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Original Article

Study on mitigation of workplace violence in hospitals

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ARTICLE INFO

Article history:
Received 8 July 2019
Accepted 23 September 2019
Available online 18 December 2019

Keywords:
Workplace violence
Healthcare professionals
Physical environmental factors
Poverty

ABSTRACT

Background: A workplace is any location, permanent or temporary, where an employee performs work-related duty. Workplace violence includes threats, beating, stabbing, shooting, psychological trauma, suicides, near suicides, and harassment of any kind. We can see slow changes in attitude of care providers when they encounter violent behavior and incidents. It is a world-wide issue. Of late, in developing countries where out of pocket payment mode is the main healthcare financing option for a family, the medical professionals are being demonized as professional pick-pocketers by few sections of the society. Hence, we explored to garner opinion of the employees regarding what constitutes violence in hospital setting and identified the factors among doctors, nurses, environmental duty workers, which are contributing toward work-place violence by patients and visitors. The aim was to improve the work environment for healthcare givers.

Methods: Descriptive, cross-sectional study with a close-ended questionnaire under sections of physical environment factors, patient processes, equipment factors, and types of events taking place was administered. A sample size was 540, including 120 doctors, 240 nurses, and 180 environment health workers. About 127 patients were also interviewed to understand their opinion about event leading to attacks on doctors and nurses.

Results: Patient attendants yelling at healthcare personnel, verbal threats of violence, and using offensive language against staff are the perceptions of hospital staff as incidents of workplace violence. Non-communicative staff, sudden death of patients, and non-satisfactory treatment lead to aggressive behavior as opined by patient families.

Conclusion: In the process of providing safe work environment, each potential contributing factor needs to be addressed independently by administrators. The hospital has training programs to nurses on customer relationship management, interpersonal relations trainings.

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https://doi.org/10.1016/j.mjafi.2019.09.003

Introduction

Human beings regularly have the tendency to prey on the weak. There were examples in recent past, where in the richer sections of society used to wield their muscle power on socially weaker sections of society. In few sectors, in the current day scenario, the weaker sections attack the richer sections of society. Violence has many manifestations as a public health issue, and it had been addressed in the angle of anthropological, sociological problem, criminal, or psychological problem. The Center for Disease control and Prevention (CDC) began exploratory studies in healthcare field and established the "Violence Epidemiology" branch in 1983. The US Surgeon General C. Everett Koop's "Workshop on Violence and Public Health" explored the suitability of healthcare career personnel engagement in mitigation of violence.[1] A report presented by US Surgeon General listed violence and abusive behavior as one among 22 top public health priorities and called for "cooperation and integration across public health, health care, mental health, criminal justice, social service, education, and other relevant sectors." CDCs document on "A Timeline of Violence as a public health issue" specifies that issues of suicide, interpersonal violence, youth violence, intimate partner violence, violence against women, child maltreatment, and dating abuse are all issues of public health.[2] The latest streak of definitions, the Occupational Safety and Health definition is short and meaningful, where workplace violence is defined as "violent acts (including physical assaults and threats of assaults) directed toward persons at work or on duty". Therefore, any physical assault, threatening behavior, or verbal abuse occurring in the work setting is violence.[2] A workplace is a location, permanent or temporary, where an employee performs any work-related duty.[3] Hospital workplace violence differs among countries and among occupational settings, but the perpetrators of violence are always visitors, patients, and their family members, intruders, and co-workers.

A 12-month study in Swiss hospitals in 2010 reveals that 72% of nurses faced patient or visitor verbal abuses, and 42% experienced physical violence.[4] An Australian study of 94 nursing wards in 21 hospitals reported 65% of nurses recognized an emotional abuse during their prior five shifts of duties.[5] The China Daily reported policemen were picketed at the Shanghai Minhang District Central Hospital because of violence and attacks on physicians, in the year 2007.[6] A retired dentist was brutally stabbed in 2017. There are gangs (Yi Nao) who work at hospitals in liaison with patients who perceive an act of medical negligence, and they target the hospital for financial benefits.[6] A study among 290 hospitals in Turkey by Oztunc in 2006 reported 80% of nurses facing verbal abuse, and it had affected by reducing their professional performance.[7] In Portugal, an analysis of official reports on workplace violence from 5 health centers and 2 hospitals revealed characteristics of 22 cases, and a national press analysis of over a 12-month period revealed 9 articles concerning the subject.[8] In a study on impact of crime and violence on the delivery of state healthcare services in the Cape Town of South Africa, it got revealed that 60% of respondents had to deal with crime and violence at work, 92% were verbally abused in recent 2 years, and 36% had occasionally been threatened.[9] In Brazil, in a survey done in 2000, in 2 emergency services in the city of Rio De Janeiro, identified the main reasons for violence as being due to excessive delay in attending to patients, the relatives wishing their patient to be given immediate and special treatment, perceived negligence on the part of workers in their attendance on patients, and invasion of armed gangs in the physical spaces of the emergency areas.[10]

This study was conducted in the light of growing number of violent acts perpetrated by patients and visitors on healthcare givers in India. The challenges hospitals face are to mitigate, control, and respond to violence within the caring nature of the hospital environment.[10] An act of violence has an impact on the patients' well-being, the healthcare providers as well as the hospital. Violence harms patients by changing or reducing care providers' attitudes toward them. It takes away the concentration from care providers. Violence also harms the reputation of the hospitals. A hospital's brand and reputation influences the physician's choice of where to practice and helps job seekers decide where to apply and work.[5] Through this study, we explored the opinion of the employees regarding what constitutes violence in our setting, the factors that are contributing toward work place violence by patients and visitors. This was done to understand the factors conducive for violence so that management can channelize its resources to mitigate them and to improve the work environment for healthcare givers.

Material and methods

Study design

A cross-sectional, prospective study with a stratified sampling was carried in a medical college teaching hospital to collect perceptions of healthcare personnel, patients, and their attendants on increasing incidents of violence, with the help of a questionnaire.

Study tool

The research tool was close-ended questionnaire with questions divided under sections of physical environment factors, patient care processes, equipment factors, types of events occurring, attitude of employees which contribute toward instigating violence. It was validated by circulating to experts committee of subject area. The answers were given by respondents with a "Tick" mark to the chosen options. The respondents could also opt for multiple options.

Study period

The study period was 6 months.

Sampling method

Stratified Sampling method

In the total number of employees on hospital, which has a ratio of 1:3:3 among doctors, nurses, and workers, the sample was picked. The sample size of the study was 667, with 540 healthcare personnel and 127 patients and patient attendants. The employees being 2900 in number (400 doctors, 1200 nurses, 1300 healthcare workers [ratio of 1:3:3]), a sample size of 540 (19% of the total employee strength) was taken to reflect their opinions. Among 540 respondents, there were 120 doctors, 240 nurses, and 180 environment health workers (ratio of 1:2:1.5). About 127 patients including patient attendants were also interviewed to understand their opinion about events leading to violence.

Inclusion and exclusion criteria

Personnel working in wards of departments of Medicine, Surgery, Pediatrics, Maternity, Psychiatry, and critical areas like Emergency, intensive care units (ICUs), with even numbers distributed among all these areas, were included. The doctors considered in the study were assistant professors and associate professors. The nurses were from the staff nurse designation. All the employees were with more than 5 years of experience in the organization.

Results

Table 1 showing the demographic characteristics of the sample population. The number of females is more amongst nursing cadre, and number of males is more amongst the Class D employees. Few patients from pediatric age group were picked, and their parents were administered the questionnaire. Nurses and Doctors comprised in more younger age group. The oldest patient was 68 years old. Table 2 depicts the opinion of the healthcare givers as workplace violence ranging from shouting or yelling at them to using offensive language to talking loudly. More females perceived these reasons. The combination of two or more factors have been recognized by many employees as a form of workplace violence.

When enquired about importance they attach to physical environment in wards, overcrowding is seen as single most individual factor perceived by all study participants potentially leading to violence, as per Table 3. More than 50% of participants felt there was combination of 2–4 factors leading to disturbances.

In Table 4, the opinion of the healthcare personnel in the study population mentioned that death of patient was cited as the single most common factor contributing toward violence, followed by not satisfied with the treatment and length of stay.

As per patients, non-communicative staff led to aggravated situation between patient attendants and the staff, as shown in Table 5. Patients those responded with unsatisfactory treatment described prolongation of length of stay as the main reason. When a patient comes to know from visitors or co-patients that other hospitals discharged patients quickly when admitted with the same ailment, they get infuriated and dissatisfied and thus start talking loudly leading to usage of offensive language.

Discussion

A study carried out in Brazil identified excessive delay in attending to patients as one of the main reason for violence on the patients' side. Perceived negligence on the part of workers in their attendance on patients was also cited as another reason causing violence.[10] In another study, Engel et al. highlighted delay in treatment, long waiting times, and inexperienced staff as main reasons contributing to violence.[9] As per Carmel et al., the behavior of staff, arrogant attendants lead to workplace violence. One of the important remedial measures to rectify the attitude of healthcare personnel is training.[11] In one study by George M Diaz, approximately a quarter of participants indicated that identifying patients with a history of assaultive behavior is the most important training improvement needed in the hospital while enhancement of staff interpersonal and communication skills and self-defense training were other sessions that would help reducing the incidents in hospital. A survey by Harris Meyer et al. identified ways of training healthcare workers to assess and de-escalate potentially violent situations. A research survey found that participants who had not attended violence prevention training were at greater risk of encountering situations of violence than by those workers who attended such trainings.[12] As per a study in 2008 by Gillespie, an informal debriefing and social support to the healthcare personnel who is victim of violence should happen in the same shift hours to prevent future thoughts that might

Table 1 – Chronological age and gender distribution of healthcare personnel.

Gender	Doctors	Nurses	Environment healthcare workers	Patients	Total
Male	62	39	120	92	313
Female	58	201	60	35	354
Total	120	240	180	127	667
Age					
Below 20 years	0	0	7	16	23
21–30 years	77	168	56	35	336
31–40 years	43	47	72	56	218
41 and above	0	25	49	16	90
Total	120	240	180	127	667

Table 2 – Perceptions of healthcare personnel on workplace violence.

	Perceptions	Doctors	Nurses	EHW	Total	Male	Female
1	Talking loudly in hospital	5	23	23	51	17	34
2	Using offensive language	14	18	25	57	16	41
3	Shouting/yelling at them	2	29	32	63	10	53
4	Verbal threats of physical violence	6	12	27	45	17	28
5	Physical assault	7	8	20	35	14	21
6	Combination of 2–4 of above factors	76	120	40	236	104	132
7	Combination of more than 4 above factors	10	30	13	53	25	28

Table 3 – Environmental factors in hospital wards leading to workplace violence.

	Physical environmental factors	Doctors	Nurses	EHW	Total	Male	Female
1	Overcrowding	18	34	28	80	32	48
2	More noise level	0	12	24	13	3	10
3	High humidity and temperature	5	6	22	12	6	6
4	Unclean surroundings	0	2	3	5	2	3
5	Poor quality food in cafeteria	1	1	0	2	1	1
6	Lesser illumination	0	1	0	1	0	1
7	Lack of privacy	2	48	3	9	4	5
8	Combination of 2–4 of above factors	79	102	83	232	63	169
9	Combination of more than 4 above factors	13	12	14	39	13	26
10	Didn't mark any of above	2	22	3	27	10	17

Table 4 – Perception of healthcare personnel of this hospital about events leading to mob violence.

	Events in hospital	Doctors	Nurses	Environmental health worker	Total
1	Death of the patient	53	77	78	208
2	Missing patient	30	64	20	114
3	Thefts	20	56	35	111
4	Damage to property	17	43	47	107
Total		120	240	180	540

affect the worker's sleep and will remove any fear of the worker regarding future workplace violence.[13]

Based on the findings of these studies, the internal environment of the wards in the present study was improved. To overcome overcrowding, the administration ensured that adequate number of waiting rooms and space for patients care is provided for all intensive care units and emergency department area to ensure uncluttered environment. A huge dormitory with 200 beds capacity was built opposite to the hospital and beds on day-to-day basis were allotted to relatives of patients. Visiting hours to wards were enforced strictly, with more number of relatives staying in dormitory.

Table 5 – Opinion of patients and attendants about instances leading to violence against healthcare personnel.

	Issues from patients perspective	Male	Female	Total
1	Long waiting time	12	2	14
2	Death of patient	13	10	23
3	Non-communicative staff	26	6	32
4	Delay in emergency care	15	3	18
5	Unsatisfactory treatment	10	12	22
6	More than 2 of above reasons	16	2	18
Total		92	35	127

This practice needs to be implemented compulsively in pediatric and burns cases, as sudden death of patients in both cases specially of young family members leads to emotional flare among the rest of family members. These measures helped in active trouble shooting. The hospital building must confirm to space requirements for wards, rooms, ICU, and waiting areas as prescribed by National Building codes. ICUs doors were provided with identity card enabled swipe access to employees. Security guards were posted at ICU doors during visiting hours to enable visitors to enter. Closed circuit cameras were placed at strategic points, outside ICUs and emergency areas. Nurses duty change rooms were provided in wards itself 1 for every 30 beds, to mitigate privacy-related issues. A single large room ward should not have beds allotted to different specialties. This leads to different doctors coming for rounds at different times, and nurses will have to cater to patients of different specialties, and controlling crowd becomes issue to the nursing staff of the ward. The corridors and parking areas were well-illuminated along with appropriate instructional sign boards.

The safety of employees has been ensured with various systems, and committees being operational. The hospital implemented a policy of not encouraging any discrimination on the basis of caste, religion, gender, or socioeconomic background among employees. The hospital is maintaining a

workplace free from alcohol, tobacco, and other substance abuses. The employees are encouraged to approach the supervisors and managers in case of grievances. If any employee believes that he or she has been victim of harassment or knows of another employee who has been, they have the right to report directly to human resources department. The hospital has a grievance cell for its employees which provides two grievance boxes where employees can lodge thier complaints through written notes which are checked once every week, and the grievance cell meets once every month to review the complaints. In addition, employees can approach an executive in human resources department. Emergency codes such as Code Red, Code White are displayed in wards and corridors. It is notified to the team comprising of Manager on Duty, Assistant Medical Superintendent, Security-In charge, Nursing Superintendent, who have to reach the place of incident immediately. A separate location is identified to discuss the patient grievances in such instances. If situation goes out of control, local police are called to control the mob. With the above policies as background, the awareness of employees toward workplace violence was studied. All the nurses are provided periodic training about customer relationship, interpersonal relationship, and harassment at workplace awareness program by a Human Resources department personnel of hospital.

Conclusion

The administrators of a hospital should ensure to facilitate safer work place environment by all possible means. In the process of providing safe work environment, each potential contributing factor needs to be addressed independently. The initial induction program of new employees should address issues such as support provided by employer, factors preserving safety environment, which builds up the confidence in new employees. Factors precipitating violence, as perceived by our employees, are consistent with research published across the world. With all the measures described above, the hospital management can mitigate the incidents of violence in hospitals.

Conflicts of interest

All authors have none to declare.

Acknowledgments

The authors acknowledge Manipal Academy of Higher Education, Manipal.

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