan 19;14(1):96.
12. Pund SB, Kuril BM, Doibale MK, Ankushe RT, Kumar P, Siddiqui N. Study of workplace violence, its risk factors and perceptions about workplace security in doctors of Paithan. *Int J Community Med Public Health* 2017 June;4(6):1987-92.

13. Kowalczyk K, Krajewska-Kulak E. Patient aggression towards different professional groups of healthcare workers. *Annals of Agricultural and Environmental Medicine* 2017; 24(1):113-116.
14. World Health Organization. Report on Attacks on Health Care in Emergencies. Geneva, Switzerland: Prevent-Protect-Provide. 2016.
15. Anand T, Grover S, Kumar Kumar RM, Ingle GK. Workplace violence against resident doctors in a tertiary care hospital in Delhi. *The National Medical Journal of India* 2016;29(6):344-48.
16. Sharma DC. Rising violence against health workers in India. *The Lancet*. 2017 Apr 29;389(10080):1685.
17. Martino V di. Framework Guidelines for Addressing Workplace Violence in the Health Sector: The training Manual. Geneva: International Labour Organization; 2005: 1-122.
18. Vanlalduhsaki. Verbal and Physical violence towards junior doctors in a medical college in Manipur: A cross sectional study. *IOSR Journal of Humanities And Social Science*. 2018; 23(1):12-17.
19. Schablon A, Zeh A, Wendeler D, Peters C, Wohlert C, Harling M, Nienhaus A. Frequency and consequences of violence and aggression towards employees in the German healthcare and welfare system: a cross-sectional study. *BMJ open*. 2012 Jan 1;2(5):e001420.
20. Eker HH, Özder A, Tokaç M, Topçu I, Tabu A. Aggression and violence towards health care providers, and effects thereof. *Archives of Psychiatry and Psychotherapy* 2012;4:19–292.
21. Alexander C, Fraser J. Occupational violence in an Australian healthcare setting: implications for managers. *J Health Manag*. 2004;49(6):377-92.
22. Carmi-Iluz T, Peleg R, Freud T, Shvartzman P. Verbal and Physical violence towards hospital and communitybased physicians in the Negev: an observational study. *BMC Health Services Research* 2005, 5:54.