A Cross Sectional Study on Violence Against Doctors and Associated Risk Factors in Raigarh, Chhattisgarh

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ABSTRACT

Introduction: A divine status was endowed upon doctors of our country since time immemorial, be it urban or rural setting. Of late violence against medical practitioners is increasing worldwide and more so in developing countries like India. This violence may comprise of verbal abuse, threats, vandalism, physical assault as well as loss of life. So there is an urgent need to evaluate the risk factors involved in violence against doctors to overcome this problem in time.

Aim & Objective: The aim & objective is to determine the prevalence and identify the risk factors associated with violence against doctors.

Materials & Methods: A community-based cross-sectional study was conducted using a self-administered semi-structured questionnaire from July to September 2019. Both government and private doctors were included in the study who have been into practice for more than 1 year in the Raigarh district of Chhattisgarh. Detailed data were collected regarding violence and its associated risk factors and their suggestions were taken on how to prevent violence against doctors. A total of 420 doctors were included in the study and Data analysis was conducted using Excel and SPSS software.

Results and Conclusion: Violence against doctors were found to be very high among government as well as private practitioners. The major risk factors were Patient dissatisfaction with services, Unrestricted public access to the hospital, Lack of security and less manpower with long and erratic working hours. Medical professionals who faced violence have been known to develop depression, insomnia, fear and anxiety leading to absenteeism which is a major problem for the community.

Key Words: Cross-sectional study, Doctors, Prevalence, Risk factors, Violence

INTRODUCTION

A divine status was endowed upon doctors of our country since time immemorial, be it urban or rural setting. Of late violence against medical practitioners is increasing worldwide and more so in developing countries like India. This violence may comprise of verbal abuse, threats, vandalism, physical assault as well as loss of life. For government hospitals and primary health centres across the country, particularly in West Bengal and Maharashtra violence by patient relatives, local goons, political leaders and even by police has been reported⁴-⁵. Anxiety, long waiting period, non-availability of services, inordinate delay in referral, unhygienic and extremely crowded conditions in the emergency and other wards are some of the reasons given. Electronic and print media also do not have an understanding of the challenges faced by the doctors. Increasing out of pocket expenditure, communication gap and commercialisation of medical services has hampered the relationship between doctors and communities.

So there is an urgent need to evaluate the risk factors involved in violence against doctors to overcome this problem in time. Violence against doctors is an arising trend across India. Most of the violent situations are faced by respondents in the emergency department or dealing with people at odd hours. Indian Medical Association reports⁴ prevalence as 75% but no study has been reported from the state of Chhattisgarh. Analysis of this situation is very important and will form the foundation for addressing the alarming situation. The objective is to determine the prevalence and identify the risk factors associated with violence against doctors.

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**METHODS**

A community-based cross-sectional study was conducted using a self-administered semi-structured questionnaire from July to September 2019. The inclusion criteria for participants were voluntary participation by doctors engaged in clinical work who had at least 1 year of professional experience in the government sector as well as or private sector of the Raigarh district of Chhattisgarh. Detailed data were collected after a pilot study on 20 doctors regarding violence and their associated risk factors and their suggestions were taken on how to prevent violence against doctors. Informed consent was taken from all the participating doctors. A total of 420 doctors were included in the study and all the data were compiled using MS Excel and analysed by SPSS software (Statistical Package for the Social Sciences). P-values less than 0.05 were considered statistically significant. Descriptive statistics were reported using frequency and percentage. A Chi-square test was used to test the association.

**RESULTS**

In the present study prevalence of violence against doctors was determined and elucidation of the factors responsible for it was found out.

**Table 1: Demographic characteristics of participants**

| Variable               | n=420(%) |
|------------------------|----------|
| Sex                    |          |
| Male                   | 300(71.43)|
| Female                 | 120(28.57)|
| Age                    |          |
| Less than 35 years     | 320(76.19)|
| 36 to 45 years         | 64(15.24)|
| More than 45 years     | 36(8.57)|

A total of 420 doctors were included in our study, where 71.4% were males and 28.6% were females. The majority (76.19%) of them were below 35 years of age and 36(8.57%) were more than 45 years old.

**Table 2: Perpetrators for violence**

| Perpetrators (*Multiple responses) | n=428(%) |
|-----------------------------------|----------|
| Patients                          | 48(19.35)|
| Relatives                         | 208(83.87)|
| Police                            | 8(3.23)|
| Local leaders                     | 100(40.32)|
| Media persons                     | 52(20.97)|
| Public/mob                        | 36(14.52)|

In our study, it is found that in most of the cases perpetrators were relatives (83.87%) followed by local leaders (40.32%). About one-fifth of them were found to be media persons. This was followed by patients, police and the public.

**Table 3: Cause for violence**

| Cause of violence (*Multiple responses) | n=428(%) |
|----------------------------------------|----------|
| The communication gap between doctor and patients/attendants | 48(19.35)|
| Non-Availability of bed                | 28(11.29)|
| Non-Availability of required medicines | 52(20.97)|
| Less manpower                         | 124(50)|
| Patient/attendants dissatisfied with services | 112(45.16)|
| High workload                         | 80(32.26)|
| The patient died after rescue          | 52(20.97)|
| Patient referral                      | 32(12.90)|
| Unrestricted public access to hospital | 92(37.10)|
| Negative media guide                  | 64(25.81)|
| The mental disorder of the patient    | 4(1.61)|
| Refusal for services that were not available | 44(17.74)|
| No improvement in patient condition   | 16(6.45)|
| Long waiting time                     | 32(12.90)|
| Lack of security                      | 80(32.26)|

In our study, the most important cause of the violence was found to be less manpower (50%) followed by patient/attendants dissatisfaction with services (45.16%) and unrestricted public access to the hospital (37.10%). Lack of security, High workload, Negative media guide and Communication gap between doctor and patients/attendants was also a common cause for violence.

In the majority of the cases, no action was taken 136(54.84%) against the perpetrators followed by the verbal warning given 60(24.19%) and reported to police 52(20.97%).

**Figure 1: Prevalence of violence.**

Out of 420 respondents, 248(59.05%) have faced violence during their practice. Out of which 124(50%) have faced verbal abuse, 100(40.32%) have faced threatening and 24(9.67%) have faced physical abuse.
Table 4: Attitude towards work after violence

| Attitude towards work changed after violence | n=168(%) | (*Multiple responses) |
|---------------------------------------------|---------|-----------------------|
| Reduce sincerity to work                    | 60(35.71)|                       |
| Apprehension at workplace                   | 92(54.76)|                       |
| Changed workplace                            | 24(14.29)|                       |
| Fear for self and family members             | 112(66.67)|                      |

In the present study, more than 66% of doctors had a sense of fear for themselves and their family members. 92 (54.76%) of doctors have developed an apprehension at the workplace followed by reduced sincerity 60(35.71%). A few of them 24(14.29%) have changed their workplace.

Table 5: Preventive measures suggested

| Preventive measures suggested by respondents | n=248(%) | (*Multiple responses) |
|---------------------------------------------|---------|-----------------------|
| Fixed duration of work                      | 108(43.55)|                      |
| Fixed job responsibility                    | 80(32.26)|                       |
| More security staff appointment             | 200(80.65)|                      |
| More medicine supply                        | 72(29.03)|                       |
| More staff appointment                      | 168(67.74)|                      |
| Strict action after violence                 | 216(87.10)|                      |

The important preventive measures suggested for reducing violence were strict action after violence by 216(87.10%) respondents followed by more security staff appointments by 200(80.65%) respondents, more medical staff appointments by 168(67.74%) respondents. Fixed duration of work was suggested by 108(43.55%) respondents. Very few respondents have suggested the other preventive measures such as fixed-job responsibility and more medicine supply by 80(32.26%) and 72(29.03%) respectively.

Table 6: Association between demographic characters and violence

| Variable               | Violence Yes | Violence No | Chi-sq | p-value |
|------------------------|--------------|-------------|--------|---------|
| Sex                    | Male         | Female      |        |         |
|                        | 184          | 116         | 2.2686 | 0.132   |
| Age                    | Less than 35 years | 192 | 128 | 12.4555 | <0.05 |
|                        | 36 to 45 years | 44 | 20 |        |         |
|                        | More than 45 years | 12 | 24 |        |         |

Violence against doctors is independent of gender as seen statistically as out of total respondents 61.33% of males and 53.33% of females faced violence. But violence was significantly less in the older age group as only 33.33% of the respondents having aged more than 45 years faced violence or we can say that the younger age group are facing more violence.

Table 7: Association between the time of violence and violence

| Variable   | Violence Yes | Violence No | Chi-sq | p-value |
|------------|--------------|-------------|--------|---------|
| Time of violence | Morning   | 116         | 132    |        |
|             | Evening      | 108         | 140    | 11.53   | <0.05   |
|             | Night        | 144         | 104    |        |         |

With the above table, we found that violence was more than 58% during night shift which was statistically significant in this study.

**DISCUSSION**

This study was performed in the Raigarh District of Chhattisgarh state from July to September 2019. In our study, 71.4% were males and 28.6% were females. A similar percentage of respondents was seen in a study done by Gohil RK et al. that is 72% males and 28% females. A study done by Kumar M et al had respondents as 61% males and 39% females. The overall prevalence of violence was found to be 59.05% with 50% verbal abuse, 40.32% threatening and 9.67% physical abuse. A study done by Pound SB et al found the prevalence of violence more i.e. 78% with verbal abuse in 73%, threatening in 49% and physical abuse in 6%. Though IMA reports an overall prevalence of 75% there has been no reported study on violence in the state of Chhattisgarh.

In our study, most of the perpetrators of the case were relatives (83.87%) followed by local leaders (40.32%). Gohil RK et al also found that relatives were the most common perpetrators (80%) followed by patients themselves in 20%
followed by the general public 8.4%7. J Farooq et al found out that in 81.8% of the cases perpetrators were either the attendants or the patients themselves. The most important cause of the violence was less manpower (50%) followed by patient/attendants dissatisfaction with services (45.16%) and unrestricted public access to the hospital (37.10%). Whereas a study conducted by Kumar M et al says long waiting period 73.5% followed by delayed medical provision 45.6% were the main reasons for violence6. A study done by Iluz TC et al reports the common cause as long waiting for time (46.2%) followed by dissatisfaction with treatment 15.4%8.

In the majority of the cases, no action was taken 136(54.84%) against the perpetrators followed by the verbal warning given 60(24.19%) and reported to police 52(20.97%). Gohil RK et al also reported a similar finding5. Koukia E et al report 43 (45.7%) of respondents felt that the incident did not justify a complaint to the police, 17 (18.1%) were satisfied with the attacker’s apology with verbal warning10. Our study shows more than 66% of doctors have a sense of fear for themselves and their family members. A study done by Iluz TC et al found that 22.4% of respondents had fear for themselves and family members after violence8.

In our study, the most important preventive measures suggested for reducing violence was strict action after violence followed by more security staff appointments, more medical staff appointments. The study conducted by Kumar M et al also reports that an increase in security and medical staff have an important role in preventing violence6. Gender was independent for violence against doctors as 61.33% of males and 53.33% of females faced violence but violence was significantly less in the older age group as only 33.33% of the respondents faced violence. A study done by Pound SB et al found a similar result as 64% of males and 60% of females faced violence which was independent for violence and only 40% older age group respondents faced violence.3. We observed time of violence was night significantly but a study conducted by Gohil RK et al. found no difference in evening and night shift and more violence were reported in morning hours5.

CONCLUSION

The prevalence of violence against doctors (59.05%) in the present study shows that it is an important issue in the health care delivery system and can’t be ignored. The major risk factors were less manpower followed by Patient dissatisfaction with services and unrestricted public access. Medical professionals who faced violence have been having fear for themselves and family members, high apprehension at the workplace and some have even changed their workplace. The World Health Organization has also initiated the global campaign for violence prevention which aims to raise awareness about the problem and emphasize the crucial role that public health can play in addressing its causes and consequences. While security needs to be better strengthening the doctor-patient relationship is undoubtedly the most imp factor in reducing violence which the MCI has already started working into as per the new curriculum. Very few reported studies have been found in the country and none were found in the state of Chhattisgarh. A more exhaustive study is essential both in Chhattisgarh and the entire nation to find out the lacunae in the implementation of preventive measures.

AUTHOR CONTRIBUTION

1st author: Development of questionnaire, Data collection, analysis and write up. 2nd author: Conceptualizing the idea, Development of the questionnaire, Review of the literature.

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