Journal of Medicine, Physiology and Biophysics
ISSN 2422-8427 An International Peer-reviewed Journal
Vol.42, 2018

Violence Against Healthcare Professionals in Nishtar Medical University Hospital Multan, Pakistan: A Descriptive Cross-Sectional Study

Dr. Muhammad Ishfaq
House Officer BVH, Bahawalpur

Dr. Mehwish Sagheer Khan
House Officer Nishtar Hospital Multan

Dr. Alvina Dilshad
House Officer Nishtar Hospital Multan

Abstract
Objective
This study aims to identify the risk factors of physical violence against healthcare professionals in Nishtar Hospital Multan Pakistan.
Study design
Descriptive cross-sectional study
Place and duration of study
Department of Psychiatry and Behavioral Sciences, Nishtar Medical University Multan, Pakistan. The time span of study was from January 2016 to December 2017.
Method
A non-probabilistic strategy was used to select 200 healthcare professionalswho were serving at Nishtar hospital Multan Pakistan. We first obtained lists of all healthcare workers employed at our university hospital from hospital management and human resource department. We combined these lists, assigned a number to the name of each worker, and selected an average of 200 personnel from our university hospital. The study samples included doctors, nurses, and paramedical staff (e.g., medical technicians and administrative staff). All the members of study population were well informed of the purposes and methods of the study. Then we distributed the questionnaire. All the healthcare professionals responded as per their opinion and experiences and submitted it to a specified box. The dara were retrieved and analyzed by using computer program SPSS 20 version.
Results
Out of total study population a total of eighty six (43%) healthcare professionals reported that they were physically attacked in their hospital in the previous 12 months. Most of the time this illegal action was performed by the relatives of the patients (88 %), followed by the patient (12%); 73.6% of perpetrators young aged between 20 to 40 years of age. Pertaining to physical violence incidents, approximately 91% (n = 182) resulted in a physical injury, and 55.4% of respondents took two or three days of sick leave after sustaining that physical injury. Surprisingly, the reporting of workplace violence in hospitals to law enforcing agencies and higher authorities of hospital administration was considerably low (12.4%). Most of the healthcare professionals (87%) did not receive training on how to avoid workplace violence (n=174). The study showed that general nurses, aged 35 years or younger, were more likely to experience physical violence. Healthcare professionals with direct physical contact (washing, turning, lifting) with patients had a higher risk of physical violence compared to other health care workers. The lengthy and cumbersome legal and administrative delays in the procedures for reporting workplace violence were a major cause for physical violence. At work place, the reporting of incidence after psychological violence was protective than to waiting until an instance of physical violence takes palce.
Conclusions
Physical violence in hospitals is an occupational hazard for public health concern. Policy makers and higher authorities should introduce legal procedures and intervention to cope with this serious issue.

Introduction

The growing rates of workplace violence reported in the past decades have triggered public worries of rapid decline in workplaces' safety. Compared to different occupations, healthcare workers (HCW) have been exposed to one of the highest violence rates with about 16 times more than any other service workers.[1] Between 2002 and 2013, violence against HCW four times more than average increase in the private industry with about 7.8 incidents per 10,000 full-time HCW.[2] This escalation continued to become almost a routine with about 90% of HCW suffer from violence during work time. Type of violence varies between indolent types like psychological violence to the more obvious ones including; physical, verbal, sexual, and psychological. Around 38% of

workers in healthcare services reported that they experienced physical violence in their work life with about 95% suffering from verbal abuse.[3] Violence could cause injuries, psychological problems, declining of job motive or even traumatic death to healthcare staff. It does affect not only victims but also have a reflection on the public economy with about 37% of total sick leave costs.[4] Approximately $100 million was the budget accounted for health workplace's conflict every year and among that; verbal violence costs the most.[5] Women have conquered all working fields, hence; exposed to the same dangers with an extra burden for gender prospectives. A report in the United States from 1980 to 1989 indicated that violence accounted for 41% of women's fatalities at work while only 10% for men.[6] Similarly, in 2000, about 13,935 female victims suffered from workplace violence.[7] Measures to stop violence (especially gender-driven one) should be faced with radical primary preventive measures and secondary ones to avoid problem escalation. In spite of all efforts and increased awareness in society, the violence has still been stated until today.[3] Therefore, more studies are needed to explore the underlying causes of violence at health services, particularly those including women victims. For this purpose, we have conducted this study to investigate the prevalence of this phenomenon.

Materials and methods

This descriptive cross-sectional study was conducted at Department of Psychiatry and Behavioral Sciences, Nishtar Medical University Multan, Pakistan. The time span of study was from January 2016 to December 2017. We started this study after taking consent from the Ethical Review Committee of Nishtar Medical University Multan Pakistan. A non-probabilistic strategy was used to select 200 healthcare professionals who were serving at Nishtar hospital Multan Pakistan. We first obtained lists of all healthcare workers employed at our university hospital from hospital management and human resource department. We combined these lists, assigned a number to the name of each worker, and selected an average of 200 personnel from our university hospital. The study samples included doctors, nurses, and paramedical staff (e.g., medical technicians and administrative staff). All the members of study population were well informed of the purposes and methods of the study. Then we distributed the questionnaire. All the healthcare professionals responded as per their opinion and experiences and submitted it to a specified box. The dara were retrieved and analyzed by using computer program SPSS 20 version. The questionnaire we used to measure Work Place Violence was developed in 2003 by an International Labor Office (ILO), International Council of Nurses (ICN), WHO, and Public Services International (PSI) joint program to measure workplace violence [18]. The questionnaire was translated into Urdu and back-translated into English to verify the accuracy of the Urdu version. The questionnaire had the following sections. The first section collected demographic and workplace data (i.e., age, sex, years of experience, marital status, level of education, rank or title, profession, participation in shift work), departmental data, and a question about anxiety regarding work place violence (WPV), which was measured on a scale from never to extremely high. The second section examined respondent experiences with physical violence in the past 12 months. The third section examined respondent experiences with non-physical violence (i.e., verbal abuse, threatening events, and sexual harassment) in the past 12 months. The fourth section contained three open-ended questions examining respondent opinions towards WPV. Then we entered all the gathered data into MS Excel. The data were analyzed by using computer program SPSS 20. The descriptive statistics were used to calculate mean ± SD for the age of the patients. Frequencies and percentages were calculated for all the variables included in the study.

Results

Out of total study population a total of eighty six (43%) healthcare professionals reported that they were physically attacked in their hospital in the previous 12 months. Most of the time this illegal action was performed by the relatives of the patients (88 %), followed by the patient (12%); 73.6% of perpetrators young aged between 20 to 40 years of age. Pertaining to physical violence incidents, approximately 91% (n = 182) resulted in a physical injury, and 55.4% of respondents took two or three days of sick leave after sustaining that physical injury. Surprisingly, the reporting of workplace violence in hospitals to law enforcing agencies and higher authorities of hospital administration was considerably low (12.4%). Most of the healthcare professionals (87%) did not receive training on how to avoid workplace violence (n=174). The study showed that general nurses, aged 35 years or younger, were more likely to experience physical violence. Healthcare professionals with direct physical contact (washing, turning, lifting) with patients had a higher risk of physical violence compared to other health care workers. The lengthy and cumbersome legal and administrative delays in the procedures for reporting workplace violence were a major cause for physical violence. At work place, the reporting of incidence after psychological violence was protective than to waiting until an instance of physical violence takes place.

Table 1: Distribution of healthcare workers according to their departments

Department	Yes	No	Total
Medicine & allied Branches	26 (13%)	40 (20%)	66 (33%)
Surgery & allied branches	19 (9.5%)	35 (17.5%)	54 (27%)
Obstetrics & Gynaecology	20 (10%)	37 (18.5%)	57 (28.5%)
Emergency/Radio-diagnosis /Para-clinical	11 (5.5%)	12 (6%)	23 (11.5%)
Total	76 (38%)	124 (62%)	200 (100%)

Table 2: Perceived causes of violence according to doctors (N=76).

Causes of violence	n (%)
Long Waiting Periods	23 (30.26%)
Delays in Medical care provision	16 (21.1%)
Violation of visiting hours	12(15.8%)
Psychological problems	6 (7.9%)
Delays in nursing care provision	5 (6.6%)
Denial of patient's admission in the hospital	7 (9.21%)
Others	07 (9.21%)

Table 3: Distribution of type of violence reported from different departments.

Department	Physical Violence	Verbal Violence	Emotional Violence	Total
Medicine & allied Branches	8(10.5%)	16 (21.1%)	2 (2.6%)	26 (34.2%)
Surgery & allied branches	4 (5.3%)	7 (9.2%)	6 (7.9%)	19 (25%)
Obstetrics & Gynaecology	2 (2.6%)	11 (23.7%)	7 (9.2%)	20 (26.32%)
Emergency/Radio-diagnosis /Para-clinical	5 (6.6%)	6 (7.9%)	0	11 (14.5%)
Total	19 (25%)	40 (52.6%)	15 (19.73%)	76 (100%)

Discussion

As a result of the increasing number of reports of workplace violence against healthcare providers during their duty hours, we conducted this cross-sectional study to estimate the overall prevalence of such phenomenon in our university hospital. The review of literature states that, with regard to regional distribution, Eastern Mediterranean region came up with the highest violence rates followed by The Americas region[8-10]. This could be attributed to the higher tendency to report these incidents in these regions. Multiple studies, conducted in Eastern Mediterranean region, showed much higher reporting rates compared to studies conducted in American, African, and European regions which go in line with our results[11,12].

In the context of gender effect or discrimination of workplace violence, our analysis showed the overall violence rate in both genders is almost the same.[13] However, in the African region, Females were more frequently subjected to subtle discrimination and perpetration.[14] According to our finding, they had almost ten times the risk of being exposed to different kinds of violence or harassment than males, with the differences in risk being statistically significant. Whilst, all other regions showed no similar significant differences. Our finding is similar to previous reports from African region which revealed that females had significantly higher odds of being victims of violence than males after controlling for possible confounders.[15] Interestingly, European region had similar increased rates of violence among females but the gap between genders was to a lesser extent.

Among other studies conducted in Africa; Muzembo et al.[16] reported that females were the primary target of harassment and, hence, confirming our result. Also, Abodunrin et al.[17] showed that females experienced violence and assault more frequently than males. However, the difference was statistically insignificant, and Banda et al.[18] who showed that the majority of the participants who experienced violence were females. A meta-analysis published in 2016, reported 21% increase in odds of verbal abuse toward female nurses, which is reported to be statistically significant. This finding could be explained by the fact that Nursing is widely perceived as a female dominated profession.[19] Verbal abuse is considered a major significant facing healthcare workers from both developed and developing nations with studies from Turkey[16], Switzerland[20], Amman, Canada[20], US[21], Ghana[22], Germany[23], and Iran reporting terrifyingly high rates of verbal abuse toward workers during their duty hours.

A study showed that females were more verbally perpetrated than males and the differences were statistically significant.[23] It also reported that verbal abuse was significantly associated with increased intention to quit among nurses which go in line with what is reported in the literature.[24] This could be the result of thinking that the only way to combat abuse is through quitting when it is considered as a 'part of the job' or 'the customer is always right' upon reporting these incidents to concerning administrations. So, thinking that

reporting is 'not important' resulted in under-reporting of these acts and increasing thoughts of quitting among these nurses with a subsequent negative effect on job performance and quality of patient care.

Other supporting evidence, showing that females are more exposed to verbal abuse than any other kind of violence, related it to the traditional and cultural intolerance of Turkey, where this study was conducted, toward physical abuse; hence higher tendency of perpetrators to express their frustrations in the form of verbal abuse.[23] Patients' frustration came from waiting for a long time along with difficult connections between them and the medical staff which is believed to increase the likelihood of verbal abuse.[25]

Preventive strategies aimed at decreasing the incidents of violence and these include violence-prevention training programs which should be held upon hiring a healthcare worker, Identification of provoking factors of violence of patients, and proper recognition of initial signs of violence. Once these signs have been identified, de-escalation approaches should be followed at once. These include active listening, attempting to identify concerns, honestly answering patient's concerns, and providing a comfort environment based on the situation whenever possible.[26]

Conclusion

Physical violence in hospitals is an occupational hazard for public health concern. Policy makers and higher authorities should introduce legal procedures and intervention to cope with this serious issue.

Declaration of interests of interest

None of the authors have any conflicts of interest to declare.

References

1. Kingma M. Workplace violence in the health sector: a problem of epidemic proportion. *International Nursing Review* 2001; **48**(3): 129-30.
2. Safety O, Administration H. Workplace violence in healthcare: understanding the challenge. *OSHA* 2015; **3826**(12): 2105.
3. O'Connell B, Young J, Brooks J, Hutchings J, Lofthouse J. Nurses' perceptions of the nature and frequency of aggression in general ward settings and high dependency areas. *Journal of clinical Nursing* 2000; **9**(4): 602-10.
4. Rose M. A survey of violence toward nursing staff in one large Irish Accident and Emergency Department. *Journal of Emergency Nursing* 1997; **23**(3): 214-9.
5. Flood C, Bowers L, Parkin D. Estimating the costs of conflict and containment on adult acute inpatient psychiatric wards. *Nursing Economics* 2008; **26**(5): 325.
6. <Workplace-Violence-Fact-Sheet.pdf>. March 2012.
7. Organizations. AFoLCoI. Violence against women in the workplace. June 25 2006.
8. Moher D, Liberati A, Tetzlaff J, Altman DG, Group P. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *PLoS medicine* 2009; **6**(7): e1000097.
9. Borenstein M, Rothstein D, Cohen J. Comprehensive meta-analysis: A computer program for research synthesis [Computer software]. *Englewood, NJ: Biostat* 2005.
10. Glaser AN. High-yield biostatistics: Lippincott Williams & Wilkins; 2005.
11. Begg CB, Mazumdar M. Operating characteristics of a rank correlation test for publication bias. *Biometrics* 1994: 1088-101.
12. Begg CB, Mazumdar M. Operating characteristics of a rank correlation test for publication bias. *Biometrics* 1994; **50**(4): 1088-101.
13. Duval S, Tweedie R. Trim and fill: A simple funnel-plot-based method of testing and adjusting for publication bias in meta-analysis. *Biometrics* 2000; **56**(2): 455-63.
14. Higgins J, Jackson D, Barrett J, Lu G, Ades A, White I. Consistency and inconsistency in network meta‐analysis: concepts and models for multi‐arm studies. *Research synthesis methods* 2012; **3**(2): 98-110.
15. Fute M, Mengesha ZB, Wakgari N, Tessema GA. High prevalence of workplace violence among nurses working at public health facilities in Southern Ethiopia. *BMC Nursing* 2015; **14**: 9.
16. Muzembo BA, Mbutshu Lh Fau - Ngatu NR, Ngatu Nr Fau - Malonga KF, et al. Workplace violence towards Congolese health care workers: a survey of 436 healthcare facilities in Katanga province, Democratic Republic of Congo. (1348-9585 (Electronic)).
17. Abodunrin O, Adeoye O, Adeomi A, Akande T. Prevalence and forms of violence against health care professionals in a South-Western city, Nigeria. *Sky J Med Med Sci* 2014; **2**(8): 67-72.
18. Banda CK, Mayers P, Duma S. Violence against nurses in the southern region of Malawi. *Health SA Gesondheid* 2016; **21**: 415-21.
19. Meadus RJ, Twomey JC. Men student nurses: the nursing education experience. (1744-6198 (Electronic)).
20. Hahn S, Muller M Fau - Needham I, Needham I Fau - Dassen T, Dassen T Fau - Kok G, Kok G Fau -

Halfens RJG, Halfens RJ. Factors associated with patient and visitor violence experienced by nurses in general hospitals in Switzerland: a cross-sectional survey. (1365-2702 (Electronic)).
21. Pejic AR. Verbal abuse: a problem for pediatric nurses. *Pediatric nursing* 2005; **31**(4): 271.
22. Hahn S, Müller M, Needham I, Dassen T, Kok G, Halfens RJ. Factors associated with patient and visitor violence experienced by nurses in general hospitals in Switzerland: a cross‐sectional survey. *Journal of clinical nursing* 2010; **19**(23‐24): 3535-46.
23. Boafo IM, Hancock P, Gringart E. Sources, incidence and effects of non‐physical workplace violence against nurses in Ghana. *Nursing open* 2016; **3**(2): 99-109.
24. Franz S, Zeh A, Schablon A, Kuhnert S, Nienhaus A. Aggression and violence against health care workers in Germany-a cross sectional retrospective survey. *BMC health services research* 2010; **10**(1): 51.
25. Hinson J, Shapiro M. Violence in the workplace: awareness and prevention. (0156-5788 (Print)).
26. Edward Kl, Stephenson J, Ousey K, Lui S, Warelow P, Giandinoto JA. A systematic review and meta‐analysis of factors that relate to aggression perpetrated against nurses by patients/relatives or staff. *Journal of clinical nursing* 2016; **25**(3-4): 289-99.