

Escalating violence against physicians: A qualitative examination of an alarming crisis

By Avinash Kumar

Escalating violence against physicians: A qualitative examination of an alarming crisis

Shubhi Saxena¹, Serah Elizabeth Cherian¹, Savio Sebastian¹, Isha Yadav¹, Avinash Kumar¹, Rashmi K. S²

¹Kasturba Medical College, Mangalore, Manipal Academy of Higher Education, Karnataka, Manipal, India

²Department of Physiology, Kasturba Medical College, Mangalore, Manipal Academy of Higher Education, Karnataka, Manipal, India

Corresponding author:

Avinash Kumar

E-mail: inovation.avi@gmail.com

ABSTRACT

Introduction: Over the past few decades, increasing instances of violence against doctors have frequently made headlines. Evidence indicates that doctors face significantly high risk of physical violence, threats, verbal abuse, and cyberbullying in their workplaces. According to the Indian Medical Association, 75% of doctors experience verbal physical abuse, with 43% citing it as a major source of anxiety. Contributing factors likely include poor communication, understaffed and overworked medical professionals, inadequate training in emergency care and management, and ineffective grievance redressal systems.

In response, India has enacted the Health Services Personnel and Clinical Establishments Bill, marking a significant initial step toward addressing this issue. It is imperative that we explore various approaches to foster harmony, implement systemic changes in healthcare delivery, and prevent such adverse incidents, ensuring continuous, high-quality services for those in need.

Objectives: The objectives of the study were to identify the probable causes for the increase in violence against doctors and to explore solutions to improve the current scenario.

Setting and design: The present study was conducted in Kasturba Medical College, Mangalore. This is a descriptive qualitative study including two steps i.e. Free listing and Pile sorting.

Materials and methodology: The study used purposive sampling. The study involved a one to one interview with 2 interns and 2 tutors posted in Community Medicine Department of Kasturba Medical College, Mangalore.

Statistical Analysis: Visual Anthropac 4.98.1 software was used.

Results: After conducting free listing a total of 28 causes were identified and 19 solutions were suggested a smith's salience score of 0.15 was taken as the limit and 14 cause and 12 solutions were then sorted where they were grouped into 3-6 and 3-5 groups respectively. The cause with the highest salience score of 0.25 was not giving importance to autonomy and the solution with the highest salience score of 0.25 was better triage system in emergency cases.

Conclusion: Violence against doctors is one of the major problems being faced today. By using the free listing and pile sorting method not giving importance to autonomy, favourism and discrimination among patients were identified as some of the main causes for violence against doctors while better triage system in emergency cases and strict laws for violence against doctors were suggested as effective solutions for the above problem.

Keywords: Violence against doctors, Qualitative study

INTRODUCTION

'No physician, however conscientious or careful, can tell what day or hour he may not be the object of some undeserved attack, malicious accusation, black mail or suit for damages'^[1]

Over time, as in case of other human endeavours, one can witness the wearing off of the patient's trust on doctors.^[2] Increasing incidences of violence against doctors have been making headlines of newspapers for over the past few decades, with the situations worsening in China, India, Bangladesh, Pakistan, and Sri Lanka.^{[3][4]}

Current scenario is evidence enough that doctors are prone to physical violence, threats and verbal abuse and cyber bullying at work. According to Indian Medical Association as many as 75% of doctors have faced violence at some point in their career. It is one of the most common causes of anxiety in 43% of the doctors.^[5] Most often the violence is witnessed in critical care units. Health care service providers are threatened, abused, bullied, manhandled and even killed.^[5] Lack of proper protective equipments, understaffed and overloaded medical professionals, poor training in emergency care and management, poor grievance redressed on part of the doctors, inadequate protection of medical staff, a fall in the quality of medical services, misunderstandings arising due to poor communication, increasing awareness among patients and increasing cost of medical services often results in medical disputes and sometimes violence against doctors. In India, laws for protecting and safe guarding the medical community, are not very effective. Assaulting an uniformed officer is a non-bailable offence but same done to a doctor in hospital is not and hence there are no inhibitions whatsoever in the public and they harass the doctor knowing that there will be no consequences.^[6]

The situation is beginning to change ever so slightly with the new bill that has been passed. The Health Services Personnel and Clinical establishments' bill has been passed in India which can be considered as one of the first steps towards resolving the matter at hand.^[5]

It is high time we figure out different ways of working together in harmony and bringing about systemic changes in health care delivery system for avoiding such untoward incidents and ensuring round the clock quality services for those in need. A change in attitude of all people concerned is required. That being said the media too should stop blaming the doctors who more often than not are the victims themselves.^[7] This study aims at identifying the probable causes for the increase in violence against doctors and to explore solutions to improve the current scenario.

The current qualitative study was conducted among 15 second-year students from a selected nursing college in Mangalore, Karnataka. The sample size of 15 was determined based on the principle of saturation for qualitative research. The study received approval from the Institutional Ethics Committee (Reference no: 19050) before commencement. Participation was secured through written informed consent. Free listing and pile sorting methods were utilized to identify perceived causes of substance abuse initiation and potential solutions among nursing college students in Mangalore, Karnataka. Free listing:

For the free listing the students were asked two probe questions:

(1) In your opinion, what do you think are the causes for substance abuse among your age group of students in your field?

(2) Suggest the possible solutions to eradicate the use of substance abuse among this age group of students in your field?

The students were asked to provide a list of various perceived causes and possible solutions for substance abuse individually. Once the response was written by the participant, the investigator reread the same to ensure there was no misunderstanding and confusion. The evaluation of the responses were based on the

9 basic measures of central tendency. Statistical program ANTHROPAC was used to compute Smith's Saliency Index, and frequency for free list data. Smith's saliency index refers to the "importance, representativeness or prominence of items to individuals or to the group". It is a measure by word frequency across lists and word rank within the lists. The concept behind Smith's saliency index is that while the participants present their response, the items with 3 greater salience is listed first. It is often used to deduce free list data. Prior to analysis, the items that were recorded by various participants but using different words 2 were grouped together. This process was done through consensus with research team. From the results; twenty responses as causes and fifteen solutions were taken for pile sorting. The obtained results were subjected to analysis using Visual Anthropac

Pile sorting

The free listing is followed by pile sorting. It is a potent methodology that is commonly used to discover the similarities and differences between the individual and group values such as in this case, causes and solutions for substance abuse. This procedure is used within cognitive anthropology to scrutinize how the students perceive 2 the given causes or solutions to be related. Identified salient items; twenty causes and fifteen solutions were written on cards with their respective numbers. Following this pile sorting is succeeded by two procedures. First, the participants were then allowed 3 group the selected perceived reasons and solutions based on their own criteria of similarity. Second, the participants were asked to elicit the reason for piling up the items in the same category. Successive pile sorting was done with most similar causes and solutions assembled first followed by items with less similarity. This process continues until all the groups are clustered into a 2 single pile. The achieved results were analysed using Visual Anthropac. This software aims to analyse each participant's data, based on the percentage of participants who sorted the items in the same pile. The multidimensional scaling reveals the causes and solution that have greater degrees of similarity.

Ethics statement 2

Present study was conducted after obtaining the ethical clearance from the institutional ethics committee. (Reference No :). Permission was obtained from the heads of the nursing institutes and consent was taken from the nursing students before the commencement of the study.

MATERIALS AND METHODS

This is a descriptive qualitative study including free listing to identify the causes and solutions regarding violence against 1 doctors and Pile sorting to find a relation between the causes and solutions regarding violence against doctors. The study involved a one to one interview with 2 nine participants posted in Community Medicine Department of Kasturba Medical College, Mangalore. The sample size of 9 was reached after applying the rule of saturation for qualitative study. The study commenced only after obtaining 3 clearance/approval from the Institutional Ethics Committee (Reference no. IECKMCMLR/023/2019). The participants were inducted only after obtaining a written informed consent form.

Free listing

For the free listing the students were asked two probe questions:

- (1) What in your opinion are the probable causes for violence against doctors?
- (2) What in your opinion could be done to prevent such instances?

The participants were given instruction about the research and their role in it. The questions were read in front of the participants in a way that they understood. It was also cleared that it was not a test for their knowledge. Participants were given time to respond. After the 2 end of the exercise, the responses were re-read to the participants before they were finalized for pile sorting. Statistical program ANTHROPAC was used to

compute Smith's Saliency Index, and frequency for free list data. Smith's saliency index refers to the "importance, representativeness or prominence of items to individuals or to the group". It is a measure by word frequency across lists and word rank within the lists. The concept behind Smith's saliency index is that while the participants present their response, the items with greater salience is listed first. It is often used to deduce free list data. Prior to analysis, the items that were recorded by various participants but using different words were grouped together. This process was done through consensus with research team. From the results; twenty responses as causes and fifteen solutions were taken for pile sorting. The obtained results were subjected to analysis using Visual Anthropac.

Pile sorting

The free listing is followed by pile sorting. It is a potent methodology that is commonly used to discover the similarities and differences between the individual and group values such as in this case, causes and solutions for violence against doctors. This procedure is used within cognitive anthropology to scrutinize how the students perceive the given causes or solutions to be related. The responses obtained from free listing were pooled together for pile sorting. This step aimed at identifying the similarities and differences in the responses. 6 causes and 5 solutions with relatively high Smith's S value were then pile sorted. Smith's S (Smith's saliency score) refers to the importance, representativeness or prominence of items to individuals or to the group. It is measured by word frequency across lists and word rank within the lists. The free pile sorting method that had been adopted for the research. The identified causes and solutions were written on separate cards and each was assigned a number. These cards were handed to the participants who then arranged them in groups using their own criteria. The participants then explained the reason behind these groups which were also recorded. The cards were shuffled every time. All participants could rearrange the pile. First, the participants were then allowed to group the selected perceived reasons and solutions based on their own criteria of similarity. Second, the participants were asked to elicit the reason for piling up the items in the same category. Successive pile sorting was done with most similar causes and solutions assembled first followed by items with less similarity. This process continues until all the groups are clustered into single pile. The achieved results were analysed using Visual Anthropac. This software aims to analyse each participant's data, based on the percentage of participants who sorted the items in the same pile. The multidimensional scaling reveals the causes and solution that have greater degrees of similarity.

RESULTS

The current study was carried out to explore the perceived causes and solutions for violence against doctors.

Table No 1: Pile sorting to assess the relation among various causes and solutions for violence against doctors.

Causes		
Respondent number	Pile formed	Reasons
1	pile 1: 4 2 pile 2: 5 6 pile 3: 1 3	Poor communication between doctors and patient party Inadequate facilities for managing difficult situations Consequence of less experience
2	pile 1: 4 5 pile 2: 1 2 pile 3: 3 6	Administration responsibility for proper facilities and security Individual fault of the doctor Lack of knowledge and training

3	pile 1: 5 pile 2: 1 4 pile 3: 2 3 6	Resources that need to be increased in the hospital Unavoidable Improve training and education
4	pile 1: 1 2 3 pile 2: 4 5 6	Lack of taking consent and poor communication Poor facilities in the hospital
5	pile 1: 4 2 pile 2: 1 6 pile 3: 5 3	Poor communication Lack of training, knowledge, negligence Lack of proper consent and poor facilities
6	pile 1: 5 6 pile 2: 4 pile 3: 1 2 3 18	Lack of equipments and training to handle difficult situations Patient party should not be allowed in casualty and condition should be explained to them beforehand Lack of communication between doctor and bystanders of the patient
7	pile 1: 1 6 3 2 pile 2: 5 pile 3: 4	Shortcomings of medical professionals Inadequate facilities and poor hospital management Under the influence of alcohol, uneducated
8	pile 1: 1 2 3 pile 2: 4 5 6	Communication gap between patients and doctors and lack of consent Lack of experience, training and infrastructure
9	pile 1: 5 6 pile 2: 2 4 pile 3: 1 3	Lack of emergency medicine popularity in India and low exposure of doctors to such cases during training period Wrong etiquettes of patient and party and poor communication between doctor and patient Taking the patient for granted especially in government setup

Solutions

Respondent number	Piles formed	Reasons
1	Pile 1: 3, 4 Pile 2: 1, 5, 2	Administrative or hospital monitoring inputs required Training education integration required
2	Pile 1: 1, 2, 3 Pile 2: 4, 5	Better training in language and communication skills in explaining the proposed treatment and associated risks Improving the hospital infrastructure and facilities which indirectly improves treatment
3	Pile 1: 3 4 Pile 2: 1 pile 3: 5 2	Administrative/hospital, monetary inputs required Training, education integration required Proper communication skills
4	Pile 1: 1, 5 Pile 2: 3, 4, 2	Empathy towards patient will be there only with better communication and the with the patient knowing which phase he is going through Security system and infrastructure has to be taken care of by the hospital administration
5	Pile 1: 3, 4 Pile 2: 1, 5 Pile 3: 2	Improved administrative responsibility for facilities Individual skill improvement in managing situations Improved knowledge in the legal aspect of medicine

6	Pile 1: 2 Pile 2: 1, 5 Pile 3: 3, 4	Documentation of important procedures and patient's acknowledgement of treatment strategies Improvement in communication skills aid proper delivery of health care needs and to show empathy to patient and patient party Improving infrastructure and improving hierarchy in healthcare to break down work load
7	Pile 1: 1, 2, 5 Pile 2: 3, 4	Better communication to educate and explain to the patient any procedure or to the patient party the cause of death Providing security for proper work environment and to ward off unnecessary mobs who may hinder work
8	Pile 1: 3, 4 Pile 2: 1, 2, 5	Infrastructure should be such that doctor gets enough privacy to work without interference from a third party and security should be heightened Doctors should be trained on the importance of informing the treatment plan and taking consent from patients
9	Pile 1: 2, 1, 5 Pile 2: 3, 4	Medical professionals must receive adequate practical training to tackle any situation in a hospital amicably Understaffing should be avoided, security personnel must be appointed and medical equipment must be updated and maintained

For free listing about the causes of violence against doctors a limit of a smith's salience score of 0.167 was taken and top 6 of all the causes were selected and sorted. In free listing regarding the solutions that could be implemented to improve the current scenario a limit of a smith's salience score of 0.167 was taken and 5 solutions were sorted.

The causes from free listing 1 were sorted in 2-3 categories by nine respondents (Table 1). The categorization was based on the following reasons: limitations from the side of the doctors (inadequate knowledge, lack of communication skills and negligence of the doctor), insufficient equipments and patient party related reasons. Similarly, the solutions from free listing 2 were sorted into 2-3 groups. It was done based on reasons like information to be provided to the patients, strict policies to be implemented, including doctor-patient communication, better training of undergraduates, with respect to the management (authority) and so on.

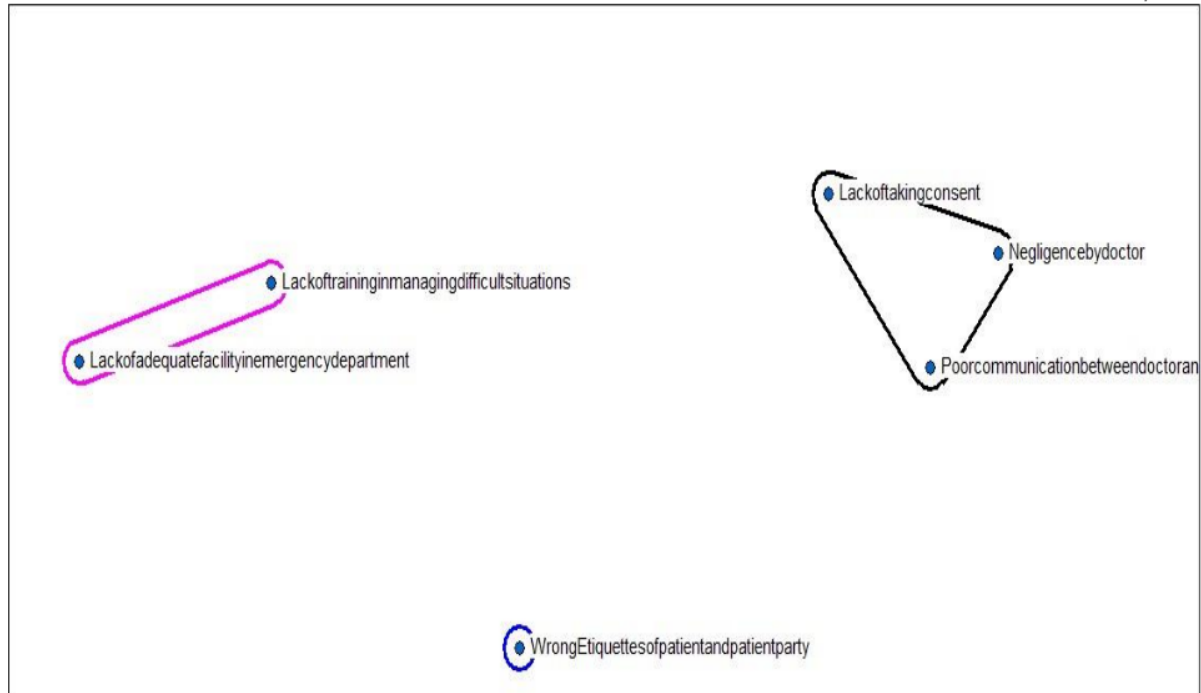


Figure 1: Cognitive map: Causes for violence against Doctors

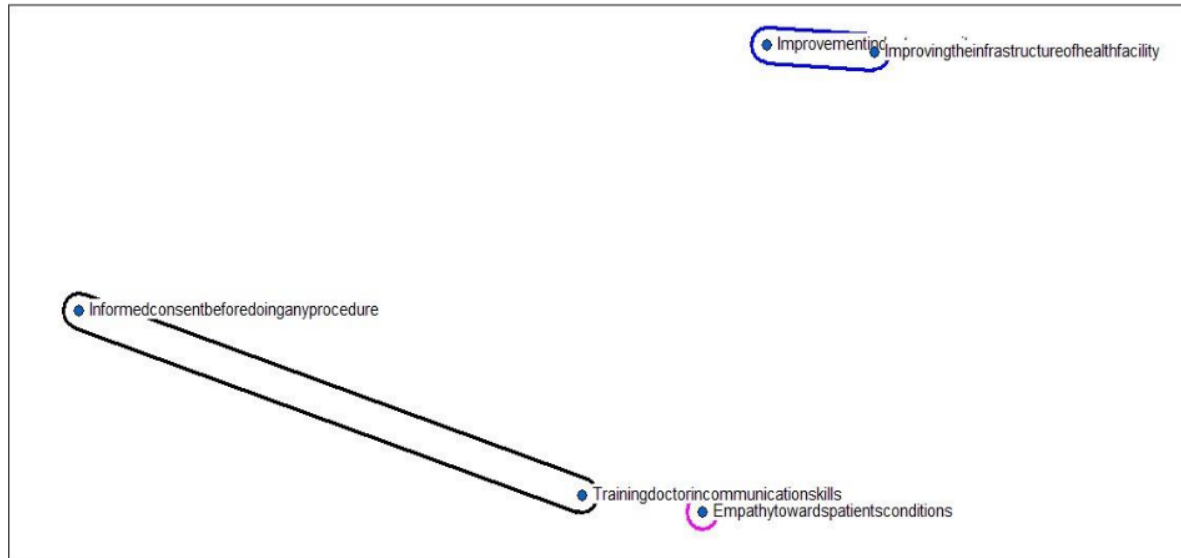


Figure 2: Cognitive map: Solutions for violence against Doctors

11 The technique of MDS has been implied in the research for better analysis of the data collected. MDS is multidimensional scaling. It is a visual representation of distances or dissimilarities between sets of objects. The responses received in free listing have been subjected to MDS where similar responses have been plotted closer to each other on the Cartesian scale and so on. Responses are plotted farther depending on their dissimilarities. This method helps in sorting the responses in order to understand the dimensional structure of the result of the research (Figures 1, 2).

Figure 1

Pile 1 includes lack of training in managing difficult situations and lack of adequate facility in emergency department; **Pile 2** includes lack of taking consent, negligence by doctor and poor communication between doctor and patient. **Pile 3** includes wrong etiquette of patient and patient party

Figure 2

Pile 1 includes lack of training in managing difficult situations and lack of adequate facility in emergency department; **Pile 2** includes lack of taking consent, negligence by doctor and poor communication between doctor and patient; **Pile 3** includes wrong etiquette of patient and patient party.

DISCUSSION

There has been quite a bit of research on increasing incidences of violence against doctors. According to a German survey published in the year 2015, almost 50% of doctors faced aggressive behaviour, 10% experienced critical to violent attacks.^[8] Key issues identified from another study based in London points out to lack of protocols on how to deal with aggressive patients and little or no training is given to help deal with violent outbursts. Not only, is the lack of adequate physical security and general environment of premise important, but also structural measures. And last but not the least, good team work is essential to reduce such encounters and also to support the victims.^[9] Studies conducted in China, have also shown that one of the most prominent factors driving violence was patient's perception of injustice, knowledge imbalances in doctors and conflicts of interests. This results in physical violence, verbal attacks, or hospital mediated disputes. Destructing incentives, reforms in the medical education, promoting empathy among doctors are means of rejuvenating the lost trust.^[10] In a recent research conducted in India, it was seen that there were 87.3% of reported cases of violence were verbal and 8.6% physical, all witnessed during the past 12 months. Young doctors were found to be more prone. Majority of such cases were reported in the afternoon or night hours.^[11]

Public and private healthcare establishments are isolated, disorganized and vulnerable to violence. The Prevention of Violence Against Medicare Persons and Institutions Acts, which has been notified in 19 states of India in the past 10 years have failed to address the issue.^[12] A survey of violence in Birmingham suggested that 63% doctors suffered abuse or violence in previous year. Another survey of GPs found that over 60% experienced abuse or violence by patients or their relatives and nearly 20% reported some sort of abuse once a month.^[13] To combat this problem, the United Kingdom National Health Service issued "Zero Tolerance" guidelines.^[14] A German survey, published in the year 2015, reported that 50% of GPs faced aggression and 10% experienced critical to violent attacks.^[15] A study from India reported that about 87% of violent incidents were verbal while 8.4% were physical.^[16] About 87% of respondents, in a survey in China, reported an increasing trend of violence against doctors.^[17]

Our study aimed at finding the causes for violence against doctors and the probable solutions for this issue. This qualitative study was done among the interns and tutors posted in Community Medicine Department, KMC Mangalore. This research uses qualitative method i.e., free listing and pile sorting. The current study uses two stimulus research questions for which two free lists and two pile sorts were created.

Free listing (1) about the causes of violence against doctors had 28 responses from 4 participants which were entered in the Visual Anthropac software. A limit of a smith's salience score of 0.15 was taken and top 14 of all the causes were selected and sorted. In free listing (2) regarding the solutions that could be implemented to improve the current scenario 19 challenges were identified by the 4 participants which were entered in the software. A limit of a smith's salience score of 0.15 was taken and 12 solutions were sorted. The causes from free listing 1 were sorted in 3-6 categories by four respondents (table 3). The categorization was done according to the following reasons; limitations from the side of the doctors (inadequate knowledge, lack of communication skills and negligence of the doctor), external factors, stress due to Patient load, due to court cases in certain conditions, doctor's preference, emotional outburst, and patient party related reasons.

Similarly, the solutions from free listing 2 were sorted into 3-5 groups. It was done based on reasons like information to be provided to the patients, strict policies to be implemented, including doctor-patient relation exposure in undergraduates, quick and effective in evaluation and treatment, to involve the patient's view in management (evaluation and treatment), with respect to the management (authority) and so on.

This research throws light on the monstrosity of the issue and helps to deliver the first hand information regarding the problems faced by doctors themselves during their daily routines. It also highlights the probable steps that can be taken to avoid such mishaps. It tells us about the inefficacy of the existing laws which are also not known to the general population. Doctors often become the underdogs in their work environments; therefore, addressing this issue is essential to spread awareness and confidence in them. New laws should be passed and the existing laws should be implemented in a better and stricter way. The public should be educated and made aware of the existence of such laws. The hospital security system should be improved. Changes can be made in the undergraduate curriculum to increase the competency among doctors.

'Violence is very demoralising and leads to doctors practising defensive medicine' –Dr. Reddy

References:

- [1] Gihon.AL. Assaults upon medical men.JAMA.1892; 18:399-400.
- [2] Singh. M. Intolerance and violence against doctors. The Indian Journal of Pediatrics. 2017; 84:768-73.
- [3] Yu. H, Hu. Z, Zhana. X, Li. B, Zhou. S. How to overcome violence against health care professionals, reduce medical disputes and ensure patient safety? Pak J Med Sci. 2015; 31:4-8.
- [4] Feng ZH, Li TT. Guidelines for preventing violence in hospitals in China. Am J Med Qual. 2013; 28:169-71.
- [5] Kapoor. MC. Violence against the medical profession. J Anaesthesiol Clin Pharmacol. 2017;33(2):145-47.
- [6] Ambesh. P. Violence against doctors in the Indian subcontinent: A Rising Bane, India Heart J. 2016;68(5):749-50.
- [7] Ahasan. HN, Das. A. Violence against doctors. J Medicine. 2014;15:106-8.
- [8] Vorderwülbecke F, Feistle M, Mehring M, Schneider A, Linde K. Aggression and violence against primary care physicians- A nationwide questionnaire survey. Dtsch Arztebl Int. 2015;112:159-65.
- [9] Naish. J, Carter. YH, Gray. RW, Stevens. T, Tissier. JM, Gantley. MM. Brief encounters of aggression and violence in primary care: A team approach to coping strategies. Family Practice. 2002;19(5):504-10.
- [10] Tucker JD, Cheng Y, Wong B, Gong N, Nie JB, Zhu W, et. al. Patient- physician mistrust and violence against physicians in Guangdong Province, China: A qualitative study. BMJ Open. 2015;5:e008221.
- [11] Kumar. M, Verma. M, Padmanandan. A. A study of workplace violence experienced by doctors and associate risk factors in a tertiary care hospital of South Delhi, India. J Clin Diagn Res. 2016;10(11): LC06-LC10.
- [12] Nagpal N. Incidents of violence against doctors in India: Can these be prevented? Natl Med J India 2017;30:97-100
- [13] Jenkins MG, Rocke LG, McNicholl BP, Hughes DM. Violence and verbal abuse against staff in accident and emergency departments: A survey of consultants in the UK and the Republic of Ireland. J Accid Emerg Med. 1998; 15:262–5.
- [14] NHS Employers. Violence against Staff. [Last accessed on 2017 Apr 18]. Available from: <http://www.nhsemployers.org/~media/Employers/Publications/Violence%20against%20staff.pdf> .
- [15] Vorderwülbecke F, Feistle M, Mehring M, Schneider A, Linde K. Aggression and violence against primary care physicians-A nationwide questionnaire survey. Dtsch Arztebl Int. 2015; 112:159–65.
- [16] 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:LC06–10.
- [17] Wu D, Wang Y, Lam KF, Hesketh T. Health system reforms, violence against doctors and job satisfaction in the medical profession: A cross-sectional survey in Zhejiang Province, Eastern China. BMJ Open. 2014;4:e006431.