Workplace violence against doctors in a tertiary care hospital

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A B S T R A C T

Aim: This study aimed to evaluate the magnitude and factors associated with violence against doctors. Materials and Methods: An online survey of doctors working in a tertiary care hospital in India 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 353 participants, 193 doctors (54.6%) reported being exposed to violence at their workplace in the past 6 months. Participants from the medical branches (57.8%), senior residents (60.3%), and those who were posted in emergency services (79.4%) and night duty (56.1%) reported more violence. The most common type of WPV was verbal abuse (91.2%), and the perpetrators were relatives of the patients (51.7%). The possible perceived reasons for WPV were patient overload (69.7%), prolonged duty hours and excessive workload (69.7%), and long waiting periods for patients/caregivers (66.9%). The majority of the participants considered that recruiting an adequate number of professional and paraprofessional staff (75.6%) can lead to a reduction in WPV. Conclusions: The present study suggests that more than half of the doctors working in a tertiary care hospital in India face WPV. There is a lack of specific redressal mechanism to address WPV. Accordingly, there is a need to develop a mechanism for reporting of WPV and to implement preventive strategies at the individual level and at the system level. There is need for strengthening and implementing laws and making new policies to reduce WPV.

Keywords: Causes, doctors, prevention, violence, workplace

Workplace violence (WPV) is an act of aggression, physical assault, or threatening behavior that occurs in workplace setting and causes physical or emotional harm to an employee.[1] The World health Organization (WHO) defines WPV as, “The intentional use of power, threatened or actual, against another person or against a group, in work-related circumstances, that either results in or has a high degree of likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation.” WPV against doctors is a global problem.[2]

Many studies have been conducted across the globe to assess WPV against health-care workers. Some of the recent meta-analyses have estimated the prevalence of WPV to be 61.9%–69%.[3,4] In terms of the type of violence, nonphysical violence was estimated to be 42.5% (95% CI: 38.9%–46.0%), that of physical violence in the last year was 24.4% (95% CI: 22.4%–26.4%), verbal abuse was estimated to be 57.6% (95% CI: 51.8%–63.4%), threats was estimated to be 33.2% (95% CI: 27.5%–38.9%), and sexual harassment to be 12.4% (95% CI: 10.6%–14.2%). The meta-analyses also suggested that the prevalence of WPV differs significantly across different countries, study location, practice setting, working schedule, and occupation. Data also suggest that WPV against health-care workers is high in Asia and North America. In terms of specialties, WPV is reported to be high in psychiatric and emergency department settings, and is more often seen against nurses and physicians.[3] Factors...
which have been shown to be associated with WPV include working in remote health-care areas, understaffing, mental/emotional stress of patients/visitors, insufficient security, and lack of preventative measures associated with WPV against health-care professionals. [4]

There is limited data on WPV encountered by medical professionals in the Indian setting. Different studies have reported WPV in the last 1 year in Indian settings to vary from 35.7% to 78%. [5-12] A large online survey conducted in 2017 under the aegis of the Indian Medical Association reported the prevalence of fear of violence to be 46.3% among doctors. [13] The factors which have been shown to be associated with WPV against doctors in Indian settings include poor hospital security, absence of proper law, unrealistic expectation of patients and relatives, overburdened hospital, low literacy, and poor communication skills among doctors. [13] Although the government has attempted to address this problem, doctors are still experiencing assault in ever-increasing numbers. Instances of patients’ relatives assaulting the treating doctor are a common scenario all over India. However, there is limited research on violence in health-care settings against physicians in India. To ensure that doctors stop being the victims of these events, sound research is important. With this background, this study aimed to evaluate the magnitude and factors associated with violence against doctors working in a tertiary care public-funded hospital.

**MATERIALS AND METHODS**

This study was conducted at Post Graduate Institute of Medical Education and Research, Chandigarh, which is a tertiary care public-funded hospital, in North India. The study was approved by the ethics committee of the institute. A modified version of the WPV in the Health Sector Questionnaire, developed by the WHO, was used to assess violence against doctors. [11] The study sample comprised all the resident doctors and faculty members, who were working in the institute for at least 6 months.

For this study, using the Survey Monkey platform, a survey link was sent by E-mail and/or through Whatsapp to the resident doctors and faculty members who were working in the institute. The survey required 5–6 min to complete. The anonymity of the participants was maintained. In case the person did not respond in the first instance, weekly reminders were sent for 4–6 weeks. Participation was completely voluntary; the recipients of the E-mail had an option to “opt-out” in case they did not wish to receive any weekly reminders, soliciting their participation in the survey. A person could complete the survey only once from a device. Data was checked for duplicacy by verifying the IP addresses.

All the data generated were analyzed by using Statistical Package for Social Sciences, Version-14 (SPSS for Windows, SPSS Inc. Chicago, IL, USA). Frequencies and percentages were calculated for the discrete variables. Mean, standard deviation (SD), median, and range were calculated for the continuous variables. Chi-square test was used to compare the frequency of violence in different subgroups. A two-tailed P ≤ 0.05 was considered statistically significant.

**RESULTS**

Of the total 376 respondents, 353 (94.0%) were currently working in the institute and they formed the study sample. The mean age of the participants was 32 years (median: 30.0; SD: 7.42; range: 24–64). Males (n = 250; 71.0%) outnumbers females (n = 103; 29.0%). There was a nearly equal distribution of participants who were married (51.0%) and those who were unmarried/single (49.0%). The mean duration of working in the institute was 4.3 years (SD: 5.6; median: 2.0; range: 6 months–36 years). Most of the participants were junior residents (n = 155; 43.9%), followed by senior residents (n = 116; 32.9%), and faculty members formed the smallest proportion (n = 82; 23.2%). Most participants belonged to medical branches (n = 241; 68.3%), and this was followed by those from surgical branches (n = 80; 22.7%) and basic sciences (n = 32; 9.1%). In the last 6 months, most of them were mainly posted in the outpatient area (36.3%), followed by emergency services (20.7%) and inpatient area (19.5%) [Table 1].

**Prevalence of workplace violence**

Out of the 353 participants, 193 participants reported at least one incident of WPV in the last 6 months, resulting in the prevalence of WPV to be 54.6%. The highest prevalence was seen among the participants of medical branches (57.8%), those who were senior residents (60.3%), and those who were predominantly working in emergency services (79.4%) in the last 6 months. WPV most commonly occurs during night time (56.1%). Although a slightly higher proportion of female participants reported WPV, there was no statistically significant difference in the prevalence of WPV among participants of either gender.

**Details of workplace violence**

Among those who reported WPV, most common type of WPV experienced by the participants was verbal abuse (91.2%), and about half (47.7%) of the participants reported experiencing the same 2–4 times in the previous 6 months and another one-fourth (24.8%) reported experiencing the same ≥ 5 times. In terms of perpetrators, half of the participants (51.7%) reported relatives of the patients to be the most common perpetrators and other common perpetrators were seniors from their own department (22.2%) and patients themselves (19.5%) [Table 2].
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Response of the victims to workplace violence

The doctors who were exposed to violence responded most commonly by calling the security personnel (39.4%), and this was followed by telling the perpetrator to stop (36.8%) and informing a senior colleague (23.3%). However, about one-fourth (23.3%) of the participants took no action and another 15.5% pretended as if violence did not happen [Table 3]. It was observed that people from basic sciences never informed the security personnel, possibly due to lack of availability of such persons around their workplace.

When those who did not report the violence \( (n = 75; 38.9\%) \) (took no action or pretended that violence never happen) were evaluated for not reporting the same, a majority of them reported that they did not report the violence due to lack of time (52.0%) and due to the belief that reporting was useless (52.0%) and thought that reporting would be a hassle (41.3%). It was further seen that these beliefs were more common in junior residents, compared to senior residents and faculty members. About one-third (37.3%) of the participants reported that they did not know where to report about the abuse faced [Table 4].

When asked about the environment in the institute about reporting the violence incidence, only one-third of the participants (34.2%) felt that there was an encouragement to report WPV in the institute. One-fifth of the participants (20.2%) were aware of the procedure for reporting of WPV, only 40.4% felt that there are some deterrents for preventing WPV against doctors at their workplace, and slightly less than half of the participants (47.6%) felt that the incident of WPV could have been prevented [Table 5].

Reasons and the ways of preventing workplace violence

When the participants were asked about the possible reasons for WPV, the common reasons identified by the participants were patient overload (69.7%), prolonged duty hours and excessive workload (69.7%), long waiting periods for patients/caregivers (66.9%), unrealistic expectation by the patient/relatives (54.7%), and poor communication skills of the doctors [Table 6].

When asked about their suggestions for the ways of preventing the WPV, the most common way suggested by the majority of the participants was recruiting an adequate number of professional and paraprofessional staff (75.6%).

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**Table 1: Profile of workplace violence**

| Variable                  | Frequency \((n=353), n(\%)\) | WPV positive Frequency \((n=193), n(\%)\) | Chi square test/t-test \((P)\) |
|---------------------------|-------------------------------|---------------------------------------------|-----------------------------|
| Sex                       |                               |                                             |                             |
| Male                      | 250 (71.0)                    | 132 (52.8)                                  | 1.214 (0.27)                |
| Female                    | 103 (29.0)                    | 61 (59.2)                                   |                             |
| Mean age (years)          | 32 (7.42)                     | 31 (6.09)                                   | 3.430 (0.26)                |
| Mean duration in years of working in the institute in years | 30 (24-64) | 30.0 (24-63) | 2.970 (0.33) |
| Mean (range)              | 4.3 (5.6)                     | 3.9 (4.9)                                   |                             |
| Departments               |                               |                                             |                             |
| Basic sciences            | 32 (9.1)                      | 12 (37.5)                                   | 4.594 (0.1)                 |
| Medical branches          | 241 (68.3)                    | 139 (57.8)                                  |                             |
| Surgical branches         | 80 (22.7)                     | 42 (52.5)                                   |                             |
| Current position          |                               |                                             |                             |
| Junior residents          | 155 (43.9)                    | 90 (58.0)                                   | 9.514 (0.009*)              |
| Senior residents          | 116 (32.9)                    | 70 (60.3)                                   |                             |
| Faculty                   | 82 (23.2)                     | 33 (40.2)                                   |                             |
| Main place of work in last 6 months |                   |                                             |                             |
| Outpatient area           | 128 (36.3)                    | 68 (53.1)                                   |                             |
| Emergency services        | 73 (20.7)                     | 58 (79.4)                                   |                             |
| Ward                      | 69 (19.5)                     | 36 (52.2)                                   |                             |
| Intensive care unit       | 17 (4.8)                      | 9 (52.9)                                    |                             |
| Operation theater         | 14 (4.0)                      | 2 (4.3)                                     |                             |
| Laboratories              | 22 (6.2)                      | 9 (40.9)                                    |                             |
| Others                    | 30 (8.5)                      | 11 (36.7)                                   |                             |
| Time of work              |                               |                                             |                             |
| Day hours                 | 168 (47.6)                    | 89 (53.0)                                   | 0.843 (0.35)                |
| Night hours               | 185 (52.4)                    | 104 (56.1)                                  |                             |

WPV: Workplace violence, *P ≤ 0.05
Other suggestions included recruiting counselors to handle minor queries of patients (64.9%), strengthening and implementation of the existing laws regarding the violence against doctors (62.3%), having adequate number of security personnel (55.8%), and giving time out/breaks during the working hours (55.8%) [Table 7].

**Comparison of different groups**

When we compared males and females for different aspects of WPV, female doctors significantly more often responded to WPV by calling the security personnel ($P = 0.009$) and reported to senior colleagues ($P = 0.01$). There were few significant differences between those from basic sciences, medical branches, and surgical branches. It was seen that compared to those from medical branches, those from basic sciences less often called the security ($P = 0.014$) in response to WPV, less often did not report WPV due to lack of knowledge about where to report ($P = 0.001$), were more often worried about the negative consequences of reporting ($P = 0.03$), less often considered patient overload as a cause of WPV ($P = 0.03$), and less often considered restricting the number of patients in emergency services as a solution for WPV ($P = 0.043$). Similarly, it was seen that, compared to those from surgical branches, those from basic sciences less often called the security ($P = 0.011$) in response to WPV, less often took no action to WPV ($P = 0.045$), less often did not report WPV as considered reporting WPV to be useless ($P = 0.02$), did not know where to report ($P = 0.001$), felt ashamed for reporting ($P = 0.04$), less often considered patient overload as a cause of WPV ($P = 0.025$), more often considered a delay in medical care as a reason for WPV ($P = 0.035$), less often

**Table 2: Workplace violence – types, frequency, and perpetrator’s type**

| Variables | Frequency (n=193), n (%) |
|-----------|-------------------------|
| Type of violence |  |
| Verbal abuse | 176 (91.2) |
| Both verbal and physical | 15 (7.8) |
| Physical | 1 (0.5) |
| All three types, i.e., verbal, physical, and sexual harassment | 1 (0.5) |
| Frequency of violence |  |
| Only once | 53 (27.5) |
| 2-4 times | 92 (47.7) |
| ≥5 times | 48 (24.8) |
| Type of perpetrator of violence |  |
| Relatives of patient | 164 (51.7) |
| Senior (s) from the same department | 42 (22.2) |
| Patients themselves | 36 (19.5) |
| General public | 19 (10.3) |
| Other staff member(s) at the workplace | 19 (10.3) |
| Senior (s) from the other department(s) | 8 (2.5) |
| Colleague(s) from the same department | 7 (2.2) |
| Colleague(s) from other department | 6 (1.9) |
| Junior (s) from the same department | 3 (1.6) |

**Table 3: Response of the victims of workplace violence**

| Response from the victim | Frequency, n (%) |
|--------------------------|------------------|
| Reported it to a senior colleague |  |
| Called the security |  |
| Told person to stop |  |
| Took no action |  |
| Tried to pretend it never happen |  |
| Told a colleague |  |
| Told friends/family |  |
| Complained to police |  |
| Reported to hospital Administration |  |

**Table 4: Reasons for not reporting the violence**

| Reasons for not reporting the incident | Frequency, n (%) |
|----------------------------------------|------------------|
| Lack of time |  |
| Useless |  |
| Considered that it would be an hassle |  |
| Did not know who to report |  |
| Afraid of negative consequences |  |
| It was not important |  |
| Felt ashamed |  |
considered having counselors to handle minor queries of patients as a solution to reduce WPV ($P = 0.035$), and more often considered restricting the number of patients in the outpatient department (OPD) ($P = 0.038$) to prevent WPV. When those from medical and surgical branches were compared, those from surgical branches more often did not know where to report ($P = 0.01$), less often considered the presence of any deterrents for preventing WPV ($P = 0.01$), less often considered a delay in medical care as a reason for WPV ($P = 0.045$), and more often considered restricting the number of patients in the OPD ($P = 0.025$).

Compared to senior residents, a higher proportion of junior residents considered lack of time ($P = 0.01$), useless ($P = 0.01$), considered that it would a hassle to report ($P = 0.001$), and did not know whom to report ($P = 0.018$) as the reasons for not reporting WPV. Further, compared to senior residents, a higher proportion of junior residents considered the presence of any deterrents for preventing WPV ($P = 0.04$). When junior residents were compared to faculty, a higher proportion of junior residents considered lack of time ($P = 0.001$), useless ($P = 0.001$), considered that it would a hassle to report ($P = 0.026$) to as the reasons for not reporting WPV. In terms of response to WPV, compared to the faculty, a higher proportion of junior residents called security as a response to WPV ($P = 0.005$), considered the presence of any deterrents for preventing WPV ($P = 0.025$), and considered that WPV can be prevented ($P = 0.03$). Compared to junior residents, a higher proportion of faculty members considered poor communication skills in doctors ($P = 0.001$), inadequate training/ supervision of doctors ($P = 0.04$), and poor infrastructure ($P = 0.01$) as the reasons for WPV.
Compared to junior residents, a higher proportion of faculty members considered having counselor to handle minor queries of patients \( (P = 0.04) \), more often considered restricting the number of patients in the outpatient department (OPD) \( (P = 0.036) \), more often considered developing a protocol for reporting violence and for further action \( (P = 0.042) \), more often considered adequate training and supervision \( (P = 0.001) \), and less often considered reducing the pressure of thesis \( (P = 0.025) \) as solutions for preventing WPV. When the senior residents and faculty members were compared, a higher proportion of senior residents called security \( (P = 0.003) \) in response to WPV and a lower proportion asked the perpetrator to stop \( (P = 0.038) \) and took no action \( (P = 0.025) \). In terms of reasons for violence, compared to senior residents, a higher proportion of faculty members considered unrealistic expectations by the patient/relatives \( (P = 0.045) \), poor communication skills by the doctors \( (P = 0.001) \), and inadequate training/supervision of doctors \( (P = 0.025) \) as the reasons of WPV. In terms of ways of preventing, compared to senior residents, a higher proportion of faculty members considered having counselor to handle minor queries of patients \( (P = 0.03) \), considered restricting the number of patients in the outpatient department (OPD) \( (P = 0.04) \), and considered the need for adequate training and supervision \( (P = 0.02) \) as solutions for reducing WPV.

**DISCUSSION**

The prevalence of WPV in the present study was 54.6%, which is in the reported range of 40.8%–78%, as reported in previous studies from India.\(^{[5-13]}\) This finding suggests that there is an urgent need to address this menace, which is known to have a negative impact on the psychological well-being, physician burnout, poor job satisfaction, increased intention to turnover (switch jobs), and decision-making with respect to patient care.\(^{[14-18]}\)

Although a slightly higher proportion of female participants reported WPV, the difference between the genders did not reach statistical significance. Existing literature is contradictory, with some of the studies reporting a higher prevalence of WPV among females,\(^{[19,20]}\) while others report higher prevalence among males\(^{[21]}\) and some reporting lack of gender differences.\(^{[6,7,22,23]}\) The findings of the present study support the third group of studies.

**Table 7: Ways of preventing workplace violence**

| Ways of preventing workplace violence | Frequency, n (%) |
|--------------------------------------|------------------|
|                                      | Adequate number of professional and paraprofessional staffs | 27 (68.8) |
|                                      | Having counselor to handle minor queries of patients | 17 (53.1) |
|                                      | Strengthening and implementing the existing laws regarding the violence against the doctors | 19 (59.4) |
|                                      | Adequate number of security personnel | 19 (59.4) |
|                                      | Giving time off/breaks during the working hours | 16 (50.0) |
|                                      | Restricting the number of patients in OPD | 13 (40.6) |
|                                      | Improving the infrastructure | 15 (45.9) |
|                                      | Having proper display boards - noting the consequences of workplace violence for the perpetrator | 12 (37.5) |
|                                      | To develop a protocol for reporting violence and for further action | 12 (37.5) |
|                                      | Restricting the number of patients in the emergency OPD | 9 (28.1) |
|                                      | Restrict the visiting hours for relatives of the patient | 9 (28.1) |
|                                      | Adequate training and supervision | 11 (34.4) |
|                                      | Reducing the pressure of academics | 11 (34.4) |
|                                      | Reducing the pressure of thesis | 5 (15.0) |

OPD—Outpatient department
Participants from medical branches reported highest WPV (57.8%), followed by those working in surgical branch (52.5%), with the lowest prevalence of WPV was seen among those working in basic sciences departments. Previous studies from different parts of the world and India, too, suggest that there are differences in the prevalence of WPV faced by doctors from different specialties.\textsuperscript{5,7,19,31} However, in the present study specialty-wise analysis was not performed due to the small sample for some of the specialties.

A higher proportion of senior residents (60.3%) experienced WPV, and this was followed by a proportion of junior residents (58%) and the least proportion of faculty members reported having experienced WPV. Existing literature also suggests that WPV is highest among the first-line doctors, i.e., trainee residents.\textsuperscript{8,7,19} Slightly higher proportion of senior residents reporting WPV, compared to junior residents, can be understood, in light of the fact that in most of the departments, senior residents are in fact the first-line professionals providing care to the patients in the outpatient area. The highest prevalence of WPV among those posted in the emergency area, is understandable, considering the patient load and the working conditions. This finding suggests that there is a need to streamline the emergency services, especially with respect to reducing the patient load, improving the doctor–patient ratio, having more para-professionals to attend issues that do not require professional expertise, and improving the security staff. This will also help to ally the anxiety of the patients and the caregivers and possibly also reduce the stress on the senior members of the team, who are known to reflect their stress on the junior colleagues in the form of WPV.\textsuperscript{24,29} In the present study, a higher proportion of the participants reported experiencing WPV during the night time. Some of the previous studies too have reported the same.\textsuperscript{9,25} This finding suggests that people in night duty are more vulnerable to WPV. This could possibly be due to the lower number of people posted in the nighttime, compared to the daytime.

The most common type of WPV reported in the present study was verbal abuse, and physical abuse was reported either being experienced as the only form of abuse or in combination with other forms of abuse by about one-tenth of the participants who reported WPV. Previous studies have also reported the prevalence of verbal abuse as the most common form of WPV, with a reported range of 19.6%–98.6%.\textsuperscript{6,26–32} When one compares the findings of physical abuse with the existing literature, which suggest the prevalence of 2.3%–81.05%\textsuperscript{17,22,31,33,34} our findings are toward the lower end of the reported range. This could be possibly due to the fact that ours is a public-funded facility and patients and caregivers come to the institute as a last resort and do not have many alternatives. This could possibly influence the prevalence of physical abuse. Accordingly, the prevalence figures for physical abuse must not be considered as representative of the other government facilities or private setups.

An important finding of the present study is that, about three-fourth of those who experienced WPV experienced it more than once, with about half of the participants having experienced it 2–4 times and another one-fourth (24.8%) reported experiencing the same ≥5 times. These findings suggest that the prevalence of WPV is not an isolated event and hence this must be taken seriously. Previous studies which have evaluated WPV across different countries and setup also suggest that a significant proportion of the participants experience the same multiple times.\textsuperscript{5,17}

In terms of perpetrators of WPV, findings of the present study suggest that for half of the participants, the perpetrators are relatives of the patients and for another one-fifth, the perpetrators are patients themselves. These findings are also supported by the existing literature.\textsuperscript{5,9,17,22,31,32,38} In India, family is more closely knit, is involved in the care of the patient, bear the major financial burnt of the treatment cost, and are involved in the care of the patient. Due to all these factors, family members possibly become more distressed when they feel that the patient is not being cared for, or the care is being delayed. Accordingly, there is an urgent need to launch public awareness campaigns for patients and caregivers, with respect to the working principles of the workplace, triage system, and prioritization of the patients depending on the severity of the illness. This should also be accompanied by improving awareness with respect to utilizing the nearby health-care facilities for minor ailments and coming to tertiary care hospital when the patient cannot be cared for at the primary care level. Further, there is a need to strengthen the primary care services and develop formal referral and back referral systems to reduce the workload at the tertiary care level hospitals.

Another important source of WPV perpetuation was seniors from the same department, accounting for 22.2% of WPV. If one takes the total picture into account, colleagues from the same or other departments and irrespective of hierarchy about two-thirds of the participants identified other health-care professionals as the perpetrators.

According to the Karasek model, variables which influence the workplace stress include the workplace demands (workload, the pace of work, length of working hours, time schedules, tight deadlines, etc.), control (capacity to respond to work demands and pressures, including autonomy, responsibility, skill, training, and experience), and social support (social environment in which working activities are performed including organizational culture, working climate, management style, help from co-workers, involvement, participation, and team work). According to
In this interaction, social support acts as a facilitator in mitigating stress at work. Accordingly, when one tries to understand the association of WPV and the other staff as a perpetrator in this background, it can be said that there is a lot of stress in the workplace, with less social support. Seniors possibly in their attempt to meet the work demand and achieve control over their work demands, pass on their stress to the junior colleagues, without being supportive. This possibly leads to a vicious cycle of WPV; it is transmitted from one person to the other, either in the form of a rule of hierarchy or retaliation. Accordingly, there is a need to reduce the work demands at all levels, create a supportive environment for fellow colleagues, so that everyone is given the workload, over which they have control.

In terms of response to the experience of WPV, only two-fifth (39.4%) of the participants resorted to informing the security personnel, and about one-third of the participants asked the perpetrator to stop. However, a significant proportion of the participants took no action and/or tried to pretend that no WPV occurred. Previous studies[7,9,19,21,31] suggest that institutional environment with respect to addressing the WPV, significantly influences the reporting and response of the victim. Further, in the present study, only one-third of the participants (34.2%) felt that there was an encouragement to report WPV and only one-fifth of the participants (20.2%) were aware of the procedure for reporting WPV at their department. Those who did not report of violence did so because of lack of time, considered that reporting would be useless, and they did not know where to report. Based on these findings of the present study, it can be suggested that there is a need to develop a mechanism with respect to whom to report, when to report, how the anonymity of the victim would be maintained, etc., This will go a long way in preventing WPV and its negative consequences on the health-care system.

When asked about the common reasons for WPV, about two-thirds of the participants considered high patient overload, prolonged duty hours and excessive workload (69.7%), long waiting periods for the patients to be responsible for WPV. About half of the participants also considered unrealistic expectations by the patient/relatives to be the reasons for WPV. Poor communication skills were also identified as one of the most common causes of WPV in the present study. The majority of these findings are supported by the existing literature.[7,9,21,30,31,39,48] These findings suggest that there is a need to reduce workload, rationalize the patient intake, rationalize working hours for the doctors, and conduct communication workshops for the doctors to reduce workplace stress and WPV.

In addition, many of the suggestions given to reduce WPV, such as recruiting an adequate number of professional and paraprofessional staff, recruiting a counselor to handle minor queries of patients, and strengthening and implementing the existing laws regarding the violence against doctors can help in reducing the WPV. If one looks at the existing literature, there is supportive evidence for some of these strategies.[7,9,19,30,31]

The present study has certain limitations. First, it was a cross-sectional study and the participants were asked to report the WPV experienced in the last 6 months, which could be influenced by recall bias. Second, this study was limited to only one tertiary care hospital and hence the findings cannot be generalized to all the treatment settings. Third, the study was limited to doctors only. Further, the study did not evaluate the immediate antecedents, environmental factors, personality factors of the victim and perpetrator, and the system-related factors which could have contributed to WPV. The present study also does not answer the question of difference in WPV, experienced by doctors working in different specialties. Future studies must attempt to overcome these limitations.

**CONCLUSION**

The present study suggests that more than half of the doctors working in a tertiary care hospital in India, experience WPV, mostly in the hand of family members of the patients or the patients themselves. First-line clinicians, especially senior and junior residents, more often face WPV. Further, about two-fifth of the victims also report seniors and other colleagues at the workplace to be perpetrators of WPV. There is a lack of specific redressal mechanisms to address WPV. Accordingly, there is a need to develop a mechanism for reporting WPV. Furthermore, there is a need to implement preventive strategies at the individual level and at the level of the system to reduce the prevalence of WPV. In addition, there is also a need for strengthening and implementing laws and making new policies to reduce WPV.

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**Conflicts of interest**

There are no conflicts of interest.

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