



Prevalence of Violence against Health Care Personnel in a Tertiary Care Centre, Hubballi, India

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ABSTRACT

Background: The sudden outburst of events in different parts of country like Dhule, Dharwad, Chennai and Jaipur led to the need of conducting a survey about violence against health care personnel. Health care personnel are at high risk of being victims of verbal and physical violence, its effect on them and their views on causes for sudden increase in such events.

Methodology: A semi-structured questionnaire regarding their experience with violence against health care personnel was prepared. Data was collected for two months –May and June 2017. Sample size of 200 was calculated which included doctors, nursing staff and group D workers from KIMS Hubballi and analysed using SPSS version 21.

Results: 99.5% were aware of increasing violent events. 76% of them have experienced violence of which, Verbal abuse- 92.10% being the highest form, emotional abuse -17.76% and physical violence 6.58%. The common place of violence was the emergency department -62.09% during daily working hours. 92.10% have reported that patient attenders caused violence.

Conclusion: Verbal and emotional abuse against health care workers has significantly amplified which is deteriorating physician patient relationship. Violence against health care personnel is a serious issue that needs to be dealt with more safety measures at the hospital.

Keywords: Violence, Health care personnel, Verbal abuse, Emergency department

INTRODUCTION

India is the second most populous country in the world and health care is one of the growing fields. Instances of patients' relatives assaulting the treating doctor have become common scenario all over India. Every alternate day there has been media telecast about these events in different parts of the country. However, there is limited research on violence in health care settings against health care personnel in India.¹ The incidents related to medical disputes has been escalating considerably over the past two decades. The reasons for increasing such events in health care setup may be lack of trust between physicians and patient. There is also imperfect legal sys-

tem that will safeguard the rights and interests of both doctors and patients.²

Our study group includes doctors, nursing staff and group D workers, who are nearly four times more likely to be injured than other professions. The highest incidence of the work place violence occurs in psychiatry wards, emergency departments, waiting rooms and geriatric units. Emergency department is recognized as an area at special risk of violence. The reasons why emergency departments are vulnerable to violence are 24-hour accessibility, lack of adequately trained, armed, or visible security guards and a highly stressful environment.³ There are many reasons for increasing violence. The probable causes

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may be patient dissatisfaction about health care, long waiting period. Patient attenders are the ones who initiate violence in hospitals sometimes under the influence of alcohol and drugs. The outcomes of violence which affect the health care professionals are poor psychological status, poor work performance and negative impact on quality of life. Evidence has shown that these adverse outcomes lead to worsening of physicians and patient relationship.

The purpose of study was to identify the proportion of health care workers subjected to the types of violence, its sources, factors affecting violence, reporting of the incidence and the effect of such events on the health care personnel. To study types of patient related violence impacting on physicians like emotional exhaustion, job satisfaction and turnover intention. Hence we conducted the study in our hospital, Karnataka Institute of Medical Sciences Hubballi which is a tertiary care government hospital where our health care staff faces violence in form or the other. A similar study was conducted in tertiary care hospital of south Delhi, where 150 members participated, out of 150 participants, 70 health care workers (47.02%) reported having an experience of violence during working hours in the year 2015.⁴ Indian Medical Association reported 47 cases of attacks on doctors in the state of Maharashtra from Jan 2015 to Dec 2016.

OBJECTIVE OF THE STUDY

The study was conducted to identify proportion of health care workers who had experienced physical, verbal and emotional abuse while on duty and complications of that on health care professionals.

METHODOLOGY

A cross sectional study was conducted in KIMS Hubballi, a tertiary care govt. hospital over a period of one month in May 2017. This was an institution based study done among health care professionals working in the hospital.

Inclusion and exclusion criteria: All health care workers with minimum professional experience of six months were eligible for the study. The study population included doctors, nursing staff and group D workers involved in direct interaction with patients. Those who have given consent were only included.

Sampling and sample size: Taking 78% as expected prevalence rate of violence at work place experienced by doctors as in a previous study in similar settings at a 95% confidence level¹, the required sample size was calculated using the formula $\sqrt{n} = 1.96\sqrt{pq/l}$

And we calculated 200 as sample size with 10% precision. Convenient sampling method was used.

Data collection: A Semi-structured pretested questionnaire was prepared in five different sections. Section I included identification information such as age, gender, professional experience, department, etc. Section II included awareness and exposure to work place violence ever in life and if any in past six months, type of violence experienced and its description. Section III included consequences of exposure to work place violence on health care workers. Section IV included assessing perspectives of health care workers on increasing incidence of work place violence. Section V included assessment of safety measures to be implemented in the institute and knowing the job satisfaction level among health care workers.

Pilot study was conducted 20 participants were included and after that necessary modifications were done in questionnaire. Data was collected by asking the Doctors, nurses and group D staff to fill the questionnaire personally, few of them filled it immediately whereas a few of them took the questionnaire and filled and returned it back due to their workload. Informed consent was taken from the participants. Confidentiality was maintained.

Statistical analysis: The data collected were entered in Microsoft excel and analysed using IBM SPSS version 21. The results are presented as proportions and any difference between two proportions in relation to a particular factor was assessed by Chi-square (or Yates correction if the expected frequency in any cell was <5 or by using Fisher Exact test if expected frequency in two cells was <5) and was considered significant at $p < 0.05$.

RESULTS

In this study, out of 200 participants, 70% were in the age group of 20-29 years. Majority was constituted by males (56%). Doctors made up majority of the study population (75%). 86% of the participants had work experience between 0-9 years. (Table 1)

Table 1: Important characteristics of the participants (N=200)

Characteristics	Participants (%)
Age(in years)	
20-29	140 (70)
30-39	39 (19.5)
Above 40	21 (10.5)
Gender	
Female	88 (44)
Male	112 (56)
Profession	
Doctor	150 (75)
Group D workers	16 (8)
Nursing staff	34 (17)
Professional experience (in years)	
0-9	172 (86)
10-19	17 (8.5)
>20	11 (5.5)

Table 2: Condition of the patient prior to the start of the violent incident to the health care provider

Condition of patient prior to the incident (N=152)	Violent incident (%)
Deterioration of the condition of the patient	69 (45.39)
Death	32 (21.05)
Continuation of long stay of the patient	48 (-27.63)
Do not remember	18 (-11.84)
Any Other:	13 (-8.55)

Table 3: Effect of the violent attack on the study population

Variables	Participants(%)
Duration of effect the violent incident had on health care personnel	
1 day	129 (84.86)
Up to 1 month	22 (14.47)
More than 1 month	1 (0.65)
Damage to property during the violent incident	
Yes	5 (3.29)
No	147 (96.71)
Financial loss	
Yes	3 (1.97)
No	149 (98.03)
Person inflicting violence	
Patient	7 (4.6)
Patient relatives/attender	140 (92.1)
Both	5 (3.3)

Table 4: Distribution of the various methods adopted by the people to handle the violent event that occurred

Methods adopted to handle the violent event	Participants (%)
Call for senior staff	43 (28.28)
Convince the patient attenders	65 (42.76)
Call for security persons	22 (14.47)
Inform higher authorities/management	11 (7.24)
Call police	6 (3.95)
Escaped from the scene	5 (3.29)
Total	152 (100)

Awareness and exposure to work place violence ever in life and if any in past six months, type of violence experienced and its description.-

Majority of the study population (99.5%) were aware of the violent events that have been happening against health care personnel recently. Out of 200 people, 76% have experienced violence in one form or other while at work. Most of the people of the study group experienced verbal abuse -92.10% followed by Physical abuse (6.58%) and emotional abuse (17.76%).

The site of occurrence of the violence and time-

Among the 152 people, 62.09% experienced violence in the emergency ward, 50% in the wards and 4.6% in the Doctor's office. Amid these 152 people, 59.21% experienced violence during the daytime i.e. during the normal working hours followed by 6.5% during weekend/holiday and 48.68% at night time. Majority have faced violence rarely (60.52%) i.e. once or twice or thrice.

Deterioration of patient condition is the most common condition of patient before the onset of the violent incident. (Table 2) Also out of 152 people violence affected life outside work in only 34.21% of the people.

Effect of the violent attack on the study population-

Most of the people (84.86%) were affected for one day followed by up to 1 month. A few of 3.29% had some damage to property during the violent incident and only 1.97% experienced financial loss following the violent event. (Table 3) In majority of the cases patient attenders/relatives are the ones who inflict the violence against health care personnel. Majority of the persons who inflicted violence were not impaired at the time of violence due to illness, drugs/alcohol etc.

Methods adopted by the people to handle the violent event that occurred- Out of 152 people, 42.76% tried to convince the patient attenders about the condition of the patient. 28% called their senior staff, 15% called for security persons and remaining methods were to inform higher authorities or hospital management or call police or escape from the scene (Table 4).

The factors that health care personnel think may be the cause for the sudden increase in violent events against health care personnel- Out of 200 people, majority (47.5%) feel that patients being casual about the disease till complications arise is the main cause for violence. The second most common cause is long waiting periods (45.5%). (Table 5) The safety measures taken in the institute were appreciated by 32% of them whereas 68% of them did not agree with this. Out of 200 people, majority of the people (75%) are satisfied with their work whereas 9.5% of the people want to change their profession.

Association between the type of abuse and the age, Gender and type of healthcare personnel -

There is no significant association between the type of abuse and the age of the health care personnel. There is no significant association between gender and the type of abuse whereas there is a significant relation between the profession and physical abuse. (Table 6) Also there is no significant association between professional experience and the type of abuse.

Males have faced more violence (40.13%) when compared to females (20.36%) in the emergency ward and this was statistically significant at $p < 0.05$. (Table 7) There is no significant association between the gender and whether violence affected the life outside of work. No significant association between the frequency of occurrence of violence and the type of abuse was found. There is a significant association between verbal abuse and deterioration of patient condition at $p < 0.05$. There is significant association between physical abuse and occurrence of violence at night (at $p < 0.05$) whereas normal working hours and weekend/holiday did not have any statistical association with the type of abuse.

Table 5: Cause of sudden increase in violent events against health care personnel as perceived by the health care personnel (n=200)

Perceived Cause	Frequency
Patient's dissatisfaction with medical care	82 (41.0)
Long waiting period	91 (45.5)
Delay in medical care provision	41 (20.5)
Violation of visiting hours	31 (15.5)
Psychological problems	29 (14.5)
Not asking for help from specialist colleagues	8 (4.0)
Denial of patient's admission to hospital	18 (9.0)
Patients are very casual about their disease till complications arise	95 (47.5)
If patient was not properly explained about disease/ prognosis/ complications	29 (14.5)
Regarding payment of bills	28 (14.0)
Diverging information to wrong people	18 (9.0)
Senior doctors not getting involved in communicating about the illness to the patient/ relatives	41 (20.5)
Availability of facilities (like drugs, blood, ventilator etc)	62 (31.0)
Non availability of specialists at that particular time	38 (19.0)

Table 6: Comparison of age, gender and type of health care personnel with various type of abuse

Variables	Verbal abuse		Physical abuse		Emotional abuse	
	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)
Age (in years)						
20-29	100 (65.79)	8 (5.26)	5 (3.29)	103 (67.78)	16 (10.53)	92 (60.52)
>30	40(26.31)	4 (2.63)	5 (3.28)	39 (25.65)	11(7.24)	33 (21.71)
P value	>0.05		>0.05		>0.05	
Gender						
Male	81 (53.29)	6 (3.95)	7 (4.61)	80 (52.63)	17 (11.18)	70 (46.05)
Female	59 (38.82)	6 (3.95)	3 (1.97)	62 (40.79)	10 (6.58)	55 (36.18)
P value	>0.05		>0.05		>0.05	
Type of health care personnel						
Doctors	105 (76.6)	8 (5.8)	2 (1.5)	111 (81.0)	21 (15.3)	92 (67.2)
Nurses	20 (14.6)	4 (2.9)	3 (2.2)	21 (15.3)	6 (4.4)	18 (13.1)
P value	>0.05		<0.05		>0.05	

P value <0.05 indicate statistical significance

Table 7: Comparison between genders vs. place of violence

Gender	Emergency ward		Doctor's Office		Ward	
	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)
Male	61 (40.13)	26 (17.10)	4 (2.63)	83 (54.6)	41 (26.97)	46 (30.26)
Female	34 (22.36)	31 (20.39)	3 (1.97)	62 (40.78)	35 (23.02)	30 (20.39)
P value	<0.05		>0.05		>0.05	

P value <0.05 indicate statistical significance

DISCUSSION

The present study tried to interpret the various aspects related to episodes of violence faced by the doctors/Health care workers during their working hours. In our study 152/200 participating health care workers i.e. 76% reported at least one incidence of violence in one form or another. As compared to previous study by Tanu Anand et al where 78.3% of the health care workers faced violence.¹ Type of violence has always been an important factor of interest. In our study about 92.10 % (i.e. 140/152) experienced verbal abuse, 6.58 % (i.e. 10/152) physical abuse, 17.76 % (i.e. 27/152) emotional abuse. This results are comparable to findings done in South Delhi Mukesh Kumar et al where verbal abuse (87.32%), physical abuse (8.4%)³ and Verbal threats (56.11%) were the most common type of violence experienced in a study done in Manipur.⁸ The reason for verbal abuse which could turn into physical one can be explained by lack of safety measures in the

hospital premises wherein the patients or their relatives feel dominated when they are more in numbers as compared to the hospital staff on duty which is most commonly seen during night shifts or evening shifts. Our current study showed that exposure to violence was greatest among male staffs (56%) compared to female staff (44%). Showing disrespect to woman is not a culturally accepted situation in most rural areas. As reported in the literature, violence against the doctors does not suggest gender specific risk assaults.³ In our study, maximum rate of violence occurred in emergency ward (62.1%), wards (50%), and doctor's office (4.60%). Similarly in study done by tertiary health care workers in South Delhi, more than 75% of affected resident doctors faced violence while they were working in casualty. Many studies have recognized emergency department was a particularly violent environment⁴ and physicians working in emergency ward face the greatest risk of violence.^{18,19,20} This could be due to lack of sufficient

staff like nurses and doctors in the emergency wards, difficult shifts and the intensity of the work required which could increase the tension around. Also the visitors maybe frustrated and impatient regarding patient progress which might trigger these kinds of attacks.

In our study staff members aged 20-29 years have faced more verbal abuse (100/152) than those who aged above 30 years. In study done in South Delhi shown similar results. Reason behind it being younger staff members lack ability in dealing with these issues.^{4,10,11,12} In our study the rates of physical assault, verbal abuse or verbal threat were highest towards are security officers and housekeepers which is similar in the study done in South Delhi by Mukesh Kumar et al.⁴ In our study, in majority of cases patients attenders were the ones who inflict the violence against health care workers i.e,92.10% (140/152). While in the study done by Tal Carmi- Iluz in negev, israel, 84.5% incidents were inflicted.⁷ This could be due to critical patient condition or no proper updates about the progress of the patient's condition to the patient attender. In our study, the major causes of violence are; (a) patients are very casual about their disease till complications arise 47.5%, (b) long waiting period 45.5%, (c) patient's dissatisfaction with medical care 41%, (d) Non availability of facilities 31%, (e) psychological stress 14.5%. whereas study done in south Delhi by Mukesh Kumar et al the results were; (a) long waiting periods 73% , (b) psychological stress 38.4%, (c) Non availability of facilities 31.4%, (e) patients dissatisfaction with medical care 41%.⁴ In our study, out of 152 cases, violence affected life outside work in about 34.25%. Similar results were observed in study done in south Delhi by Mukesh Kumar et al.⁴ This was also similar in a study done by Pund SB et.al among doctors of Paithan.⁹ Patient related causes (26.84%) and various social pathologies (23.18%) were identified as the next leading reasons. 8.54% of the doctors said that poor infrastructure, drugs and manpower were the reasons for workplace violence, all of whom were government employees.

In our study, the major methods adopted by the people to handle the event were; (a) convincing the patients/attenders 42.76%, (b) called senior staff 28.28%, (c) Inform higher authorities or hospital management 7.3%. In study done by Jones and Lyneham, Oztunc 2006, findings indicates that many incidents of abuse are not reported.³ Similarly in a study done by E Koukia et.al, the health care staff reported that they lacked the knowledge and skills to handle with violent visitors. More training would make them more confident and equipped to deal with this particularly strained group.¹³ In our study the impairment status of the persons who inflicted the violence were: (a) Not impaired 56.6%, (b) drugs/alcohol influence 34.2%, (c) Illness 0.026%, (d) Not sure 16.4%. The reason for this can be that the person inflicting violence could have been under stress maybe

financially overburdened or mentally due to the suffering of his near and dear ones in the hospital.

Association between Gender and type of health care personnel with the type of abuse-Our study revealed that there is significant association between Gender and violence occurring in the emergency ward which was very similar to the study done by M.S. Talas et al in Antara, Turkey.¹⁴ There is a significant association between verbal abuse and deterioration of patient condition. There is significant association between physical abuse and occurrence of violence at night whereas normal working hours and weekend/holiday did not have any statistical association with the type of abuse. Whereas in a study done by Yildirim et.al, in Turkey it was seen that psychological and verbal violence was extremely high (76.8% and 80.8% in the morning shift, 73.6% and 76.8% in the evening shift and 40.8% and 45.6% in the night shift respectively) a finding compatible with the ones reported from other investigators as well.^{15,16,17} The reason as quoted earlier could be due to stress, lack of security by the hospital management, odd working hours, heavy workload and too much pressure on the younger doctors or nursing staff.

LIMITATIONS

The study has been done only in a government hospital. Private hospitals should also be taken into consideration to get better data on the different factors responsible for the violent events and also ensure better safety measures for all the health care personnel. The study has been conducted in only one hospital. Hence there is limitation of generalization of our results.

CONCLUSION

Out of 200 people, three-fourth of the health care personnel have experienced violence in one form or other while at work. Verbal abuse being the highest form of violence followed by physical and emotional abuse, experienced it at some stage of their professional career, with the escorts of the patients committing the maximum amount of violence. Among those who experienced violence majority was in the emergency ward. Males were exposed to these kinds of attacks more than females. Most of the people were affected for one day followed by up to 1 month. A few of them had some damage to property during the violent incident and also experienced financial loss following the violent event. The factors responsible were patients being casual about the disease till complications arise and long waiting periods.

RECOMMENDATIONS

To ensure better safety for the health care personnel it would be better to have more safety measures like

CCTV cameras in different parts of the hospital, better trained and capable security guards who will be able to handle such events when they do occur, and emergency alarms to be installed in the wards and newer methods like red alert Whatsapp group should be introduced.

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