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Community Medicine

WORKPLACE VIOLENCE AGAINST HEALTHCARE: RESIDENT DOCTOR'S PERSPECTIVE FROM CENTRAL INDIA: A CROSS-SECTIONAL STUDY.

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ABSTRACT

Background: Workplace violence has become a new global epidemic that threatens the effectiveness of health systems. This study is aimed to determine the frequency and pattern of workplace violence experienced by the resident doctors of Central India and to study the perceived risk factors and measures to prevent workplace violence against resident doctors.

Methods: A cross-sectional study was done among resident doctors in a tertiary care centre of Central India from September 2019 to October 2019. Universal sampling technique involving all the clinical branch resident doctors with at least one year of experience was employed. The questionnaire was designed and distributed through the web based – google forms to all 250 eligible participants.

Results: Out of 250 residents, 208 had submitted their responses and the response rate was 83%. The mean age of participants was 27.09 ± 2.15 years. More than half (56.7%) had experienced some form of violence in the past 12 months. Verbal abuse is the most common form of violence experienced by 89.8% of residents followed by physical violence (27.1%). The perpetrator was male in 93.2% of cases and majority (64.4%) of them were in ≤ 30 years age group. Lack of manpower was the most common (67.79%) contributing factor followed by inadequate funding (66.83%). Improving the security system was most common (78.37%) solution suggested followed by increasing the health care providers (65.87%).

Conclusion: Huge proportion of residents are experiencing violence. Adequate resident training to tackle violence and health system strengthening will provide a major impact in addressing the epidemic of workplace violence against health care.

KEYWORDS : Workplace violence, healthcare, resident doctors, perspectives.

INTRODUCTION

Workplace violence (WPV) is any act or threat of physical violence, harassment, intimidation, or other threatening disruptive behaviour that occurs at the work site. It ranges from threats and verbal abuse to physical assaults and even homicide (*Occupational Safety and Health Administration: Workplace Violence*, n.d.). It occurs in various sectors and healthcare workers are more likely than other workers to be victims of violence (Bourn J, 2003). Workplace violence (WPV) in healthcare is not a newer phenomenon. First evidences of WPV has been traced back to early 1990s in studies done by Hobbs et al (Hobbs, 1991; Hobbs & Keane, 1996). But recently, WPV has become an alarming phenomenon in health care workers across the globe (Hong, 2019; Nowrouzi-Kia et al., 2019; Peng et al., 2016; Serrano Vicente et al., 2019; Smith, 2015) . Several independent studies across the world have reported the prevalence of workplace violence among healthcare workers to be 23% to 84% (Algwaiz & Alghanim, 2012; Bayram et al., 2017; Fallahi-Khoshknab et al., 2016; Kitaneh & Hamdan, 2012; Nayyer-ul-Islam et al., 2014; Schablon et al., 2012; Sun et al., 2017). Patients and their relatives are the most common perpetrators of non-fatal workplace violence. However, in few instances violence and abuse is also committed by hospital co-workers, especially emotional abuse and harassments (ANAND T).

In most of the nations, a pattern seems to emerge whereby patients and their relatives are the main perpetrators of physical violence while staff are the main perpetrators of psychological violence (*Martino VD. Workplace Violence in the Health Sector: Country Case Studies.*, 2002). WPV violence in healthcare is due to wide range of factors such as shortage of doctors, lack of trust in doctor-patient relationship, overburdened hospitals, long waiting hours, etc. WPV in health sector has a major impact on the effectiveness of health system (*Martino VD. Workplace Violence in the Health Sector: Country Case Studies.*, 2002) and also on the individual level such as increase the perceptions of burnout, decreased job performance and job satisfaction, poor mental health, creating a hostile work climate and results in the suboptimal care to patients. (Saeki et al., 2011; Somville et al., 2016; Zafar et al., 2016). India which has fastest growing healthcare system in the world, faces the viral epidemic of workplace violence in the recent times (Ambesh, 2016; Ghosh, 2018; Nagpal, 2017; Sen & Honavar, 2019). Various studies conducted in various parts of India had reported the prevalence of WPV in healthcare to be 41% to 78% (Anand et al., 2016; Gohil et al., 2019; Kumar et al., 2016; Ori, n.d.; Pund et al., 2017; Sharma et al., 2019; Singh et al., 2019; Vanlalduhsaki, n.d.). However, there is a dearth of evidence regarding WPV in Central India. Therefore, the present was conducted with the objectives to determine the frequency and pattern of workplace violence experienced by the resident doctors of Central India and to study the perceived risk factors and measures to prevent workplace violence against resident doctors.

MATERIAL AND METHODS

This cross-sectional study was conducted among the resident doctors in a tertiary care centre of Central India between September 2019 to October 2019. Universal sampling technique was employed to include all the resident doctors with at least one year of experience. Non-clinical department residents were excluded from the study. Questionnaire for this study was adopted from the Workplace violence questionnaire jointly developed by WHO, ILO,ICN and PSI (*Workplace Violence in the Health Sector Country Case Study – Questionnaire*, 2003). The questionnaire was divided into three sections. Section 1 contains questions regarding demographic characteristics, section 2 contains questions related to pattern of WPV and perpetrators, and section 3 deals with contributing factors and solutions for WPV. Physical violence refers to physical attacks resulting in physical and psychological harm, including hitting, kicking, shooting, barring, pushing, biting, and other violent acts, such as sexual harassment and rape; psychological violence is the intentional act against the person or collective force that results in physical, mental, spiritual, moral, and social damages, including insults, threats, attacks, verbal abuse, and harassment (*Workplace Violence in the Health Sector Country Case Study – Questionnaire*, 2003). The questionnaire was designed in the web based – google forms and distributed to all 250 eligible participants through e-mail. Reminders were sent to increase the response of the study participants. Of them, 208 residents submitted the responses giving a response rate of 83%. Data analysis was performed using Epi Info 7.2.1.0 and categorical variables were summarised as proportions and chi-square test was used to observe the differences. $P < 0.05$ was considered to be significant. Informed consent was taken from all the participants and the study was approved by the Institutional Ethics Committee.

RESULT

Out of 208 resident doctors participated in the study, 112 (53.85%) were male and 96 (46.15%) were female. The mean age of the

participants was 27.08 ± 2.15 years. Majority of residents (45.19%) were from the medicine and allied departments. More than 60% of residents worked around 6 – 12 hours per day (Table 1).

Table 1: Demographic Profile Of Resident Doctors (n=208)

Characteristics of resident doctors	n (%)
Mean age	27.08 ± 2.15
Gender	
Male	112 (53.85)
Female	96 (46.15)
Working department	
Emergency department/casualty	32 (15.38)
Medicine & allied	94 (45.19)
Surgery & allied	48 (23.08)
Obstetrics & gynaecology	34 (16.35)
Duration of work	
0 to 6 hours	22 (10.58)
6 to 12 hours	132 (63.46)
12 to 18 hours	48 (23.08)
≥ 18 hours	6 (2.88)

Nearly 84.62% had witnessed the violence and 56.7% had experienced the violence in the past one year. It was observed that out of 118 residents who were victims of violence, 89.83% were exposed to verbal abuse, followed by physical violence (27.12%). Majority (69.49%) had experienced less than 3 episodes of violence. The most common place of WPV was emergency department/casualty (49.14%) followed by inpatient departments (23.72%). Majority of the incidents (39.0%) occurred on Saturday and in the night hours (Table 2).

Table 2: Prevalence, Type And Characteristics Of WPV Among Resident Doctors (n=208)

Variable	n (%)
Witnessed violence in the past 12 months	176 (84.62)
Experienced violence in the past 12 months	118 (56.73)
Types of violence* (n=118)	
Physical violence	32 (27.12)
Verbal abuse	106 (89.83)
Number of episodes (n=118)	
Less than 3 episodes	82 (69.49)
3 to 6 episodes	22 (18.64)
> 6 episodes	14 (11.86)
Place of violence (n=118)	
Out-patient department	24 (20.34)
In-patient department	28 (23.72)
Emergency/ casualty	58 (49.14)
Labour room/ Operation theatre	8 (6.80)
Attack time (n=118)	
8 AM to 2 PM	20 (16.95)
2 PM to 8 PM	34 (28.81)
8 PM to 8 AM	64 (54.24)

In most incidents, the perpetrator was relatives (83.05%) followed by the patient themselves (16.98%), more than half of the incidents the perpetrators age was found to be ≤ 30 years and in 93.22% of incidents the perpetrator was found to be male (Table 3).

Table 3: Perpetrator Characteristics (n=118)

Variable	n (%)
Perpetrator category*	
Patient	18 (16.98)
Patient's relatives and attendants	98 (83.05)
Public/mob	10 (8.47)
Colleague/co-workers	6 (5.10)
Politician	2 (1.69)
Perpetrator gender	
Male	110 (93.22)
Female	8 (6.78)
Perpetrator age	
≤ 30 years	76 (64.40)
> 30 years	42 (35.60)
Perpetrator status	
Completely normal	57 (48.30)
Under influence of alcohol	35 (29.66)
Emotionally unstable	18 (15.26)
Mentally unstable	8 (6.78)

* Multiple responses

WPV was higher in male residents than female residents which was found to statistically significant with p value 0.01 and it was found to be higher with increased duration of work which was found to be significant with p value 0.01 (Table 4).

Table 4: Factors Associated With Workplace Violence Amongst Resident Doctors.

Variable	Total	Workplace violence, n (%)	Chi-square value	P-value
Gender				
Male	112	72 (64.30)	5.64	0.01*
Female	96	46 (47.90)		
Age				
≤ 30 years	194	112 (57.73)	1.17	0.27
> 30 years	14	6 (42.85)		
Duration of work				
< 6 hours	22	8 (36.40)	10.48	0.01*
6 to 12 hours	132	72 (54.50)		
12 to 18 hours	48	32 (66.70)		
> 18 hours	6	6 (100.00)		
Department of work				
Emergency department	32	20 (62.50)	7.33	0.06
Medicine and allied	94	56 (59.60)		
Surgery and allied	48	29 (60.41)		
Obstetrics & gynaecology	34	12 (35.30)		

* p-value < 0.01, highly significant

Lack of adequate manpower (67.79%), lack of adequate funding for healthcare (66.83%) and inadequate security system (63.46%) were most common contributing factors to WPV as perceived by the residents (Fig.1).

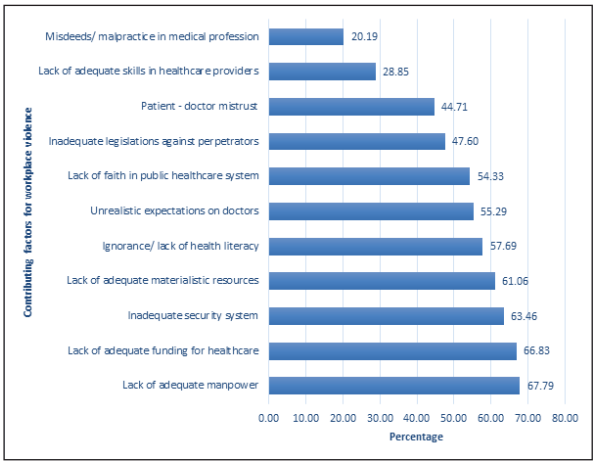

Figure 1: Contributing Factors For Workplace Violence As Perceived By The Resident Doctors

Improving security measures (78.37%), increase the healthcare providers (65.87%) and improve the hospital environment (56.25%) were most common solutions to combat WPV suggested by the residents (Fig.2).

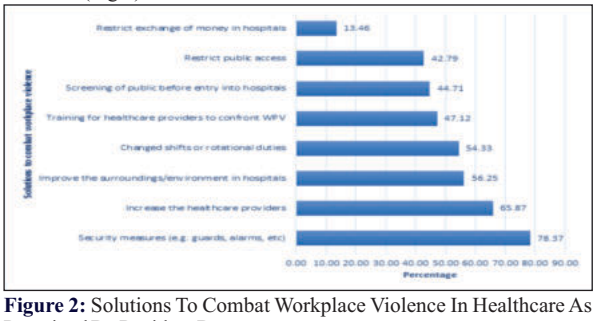

Figure 2: Solutions To Combat Workplace Violence In Healthcare As Perceived By Resident Doctors.

DISCUSSION

Workplace violence is becoming an alarming epidemic among the healthcare system. Our study revealed that 56.7% of the resident doctors had experienced violence in the past 12 months. This is much less than that reported by Ori et al. in 2014 in Manipur (Ori, n.d.) where 78.3% of postgraduate residents had faced WPV. The duration of exposure and different geographical location may explain the differences between the two studies. However, the findings of our study are in line with the study conducted by Pund S et al. in 2017 in Aurangabad (Pund et al., 2017) where 63.41% of health workers reported experiencing at least one form of violence in past 12 months. With respect to the type of violence, verbal abuse (89.83%) was more common than physical form of violence (27.12%). Pund SB et al (Pund et al., 2017) 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. Our study being conducted in the public health facility might be the reason the verbal abuses were relatively higher than other studies. Schablon et al (Schablon et al., 2012) in their study reported that 56% of respondents had experienced physical violence and 78% verbal aggression which is in line with our study but physical violence is higher in that study.

In this study there was significant association between gender and the risk of being affected by violence. This finding is similar to a study by Sun P et al (Sun et al., 2017) where males (73%) are significantly affected more than females (67%) (p=0.02). But this was contrast to the study done by Pund SB et al (Pund et al., 2017) where males are more commonly affected but not significant. Duration of work per day came out to be a significant factor for violence in our study. In this study age of the participant was not significantly associated with risk of violence. This finding is similar to the study done by Ori et in Manipur (Ori, n.d.) in which age was not a significant factor but in contrast to the study by Pund SB et al (Pund et al., 2017) in which age was found to be a significant factor.

In most of the cases (83.05%), the perpetrators were patient's relatives and attendants. This finding was similar to the study done by Kumar M et al (Kumar et al., 2016) in Delhi and Singh G et al (Singh et al., 2019) in Uttar Pradesh. In our study, majority of the perpetrators (93.22%) belong to male gender than females. This finding is in line with the study by Anand T et al (Anand et al., 2016) in Delhi where 92.8% of the perpetrators were male. Most of the residents (48.30%) perceived that the perpetrators were completely normal at the time of violence followed by some perpetrators under the influence of alcohol (29.66). Whereas in a study done by Anand T et al (Anand et al., 2016) in Delhi, 72.5% of perpetrators were normal and 4.3% were under the influence of alcohol. The variation might be due to varied settings in which studies were done as well as perceptions of the participants might be very subjective.

When looking at the contributing factors for workplace violence, lack of manpower (67.79%), lack of adequate funding for healthcare system (68.83) and inadequate security system (63.46%) were three most common factors as perceived by the residents in our study. Studies by Ori et al (Ori, n.d.) and Anand T et al (Anand et al., 2016) reported poor communication skills, shortage of drugs and poor working conditions of doctors as contributing factors.

Limitation

Our study was done in only one tertiary care centre, so the findings cannot be generalized. In our study only the perspectives of the resident doctors were dealt, hence further studies are mandated to include wide spectrum of healthcare workers as well as perspectives from the patients can also be undertaken.

CONCLUSION

More than half of the residents have experienced workplace violence in past 12 months. Mostly the residents are experiencing the verbal abuses due to various contributing factors such as lack of manpower, inadequate resources and lack of trust. Improving the security system and adequate provision of resources might alleviate the current situation of workplace violence. Further, reporting of the WPV incidents should be encouraged, healthcare centres should have zero tolerance policy towards workplace violence and adequate sensitization with training sessions for healthcare workers should be initiated.

Conflict Of Interest

None declared.

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