

Original Research Article

Pattern and factors associated with workplace violence towards doctors in southern part of Karnataka: a cross-sectional study

Vinay Kumar K.¹, Ravi M. R.¹, Naveen N.², Vijayashree Saligrama Rajaiah^{1*},
Damayanthi M. N.¹, Sukanya S. K.¹

¹Department of Community Medicine, Chamarajanagar Institute of Medical Sciences, Chamarajanagar, Karnataka, India

²Department of Dermatology, Chamarajanagar Institute of Medical Sciences, Chamarajanagar, Karnataka, India

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*Correspondence:

Dr. Vijayashree Saligrama Rajaiah,
E-mail: vijayashree.rajaiah@gmail.com

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ABSTRACT

Background: Workplace Violence (WPV) is a globally growing health problem among Doctors, Doctors are at continuous risk of facing aggression at the workplace. This study aimed to evaluate the magnitude and factors associated with violence against doctors.

Methods: An online survey of doctors working in a tertiary care hospital in Southern Karnataka was done by using the modified version of the workplace violence (WPV) in the health sector questionnaire, developed by the World Health Organization.

Results: Out of the 96 participants, 69 doctors (71.9%) reported being exposed to violence at their workplace in the past 6 months. 92.3% of post graduate, 96% of the residents from other states have experienced WPVs. The most common type of WPV was verbal abuse (70%), and the perpetrators were relatives of the patients (85.5%). The possible perceived reasons for WPV were security issues (34%), workplace environment (28.9%).

Conclusions: The present study suggests that more than half of the doctors working in a tertiary care hospital in Southern Karnataka face WPV. Reporting of the incidents and taking strict actions against the violence is lacking and it must be strengthened to reduce prevalence of WPVs.

Keywords: Doctors, Prevention, Violence workplace

INTRODUCTION

Workplace Violence (WPV) is defined as “any act or threat of physical violence, harassment, intimidation or other threatening disruptive behaviour that occurs at the work site.”¹

The high population density of India with a lack of resources predisposes to a higher incidence of WPV in India over the years. Commercialization of healthcare over time with some doctors accused of medical

negligence and unethical practices. The rapid conclusions made by the ever hungry media who jumped to publish those sensational stories had an impact on general population, which shattered the Doctor-Patient relationship.

Underreporting of the WPV has become an iceberg problem with many healthcare professional considers the WPV as a part of the job. They are resulting in frustration, irritability and anger among the doctors which is affecting their mental health also.

Burden of WPV

World: globally 62%-69% of health professionals experienced WPV annual incidence of WPV in healthcare workers is 8 serious cases per 10,000 full employees which is fourfold compared to other profession.¹

India: According to the Indian Medical Association, 75% of Indian doctors have experienced either physical or verbal abuse in their profession at some point of time.

Karnataka: 75% of doctors in Karnataka have faced WPV once in their career.²

Nationwide strike of doctors with halting of non-emergency medical services demanding work safety in response to WPV has become common news in recent time in India.³

Need for the study

Despite these developments, the magnitude of WPV among Doctors and its effects on their psycho-social health is under-researched and under-reported. So this study aims to fill this lacuna. This study aimed to evaluate the magnitude of workplace violence against doctors working in a tertiary care center and determine the factors associated with violence.

METHODS

Study area and study period

This cross sectional study was carried out in the tertiary care centers of southern Karnataka, Chamarajanagar Institute of Medical Sciences, Chamarajanagar district, in Karnataka state. The ethical clearance was obtained from Institutional Ethical Committee prior to commencement of the study. This present cross-sectional study was conducted for a period of two months from August 2024 to September 2024.

Study population and sample size

The study participants were Doctors who are working in a tertiary care centres. Inclusion criteria includes, they should be Medical Graduates (MBBS) and and post-graduates (specialist and super-specialists) residents currently working in tertiary care centre, also the house surgeons who are completed atleast 6 month of internship were considered for the study. Doctors of other systems of medicine, nursing staff, and paramedics (but were managing patients). Half-filled questionnaire was excluded.

Estimation of desired sample size (n=96) was calculated taking the reference of the study conducted by Grover et al in the year 2020, proportion of Doctors experienced WPV was 54.6%.¹ Therefore, considering 54.6% as p,

45.4% as q $= (100-p)$ & 10% as allowable error l Formula $n = \frac{([1.96]^2 pq)}{l^2}$, $n = \frac{([1.96]^2 \times 0.13 \times 0.87)}{(0.1)^2}$. Calculated sample size was 95.2 and it was approximated to next number as 96. Simple random sampling method was employed to include study participants.

Data collection

After obtaining approval and clearance from the institutional ethics committee, the subjects fulfilling the inclusion criteria were enrolled for the study after obtaining informed consent. Methods of collection of data: self-administered a pre-tested, semi-structured, anonymous "Google forms" based questionnaire. The WPV in the health sector questionnaire, developed by WHO was modified and used as a data collection tool. Google forms will be shared through whatsapp and emails. Corresponding email address and phone number of the PI will be shared for any queries. The email IDs of responders of the responders will be collected which will helps in avoiding duplication of data and filling the missed data as well

Operational definitions⁴

Physical violence

The use of physical force against another person or group, that results in physical, sexual or psychological harm. Includes beating, kicking, slapping, stabbing, shooting, pushing, biting, pinching, among others.

Psychological violence (emotional abuse)

Intentional use of power, including threat of physical force, against another person or group, that can result in harm to physical, mental, spiritual, moral or social development. Includes verbal abuse, bullying/mobbing, harassment, and threats.

Bullying/mobbing

Repeated and over time offensive behaviour through vindictive, cruel, or malicious attempts to humiliate or undermine an individual or groups of employees.

Sexual harassment

Any unwanted, unreciprocated and unwelcome behaviour of a sexual nature that is offensive to the person involved, and causes that person to be threatened, humiliated or embarrassed.

Statistical analysis

The data collected was entered in Microsoft Excel Version 2019, and was analysed using Epi Info™ Build 7.2.5 2021 by CDC. Descriptive statistics like frequencies, mean, standard deviation, percentages were

applied for quantitative data. The data was represented in the form of graphs and tables. Chi-square test was applied to compare the frequency of violence among different subgroups. Qualitative data were coded initially and then the sub themes and themes were generated.

RESULTS

Out of the 96 respondents, 50 (52.1%) are male and 46 (47.9%) are female. 56 (58.3%) of them are in the age group of 25-29, 36 (37.5%) are below 25 years of age and 4 (4.2%) of them are aged above 30. Most of the participants were post graduate residents 52 (54.1%)

followed by house surgeons 37(38.5%) and junior residents (post MBBS) 7 (7.3%).

Prevalence of workplace violence

Out of 96 participants, 69 (71.9%) participants reported at least one incident of WPV in the last 6 months, which gives the prevalence of WPV to be 71.9%. the highest prevalence was seen among male 76% compared to prevalence of WPV in female 67.4%, there was no statistically significant difference in the prevalence of WPV among participants of either gender (Table 1).

Table 1: Sociodemographic distribution with respect to workplace violence.

Variable		Total (n=96)	WPV Frequency (n=69), N (%)	Chi-square value	P value
Age in years	20-24	36	19 (52.8)	10.981	0.004*
	25-29	56	46 (82.1)		
	>30	4	4 (100)		
Gender	Female	46	31 (67.4)	0.878	0.349
	Male	50	38 (76)		
Present professional group	House surgeon	37	18 (48.65)	23.529	0.001*
	Junior resident (Post MBBS)	7	3 (42.9)		
	PG Resident	52	48 (92.3)		
Moved from another state	No	71	45 (63.4)	9.732	0.002*
	Yes	25	24 (96)		
Works in shifts	No	29	27 (93.1)	9.263	0.002*
	Yes	67	42 (62.7)		
Works anytime between (6PM-7AM)	No	7	6 (85.7)	0.715	0.398
	Yes	89	63 (70.8)		

*Statistically significant

Details of workplace violence

Among those who reported WPV, the most common type of WPV experience was verbal abuse, 67% of the participants have experienced verbal abuse, followed by bullied (18%) and physical attack (7%) (Figure 1).

Majority of the WPVs could have been prevented according to participants, around 80% of physical attacks, verbal abuse and bullying, whereas only 33% of the sexual harassment could have been prevented. However, the action taken against these WPVs is very low. Action was taken against 6% of verbal abuse and mobbing cases, whereas no action was taken against physical attacks and sexual harassment (Table 2).

In terms of perpetrators (Table 3), the majority of the participants (39.6%) reported relatives of the patients to

be the most common perpetrators and other common perpetrators were patients themselves (25.5%) and staff member from their own department (14.1%).

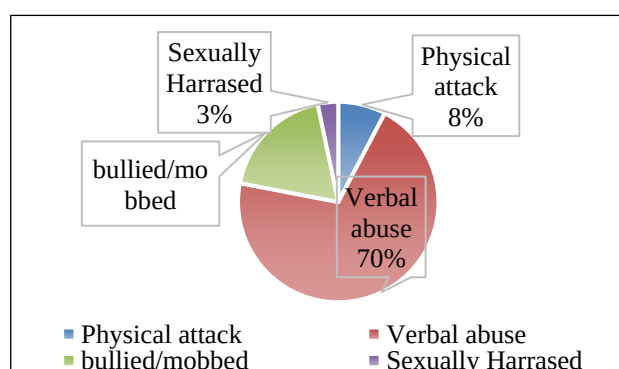


Figure 1: Showing type of WPV among the victims.

Table 2: Victims response about the WPV.

Response about the WPVs according to the victim	Physical attack n=7 (%)	Verbal abuse n=64 (%)	Bullied/mobbed n=17 (%)	Sexually harassed n=3 (%)
Preventable	6 (86)	57 (89)	14 (82)	1 (33)
Action taken	0 (0)	4 (6)	1 (6)	0 (0)

Table 3: Type of perpetrators in WPVs.

Type of perpetrator of violence	Frequency (n=69), N (%)
Relative of patient	59 (85.5)
Patient	38 (55.1)
Staff member	21 (30.4)
General public	19 (27.5)
External colleague	07 (10.1)
Management/supervisor	05 (7.2)

Responses from the victims

98.6% times the victim was asked the person to stop the violence (Table 4), and only 13% of the incidents were reported to the senior staff member, 8.7% of them took counselling and 2.9% took help from union. Whereas 76.8% victims took no action to the incident, either they shared with their friends, colleagues or family. 18.8% of the victims tried to pretend it never happened.

Table 4: Victims response towards the WPV.

Response from the victim	Frequency (n=69), N (%)
Told the person to stop	68 (98.6)
Took no action/ shared with friend, collague and family only	53 (76.8)
Tried to pretend it never happened	13 (18.8)
Reported it to a senior staff member	09 (13)
Sought counselling	06 (8.7)
Sought help from the union/ Association	02 (2.9)

Among 53 victims who didn't reported the incident (Table 5), 60.4% of them felt it was useless to report, 52.8% of them are afraid of negative consequences. 20.8% of them thought it was not that important to report the incident, but 17% of them didn't know how to report the incident and 5.9% felt ashamed to report the incident.

Table 5: Reasons for not reporting the incidents among the victims who haven't reported the incident.

Reasons for not reporting the incident	Frequency (n=53), N (%)
Felt it was useless to report	32 (60.4)
Afraid of negative consequences	28 (52.8)
Felt it was not important	11 (20.8)
Did not know how to report and whom to report	09 (17)
Felt ashamed to report	05 (5.9)

Among the victims the incident had some impact on their mental health also (Table 6), as 73.9 % of the victims had repeated, disturbing memories, thoughts, or images of the attack. 65.2% of them couldn't able to avoid thinking about or talking about the attack or avoiding having feelings related to it. 75.4% of them started to be being "super-alert" or watchful and on guard every time. 84.1% of them started to feel as everything they do will be an effort to prevent WPV (Table 6).

Table 6: Impact of the WPVs on the victims.

Impact of incident on the victims	Frequency (n=69), N (%)
Had repeated, disturbing memories, thoughts, or images of the attack	51 (73.9)
Couldn't able to avoid thinking about or talking about the attack or avoiding having feelings related to it	45 (65.2)
Started to be being "super-alert" or watchful and on guard	52 (75.4)
Started to feel like everything you do will be an effort to prevent WPV	58 (84.1)

Responses from the subjects about the factors responsible for incident was collected using open ended questions. Qualitative analysis was done to generate the codes and themes out of it (Table 7).

Table 7: Thematic analysis of the responses from the victims about factors responsible for the WPVs.

Sub codes	Frequency (n=159) N (%)	Codes	Frequency (n=159) (%)	Themes	Frequency (%)
Security	50 (31.4)	Security issues	54 (34)	Hospital related issues	114 (71.7)
Law	4 (2.5)				
Administration	1 (0.6)				
Staff	4 (2.5)	Lack of human resources & their support	14 (8.8)		
Resources	1 (0.6)				
Management	5 (3.1)				
Manpower	3 (1.9)				
Night	4 (2.5)				
Junior	7 (4.4)	Work place environment	46 (28.9)		
Toxic Environment	12 (7.5)				
Duty	6 (3.8)				

Continued.

Sub codes	Frequency (n=159) N (%)	Codes	Frequency (n=159) (%)	Themes	Frequency (%)		
Female	4 (2.5)						
Influence	1 (0.6)	Patients with influence	22 (13.8)	Public related factors	45 (28.3)		
Politic	21 (13.2)						
Deaths	8 (5)	Patient attenders	19 (14.5)				
Attender	4 (2.5)						
Uneducated	2 (1.3)						
Awareness	9 (5.7)						

According to the response (Figure 2), 5 codes have been generated which can be further clubbed to form 2 broad themes which are hospital related issues (71.7%) and public related issues (28.3%).

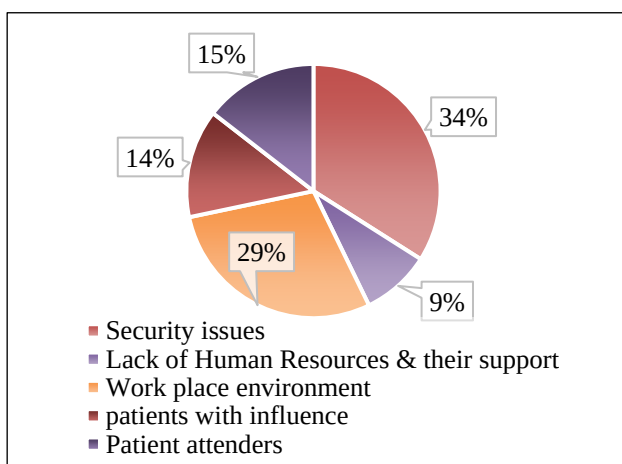


Figure 2: Reasons associated with the WPVs.

Security issues (34%) were the major factor followed by the workplace environment issues (29%).

DISCUSSION

The prevalence of WPV in the current study was 71.9%, which lies in the range of 40.8-78% WPV prevalence as reported from previous studies in India.

In the current study slightly higher proportion of male participants experienced WPV, although there is no statistical significance noted with respect to the gender. Existing literature is contradictory, with some of the studies reporting a higher prevalence of WPV among females while others report higher prevalence among females, and some reporting lack of gender differences.^{21,19,20,6-9} The findings of the current study lines with the third group of studies.

Higher proportion of post graduate students (92.3%) experienced WPVs, existing literature also suggests that WPV is highest among the first-line doctors, i.e., trainee residents.^{6,7} It could be understood by the fact that most of the departments, post graduates are the first line professionals providing the care to patients. 96% of the

residents who moved from other state have experienced WPVs, which can be explained by some language barrier which resulted in the incidents. 93.1% of the resident who don't work in shifts have experienced, these above factors are found to be statistically significant.

Verbal abuse was the most common type of WPV (67%) previous studies also reported verbal abuse as the most common type of WPV. The action taken against WPVs were very low as only 6% verbal abuse and 6% of bullying, whereas no physical attack and sexual assault have attracted any action.

Relatives of the patients were major perpetrators which is supported by previous literature. The family members possibly come to conclusion that their beloved one is not taken proper care or delay in the care, since they bear financial burnt for cost of the treatment. So there is necessity of creating awareness among public about respecting working principles in the workplace, time and priority given to the patient with respect to the severity of the illness.

In terms of responses to the incidents 13% of the WPVs were reported to their senior faculty (13%) and majority (76.8%) of the WPVs are not attracted any action. Among those who took no action, 60.4% of the incidents were not reported thinking it was useless to report, 52.8% were worried about the negative consequences, 17% of them did not know how to report and whom to report. Two third of the victims had some negative impact on their mental status also.

Among the responses from the subjects about the factors responsible for WPVs, it was noted that security issues contributes to one third of it (34%), followed by work place related issues (28.9%) and lack of human resources (8.8%). So, 71.7% of the factors are related with hospital which can significantly reduced by improving working environment in the hospitals, recruiting sufficient human resource and placing security persons at key places providing quality security services will benefit the situation. Similarly factors like patients with influence (13.8%) and factors associated with patient attenders (14.5%) can be prevented by creating awareness about strict laws against the violence of healthcare professionals and implementing them properly.

Study design being cross-sectional it attracts recall bias among the study participants as they were subjected to recall their past experiences. The study participants were limited to residents only consultants were not included. And the study was limited to tertiary care centre, therefore the generalizability of the findings cannot be done to all healthcare settings. Future studies should fix these limitation in their studies.

CONCLUSION

The present study concludes that more than two third of the resident doctors working in a tertiary care hospital in southern part of Karnataka, have experienced WPV, Patient attenders being the major perpetrators, post graduate residents were the major victims. Action wasn't taken on majority of the incidents with the lacuna of proper redressal mechanism to tackle WPV. There is a requirement of implementation of preventive measures at hospital level in terms proper security system and creating awareness among public about laws and policies related to WPV is required to reduce prevalence of WPV.

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REFERENCES

1. Grover S, Dalton N, Avasthi A. Workplace violence against doctors in a tertiary care hospital. *Industr Psych J.* 2020;29(1):38-46.
2. Kaur A, Ahamed F, Sengupta P, Majhi J, Ghosh T. Pattern of workplace violence against doctors practising modern medicine and the subsequent impact on patient care, in India. *Plos one.* 2020;15(9):e0239193.
3. Hossain MM, Sharma R, Tasnim S, Al Kibria GM, Sultana A, Saxena T. Prevalence, characteristics, and associated factors of workplace violence against healthcare professionals in India: a systematic review and meta-analysis. *MedRxiv.* 2020:2020-01.
4. Dixit S, D'Souza B, Singh R, Thomas J, Somu G, Kamath R. Factors contributing to workplace violence against doctors in a tertiary care teaching hospital in South India. *Ind J Foren Medi Toxicol.* 2019;13(3):108-13.
5. World Health Organization. Workplace violence in the health sector country case studies research instruments. 2003. Available at: <https://www.who.int/publications/m/item/workplace-violence-in-the-health-sector---country-case-study-research-instruments---survey-questionnaire>. Accessed 01 May 2024.
6. Anand T, Grover S, Kumar R, Kumar M, Ingle GK. Workplace violence against resident doctors in a tertiary care hospital in Delhi. *Natl Med J India.* 2016;29(6):344-8.
7. 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. *J Clin Diagn Res.* 2016;10(11):LC06-10.
8. Acik Y, Deveci SE, Gunes G, Gulbayrak C, Dabak S, Saka G, et al. Experience of workplace violence during medical specialty training in Turkey. *Occup Med.* 2008;58(5):361-6.
9. Belayachi J, Berrechid K, Amlaiky F, Zekraoui A, Abouqal R. Violence toward physicians in emergency departments of Morocco: prevalence, predictive factors, and psychological impact. *J Occup Med Toxicol.* 2010;5:27.
10. O'Brien CJ, van Zundert AA, Barach PR. The growing burden of workplace violence against healthcare workers: trends in prevalence, risk factors, consequences, and prevention—a narrative review. *E Clin Medi.* 2024;72:102641.

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