International Journal of Conflict and Violence

DOI: 10.11576/ijcv-6705
IJCV: Vol. 17/2023

Violence Against Frontline Healthcare Workers in India: A Growing Menace in COVID-19 Times

Seema Rizvi
Independent Researcher
seema_rzv@yahoo.com

Neeraj Sharma
SD Gupta School of Public Health, IIHMR University, Jaipur, India
neerajsharma4450@gmail.com

Anoop Velayudhan
IIHMR University, Jaipur, India
anoopvel@gmail.com

Daya Krishan Mangal
SD Gupta School of Public Health, IIHMR University, Jaipur, India
mangaldk@iihmr.edu.in

Vol. 17/2023

The IJCV	provides a forum for scientific exchange and public dissemination of up-to-date scientific knowledge on conflict and violence. The IJCV is independent, peer reviewed, open access, and included in the Social Sciences Citation Index (SSCI) as well as other relevant databases (e.g., SCOPUS, EBSCO, ProQuest, DNB). The topics on which we concentrate—conflict and violence—have always been central to various disciplines. Consequently, the journal encompasses contributions from a wide range of disciplines, including criminology, economics, education, ethnology, history, political science, psychology, social anthropology, sociology, the study of religions, and urban studies. All articles are gathered in yearly volumes, identified by a DOI with article-wise pagination. For more information please visit www.ijcv.org
Suggested Citation:	APA: Rizvi, S., Sharma, N., Velayudhan, A., Mangal, D. K. (2023). Violence Against Frontline Healthcare Workers in India: A Growing Menace in COVID-19 Times. *International Journal of Conflict and Violence*, *17 1-11.* doi: 10.11576/ijcv-6705 Harvard: Rizvi, Seema, Sharma, Neeraj, Velayudhan, Anoop, Mangal, Daya Krishan. 2023. Violence Against Frontline Healthcare Workers in India: A Growing Menace in COVID-19 Times. *International Journal of Conflict and Violence 17: 1-11.* doi: 10.11576/ijcv-6705

This work is licensed under the Creative Commons Attribution—NoDerivatives License.
ISSN: 1864–1385

Violence Against Frontline Healthcare Workers in India: A Growing Menace in COVID-19 Times

Seema Rizvi
Independent Researcher
Neeraj Sharma
SD Gupta School of Public Health, IIHMR University, Jaipur, India
Anoop Velayudhan
IIHMR University, Jaipur, India
Daya Krishan Mangal
SD Gupta School of Public Health, IIHMR University, Jaipur, India

Our study aimed to understand the role of situational factors in instigating people to perform violence against frontline healthcare workers during the coronavirus disease outbreak in India. We performed a thematic analysis of secondary data, collected from online web pages of leading national and regional newspapers. The study proposed a framework linking situational factors and violence through the mechanism of emotional dynamics that led to aggression (stress, tension, and anger). Existing literature suggests that environmental and cognitive factors influence human learning and behaviour, and there is a chronological sequence of several activities to reach the point of committing violence. The current study identified three thematic areas: information deficit, mistrust in government actions, and socio-economic insecurities based on situational factors. False beliefs, rumours, lack of relief material, doubt in government actions, communication gap, and fear for life, land and livelihood were identified as situational factors. The study contributes to building a stronger theoretical foundation for the existing literature and filling the gap in effective intervention strategies for preventing such violent acts in the near future.

Keywords: COVID-19, violence, attacks, healthcare workers, India

Aggressive behaviour, vandalism, and attacks on healthcare workers are important yet understudied domains. Worldwide, there have been reports of healthcare providers facing the outbursts of patients, of their relatives, or the community's aggression in work and work-related circumstances (Knor et al. 2020; Haar et al. 2018; Tian and Du 2017; Peng et al. 2016; Schablon et al. 2018). According to the World Medical Association, violence against healthcare providers is an international emergency that affects both the healthcare system and its beneficiaries (World Medical Association 2020). Studies found that workplace violence leads to depression, anxiety, sleep problems, job strain, and reduced productivity (Cannavò et al. 2019; Magnavita et al. 2019; Magnavita, Heponiemi, and Chirico 2020; Fernandes de Oliveira et al. 2019). Cumulatively long working hours in stressful situations, being away from families, physical exhaustion, physical and psychological harm caused by violent behaviour also affects the morale and wellbeing of the workforce (Cannavò et al. 2019; Bitencourt et al. 2021).

Recently, the novel coronavirus infection shocked the global healthcare system. Globally, emergency rapid response teams, doctors, nurses, and other medical care providers involved in containing the coronavirus outbreak have faced attacks (Ling et al. 2020; Sharma et al. 2020). News articles from Mexico and Philippines have reported, angry mobs assaulting healthcare workers and causing serious injuries (Ford

2020). There are reports of nurses and doctors being assaulted in Argentina, Australia, Chile, China, Pakistan, the Philippines, Spain, Thailand, Turkey, the United Kingdom, the United States, and in many other parts of the world (Manila Bulletin News 2020), (The Washington Post 2020), (Mexico News Daily 2020). The situation in India was no different, with multiple attacks on frontline healthcare workers (Ghosh 2020).

In fact, violence against health workers is not new in India, with the last decade witnessing increasing numbers of attacks (WHO-Newsroom 2019; Fouad et al. 2017; Knor et al. 2020). Studies by the Indian Medical Association (IMA) report that 75 percent of Indian doctors have faced some form of verbal abuse or physical violence (Ghosh 2020) (Rajratnam and Bhargav 2020). In June 2019, the Indian Medical Association held a nationwide strike to demand security (Hindustan Times 2019). In the last decade, nineteen state governments in India have passed laws for healthcare workforce protection.

A holistic understanding of violence and its triggering agents is lacking in India (Forgione 2020). To understand violence against frontline healthcare workers, and to design and implement effective intervention strategies, it is crucial to understand the personal motivation and community background, as well as the situational factors and pathways that facilitate violence.

The current study draws on a theoretical framework from sociological, psychological, criminological, and other social perspectives along with the associated micro-level processes. It seeks to provide theoretical insights about situational factors as triggering agents, and identify pathways that led to violence against frontline healthcare workers in India during the COVID-19 pandemic.

1 Conceptual framework

Various theories have been proposed in sociology, psychology, criminology, and other social sciences to understand violence. Sociologist Randall Collins introduced a "micro-sociological" theory on violence, setting out to understand and analyse violent situations, rather than violent individuals. According to Collins, violence is not inherent to human nature, and violent confrontations do not occur spontaneously. The act of violence is complex and understanding it requires analysis of the micro-situational dynamics or pathways that provoke it. The theory revolves around emotional dynamics and emphasizes that people in confrontational situations are tense and fearful, and experience emotions of uncontrollable anger and violence (Collins 2008).

Richard Felson viewed violence through the lens of social psychology. He developed a general theory of violent crime based on theories of deviance and aggression, which includes doing harm and breaking rules. Although Felson agrees with Collins that violence is exceptional and affected by situational factors, he also notes that intended harm in dispute-related violence is not uncommon (Felson 2020). In psychology, Miller proposed the "frustration-aggression hypothesis" (Miller 1941). Frustration elicits many different types of response, one of which is some form of aggression. Miller also theorized that aggression is not inborn but a learned behaviour (Dollard et al. 1939; Tonnaer, Cima, and Arntz 2016; Breuer and Elson 2017). If frustration leads to aggression, it is important to identify the cause of frustration. People tend to attack when they feel bad (Miller 1941).

Along with situations, human behaviour plays a critical role to understanding violence. Many theories have been developed to understand human behaviour. Albert Bandura presented a "social cognitive theory" (1986) based on his earlier theory of social learning. Bandura argues that human learning, and behaviour are influenced by both environmental and cognitive factors. Learning is a result of dynamic and reciprocal interaction between person, environment, and behaviour in a social context. Behaviour occurs as a result of interplay between environmental and cognitive factors, representing a reciprocal determinism concept (Bandura 1977; Anderson and Bushman 2002). Environmental factors (political, economic, and cultural) greatly influence the ways people think. In the field of criminology, Ronald L. Akers also addresses human behaviour and society in his "Social learning theory", which touches on the theory of crime and deviant behaviour. It is similar to cognitive learning theory. The theory explains social learning as a complex process with reciprocal and feedback effects. There is a tem-

poral sequence by which a person comes to the point of violating the law or engaging in deviant activities (Akers 2012).

In the light of these theoretical perspectives, the current study sought to identify and link the situational factors and micro-situational pathways that provoke violence. Hypothesizing that situational factors affect violent outcomes means it is pertinent to trace back to find the cause (driver). Our proposed conceptual framework for the data analysis is largely based on these theories (see Figure 1).

Situational conditions operated via emotional dynamics, which are central to the micro-situational theory of violence. Different factors produced tension, stress, frustration, and anger that led to aggression. Collins also argued that violent situations are shaped by an emotional field of tension and fear that escalates whenever people experience antagonistic confrontation (Collins 2008). The coronavirus pandemic faced the community with many antagonistic situations. People perceived overwhelming challenges to their welfare that were beyond their ability to control.

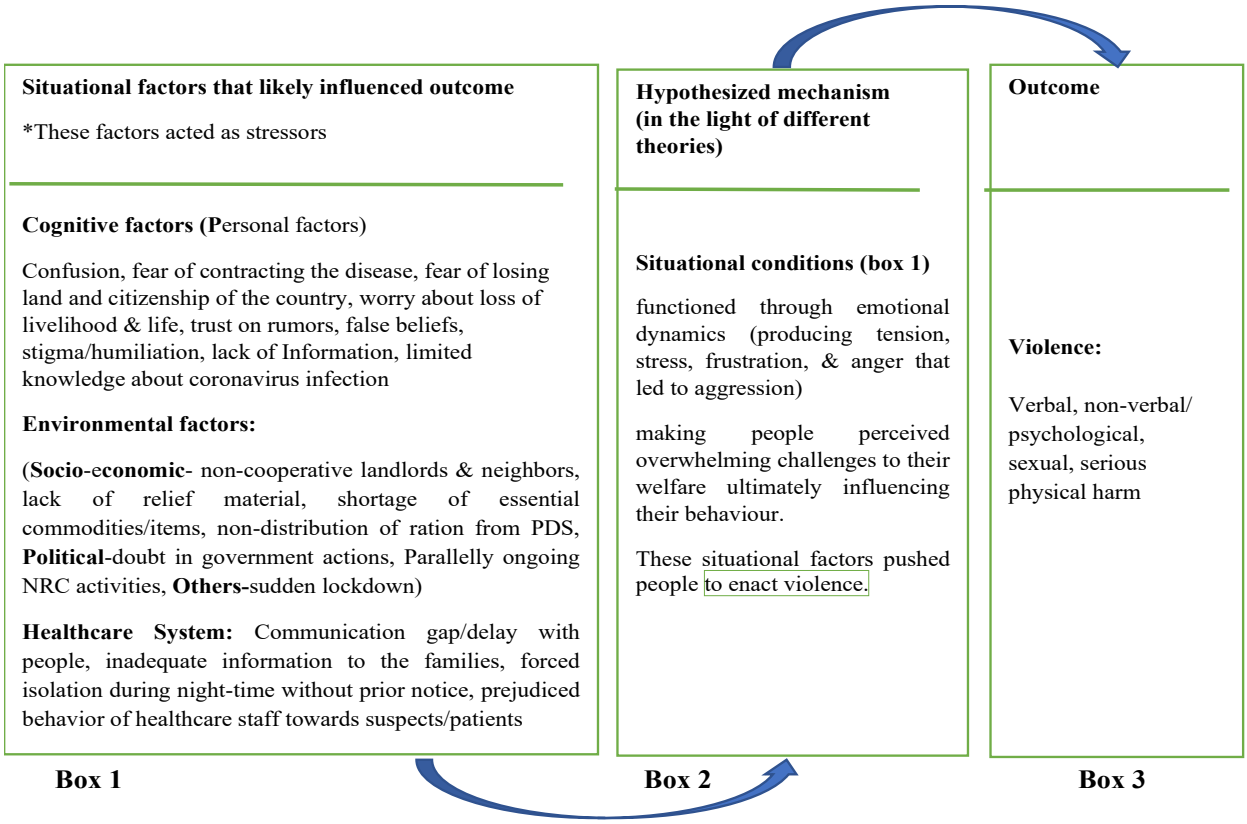
2 Methodology

2.1 Study design and data sources

During the COVID-19 lockdown, primary data collection was not feasible so, our research team relied on the available data sources. We performed a thematic analysis on secondary data in the form of newspaper articles published between March and July 2020. We searched online webpages of established national and regional Indian newspapers.

Other national and international organizations' websites were screened for other supporting information. These included World Health Organisation (WHO), International Committee of the Red Cross, Insecurity Insight, Ministry of Health and Family Welfare (MoHFW), Medical Council of India (MCI), Indian Medical Association (IMA), and the National Centre for Disease Control. The research team reviewed the available literature and discussed with

Figure 1: Conceptual framework describing plausible determinants of violence



Box 1 – Situational factors linked with violence against frontline healthcare workers in India during the COVID-19.
Box 2 – Hypothesized mechanism linking Box 1 to Box 3.

Source: Authors' work

technical experts how to identify the relevant information using a thematic logical data collection search stream.

2.2 Significance and reliability of the data source

The core data was collected from newspaper articles, which are uniquely positioned to provide original current reporting on violence. The reporting also highlighted the hazardous working conditions of frontline healthcare workers in their respective occupational settings. In India, media actively covered attacks on healthcare workers. It was also speculated that media coverage helped reduce the number and intensity of attacks on frontline healthcare workers.

The reliability of the data was cross checked using triangulation of reporting by different news agencies (on the same incident). Additionally, we cross-checked data on attacks in India as reported by international agencies such as Insecurity Insight (Insecurity Insight 2020b).

2.3 Search Terms and Study Duration

The key terms used to search relevant news articles were COVID-19 or coronavirus, attacks, frontline workers, and healthcare workers. Our search was focused on violent activities against frontline workers in public and private healthcare workers in India during lockdown phases 1 to 4 and the unlock period until 31 July 2020.

2.4 Inclusion and Exclusion Criteria

For the study, we used WHO's definition of violence: "The intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation" (World Health Organization 2002). As per the definition, we included articles mentioning any act or form of violence connected to the measures taken by the government to stop the spread of coronavirus infection in the country.

Our search identified 182 relevant news articles from 57 news sources. After careful examination of the content 81 articles were rejected. The main reasons for rejection were: relevance (general news related to coronavirus) (n=20), attacks on media and journalists (n=18), attacks on police and other law enforcement agencies (n=15), incident outside India (n=22), repeat or follow up reporting on previous healthcare attacks (n=6), and other unspecified reasons.

2.5 Data Synthesis and Extraction

Two members of the research team independently reviewed the news articles and decided to include or exclude articles, before comparing results. Any discrepancy during data extraction was resolved with the help of other researchers. Later, the two principal researchers extracted the information from the literature into an Excel format with categories for incident, location, cause, type of frontline worker involved, and outcome.

The data was examined to identify common themes using Braun and Clarke's six-step thematic analysis procedure (Clarke and Braun 2017). The study team reviewed each article before beginning the analysis and made preliminary notes. Each selected article was thoroughly read and re-read, and relevant text was highlighted. Following this, initial codes were identified to describe the article content. In this manner, codes corresponding to ideas or patterns were assigned to in each article. Then observations concerning key areas and common meanings that occurred repeatedly in the data were organized in groups, reviewed, and combined to form key domain areas. The themes were reviewed again and compared to the data set to ensure appropriateness and relevance.

3 Results

A total of 101 articles fulfilled the eligibility criteria and were selected for analysis. Insecurity Insight (2020b) reported 125 incidents of violence on healthcare professionals across India between March and July 2020.

Frontline healthcare workers faced various forms of violence including verbal and non-verbal abuse, intimidating behaviour, obstruction, manhandling, inappropriate touching, hand twisting, stone-throwing, bottle-throwing, spitting, pushing, bullying, sexual harassment, attack with sticks, scalding, and other forms of serious physical harm (The New Indian Express 2020;

Thethaitanger News 2020). The review of articles revealed attacks on many different types of healthcare worker: medical professionals, sanitation workers, and other healthcare workers including auxiliary nurse midwife (ANMs), accredited social health activists (ASHAs), Sahiya, Sevika, Anganwadi workers (AWWs), and support staff (The Hindustan Times 2020). These incidents happened mostly during community surveillance activities such as area mapping, screening, contact tracing, and data collection, as well as isolation of persons with suspected coronavirus, implementation of COVID-19 guidelines and hospital treatment of uncooperative patients (Financial Express 2019; The Tribune India 2020).

Healthcare workers also faced demoralizing and intimidating behaviour by local government authorities, housing societies and residential complexes (Kashmir Observer 2020). They were socially ostracized and reportedly harassed by non-cooperative landlords and ill-minded neighbours in residential complexes (ABP Live 2020; Livemint 2020). The police force was also involved in numerous cases of misconduct and attack on healthcare workers during COVID-19 (The Wire 2020). The main perpetrators of violence were patients, persons suspected of being infected, patients' family, neighbours, community and mobs (The Statesman 2020; The Indian Express 2020; Deccan Herald 2020) (see Figure 2).

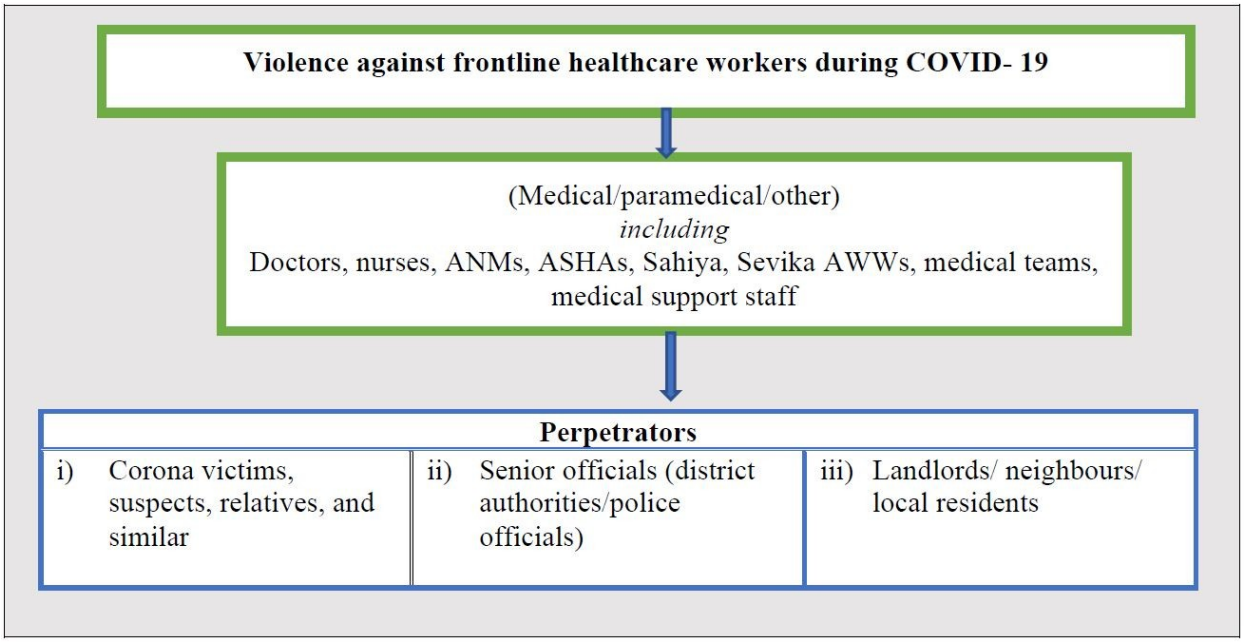
3.1 Emerging Key Domain Areas for Triggering Factors for Violent Activities

The key domain areas include information deficit, mistrust in government actions, and socio-economic insecurities.

Information deficit. Epidemics create anxiety and fear, which are further aggravated in resource-limited settings due to information deficits at ground level. This was the case with the coronavirus pandemic in India. Sudden countrywide lockdown created confusion, panic, and fear. People were unable to prepare themselves to fulfil their daily needs (Times of India 2020b; The Hindu 2020).

Our study identified two important reasons for information deficit: lack of appropriate knowledge about the coronavirus infection among the community and delayed knowledge dissemination by the authorities. Many uncertainties about the unprecedented disease amplified the situation of fear and anxiety among the community (India Today 2020). People feared to lose their life and livelihood (Altstedter, Shrivastava, and Pandya 2020). In the absence

Figure 2: Frontline healthcare workers and the perpetrators of attack



Source: Authors' work

of information, people believed rumours and developed false beliefs such as "*doctors are corona virus carriers and spreading it*" (which resulted in intimidation and even attack by house owners, residential complex associations and neighbours) (The Economic Times 2020; Livemint 2020). One such incident affecting a doctor was related by the President of the Resident Doctors Association:

> "*First, they cut off her electricity, then her water supply, then they began picking fights over trivial matters. Finally, they surrounded her one day and asked her to leave, stating that she would infect the building*" (Altstedter, Shrivastava, and Pandya 2020).

Due to their limited knowledge of coronavirus disease, most people did not appreciate the need for screening and the importance of segregating suspects and cases of COVID-19. Suspected cases refused to stay in quarantine, because they had no symptoms of coronavirus infection (Express Healthcare 2020). Some people wanted the COVID-19 test result immediately, and many did not want to be tested – which hindered preventive efforts to contain the disease (The Hindustan Times 2020). Lack of timely communication within the community about measures to curb the pandemic created panic and exacerbated the situation. This culminated in individual and collective resistance to the intervention measures against COVID-19. Cumulatively, it resulted in assaults on medical teams and healthcare workers. One resident described the experience as follows:

> "*People were being taken to quarantine without any prior notice or proper information. At first, only primary contacts were to be taken, and then the rules changed to include secondary contacts. This naturally created confusion and fear among people, most of whom are from lower socio-economic strata*" (The Hindu 2020).

This lack of knowledge about COVID-19 indicated information deficit and a need for timely information dissemination to deliver appropriate precautionary measures and establish an early dialogue with the community (India Today 2020; Times of India 2020a; The Hindu 2020).

Mistrust in government actions. Public participation based on trust between the state and its citizens is critical to make health interventions successful. Confusion, mistrust, and fear among sections of society during the initial phase of the pandemic were reflected in various news reports. The study found a significant prior event: the introduction of the National Register of Citizens (NRC) to document legal citizens of India and segregate and deport supposed illegal migrants had created fear among a section of society. People believed that healthcare surveys and other measures to contain infection were linked with earlier NRC surveys. These parallel events caused fear and panic. Fear of losing land and residence led to retaliation and attacks by suspicious communities (Gohain 2018; Times of India 2019). As a result, suspicious citizens expressed a growing lack of faith in government actions and spread rumours that COVID-19 community surveillance activities were connected to the NRC. Others feared that the government wanted to harm them by depriving them of citizenship, and thought that the personal information collected during the pandemic might be used for the NRC (The Economic Times 2020; The Quint 2020). In the words of one ASHA: "*People think our surveys are connected to the NRC [National Register for Citizens] so they do not reply properly*" (The Economic Times 2020).

Fear made people reluctant to share their details and in some cases led to attacks on the medical teams (Livemint 2020; The Quint 2020). Anxiety and fear were also generated where patients and suspects were taken into forced isolation at night and without prior notice and inadequate information to their families in the community. This further increased doubt over the government's actions and fuelled mistrust. These observations highlight the communication gap between the community and the healthcare system. The situation demands timely and open communication for long-lasting public trust in government and authority.

Socio-economic impact and insecurities. Fear of losing the means of livelihood led to community resistance to lockdown rules and in some cases violent attacks on healthcare workers. Insufficient food supplies, lack of relief material and essential commodities, and non-distribution of rations from public distribution systems fanned prevailing mistrust and fear in the communities (Scroll 2020).

One resident said:

> "*When they sealed down the area, it is their responsibility to provide us with all basic amenities and it is the right of*

the people to get them at their doorstep which has not been happening regularly" (The Hindu 2020).

A healthcare official reported:

"*The accused stopped the team and asked to speak to their Member of Legislative Assembly (MLA) claiming that they were not getting enough food and essentials as the area had been sealed*" (The Logical Indian 2020).

4 Recommendations

The current study seeks to identify the triggering factors and gaps which led to violence against frontline health workers. In response to these identified gaps the following recommendations are proposed:

4.1 Clear and Proactive Communication

The findings highlighted communication gaps and the importance of clear and timely communication with healthcare workers and communities. Communication channels for patients, their families, and the public should be set up to develop two-way communication and channels to express concerns. This will also help improve the acceptance of new interventions to prevent violent activities. Community leaders can be involved to improve the acceptance of interventions. This was evident in one incident where doctors and a medical team were attacked by a mob during a screening visit. The team returned the next day with counsellors to speak with the community, which helped to resolve the issues (India Today 2020).

4.2 Health Awareness Campaigns

Health awareness campaigns should have been launched to educate the public about the pandemic. This would also have helped in countering misinformation.

The World Health Organization started a global "Stop the spread" campaign to counter misinformation, provide correct information about COVID-19 and encourage public to double-check information with trusted sources (WHO Newsroom 2020). Other studies also suggested proper public health education as the most effective method to prevent social harassment (Bagcchi 2020; Bitencourt et al. 2021). Accurate information also builds trust in the system leading to less violent behaviour during the disease containment activities.

4.3 Creating a Community-friendly Environment for Discussions

Community engagement should be promoted by creating an environment for open discussion among citizens and frontline healthcare workers. Public perception and acceptance of healthcare services is the cornerstone to make any healthcare programme successful. This will also help in risk identification, trust building and preventing stigmatization and ostracization. Conducting surveys to understand how healthcare workers are perceived and finding ways to address the issues could be helpful. WHO also suggested that creating an environment for open discussion among citizens and healthcare workers is critical for community support in combatting the disease and avoiding fear and stigma among the community (Bagcchi 2020).

4.4 Creating a Violence Surveillance System

It is important to strengthen the violence reporting system and the response to violence, considering the increasing prevalence of violence against healthcare workers. Government should establish a violence surveillance mechanism for monitoring, registering, and responding to such incidents. A violence surveillance system can support prevention and mitigation of violence by collating, analysing, and sharing data on violence from sources across the country. Data collected from multiple sources such as police records, health system records (hospital admissions, accident and emergency records, trauma centre records and other sources) can help in understanding the nature and extent of violence, risk and protective factors, developing contextually required interventions, and monitoring and evaluating prevention activity. Violence prevention and monitoring units can be established in districts. As part of the surveillance system, data can be shared at district, state, regional and national level. A violence surveillance system will also help in understanding the true burden of violence in the country. The Safeguarding Health in Conflict Coalition (SHCC) that regularly collects data on violence and threats to healthcare workers, facilities, patients, and transport as part of health surveillance and quality assurance activities in conflict conditions also suggested

assigning the role of collection of such data to a central authority (Insecurity Insight 2020a).

4.5 Strengthening the Public Health Service

As a policy recommendation, the government should strengthen and improve the public health service system in the country by reviewing the lessons from COVID-19 pandemic management. To manage future pandemics effectively, the public health system must be strengthened at all levels. The lessons learnt could also be used to expand public awareness of diseases of public health importance and their consequences.

4.6 Comprehensive Central Law

The legislation proposed by the Health Ministry in 2019 to address the issue of occupational safety of healthcare workers needs to be passed and implemented at the earliest opportunity. Law enforcement agencies and other sectors must be clear about the roles and responsibilities of other service providers during a pandemic, in order to avoid incidents of the kind associated with the Covid-19 pandemic.

5 Limitations

The study was planned in the lockdown period, after noticing the increasing number of incidents of violence against frontline healthcare workers. This meant that the team had to rely on the available secondary data sources in the form of news articles.

6 Conclusion

The study findings highlight the situational factors that affect violence and play a role in its occurrence. An act of violence is the culmination of a chain of incidents. The study underlines the need to explore the background situation rather than looking for types of violent individuals. Planning and implementation of effective intervention programmes should include an assessment of personal and environmental factors that influence a particular behaviour.

The study found that community response behaviour was influenced by environmental stimuli. People were stressed by fear and felt insecure about their life, land, and safety. The study highlights the importance of creating a conducive, trustworthy environment to encourage positive community engagement, timely dissemination of appropriate information to avoid confusion, and a comprehensive law for the occupational safety of healthcare workers. Finally, the study also emphasizes the need for further in-depth research on the subject, which is a multifaceted issue on which very few studies have been conducted in India.

Availability of data and materials

Data extraction sheet shall be provided on a direct request with corresponding author (Neeraj Sharma).

References

ABP Live. 2020. "Coronavirus Lockdown India, Attack On Frontline Corona Warriors, Bengaluru, Indore," April 20, 2020. https://news.abplive.com/news/india/coronavirus-lockdown-india-attack-on-frontline-corona-warriors-bengaluru-indore-1202010.

Altstedter, Ari, Bhuma Shrivastava, Dhwani Pandya. 2020. "Doctors Come under Attack in India as Coronavirus Stigma Grows," *Bloomberg,* April 13, 2020. https://www.bloomberg.com/news/articles/2020-04-13/doctors-come-under-attack-in-india-as-coronavirus-stigma-grows

Anderson, Craig A., and Brad J. Bushman. 2002. "Human Aggression." *Annual Review of Psychology* Vol. 53, pp 27–51. https://doi.org/https://doi.org/10.1146/annurev.psych.53.100901.135231

Bagcchi, Sanjeet. 2020. "Stigma During the COVID-19 Pandemic." *Lancet* 20 (July): 19–20. www.thelancet.com/infection Vol 20 July 2020.

Bandura, Albert. 1977. *Social Learning Theory*. Englewood Cliffs, New Jersey: Prentice-Hall.

Bitencourt, Mariá Romanio, Ana Carolina Jacinto Alarcão, Lincoln Luís Silva, Amanda De Carvalho Dutra, Nayara Malheiros Caruzzo, Igor Roszkowski, Marcos Rogério Bitencourt, Vlaudimir Dias Marques, Sandra Marisa Pelloso, and Maria Dalva De Barros Carvalho. 2021. "Predictors of Violence Against Health Professionals during the COVID-19 Pandemic in Brazil: A Cross-Sectional Study." *PLoS ONE* 16 (6 June 2021): 1–16. https://doi.org/10.1371/journal.pone.0253398

Breuer, Johannes, and Malte Elson. 2017. "Frustration-Aggression Theory." *The Wiley Handbook of Violence and Aggression*, no. February 2018: 1–12. https://doi.org/10.1002/9781119057574.whbva040

Cannavò, Maria, F La Torre, C Sestili, G La Torre, and M Fioravanti. 2019. "Work Related Violence as a Predictor of Stress and Correlated Disorders in Emergency Department Healthcare Professionals" 170 (2): 110–23. https://doi.org/10.7417/CT.2019.2120

Clarke, Victoria, and Virginia Braun. 2017. "Thematic Analysis." *Journal of Positive Psychology* 12 (3): 297–98. https://doi.org/10.1080/17439760.2016.1262613

Collins, Randall. 2008. *Violence: A Micro-Sociological Theory*. Princeton, Oxford: Princeton University Press.

Deccan Herald. 2020. "Coronavirus: Tablighi Jamaat Attendees Misbehave with Staffers, Spit at Doctors at Delhi

Quarantine Units," April 1, 2020. https://www.deccanherald.com/national/north-and-central/coronavirus-tablighi-jamaat-attendees-misbehave-with-staffers-spit-at-doctors-at-delhi-quarantine-units-820212.html

Dollard, John, Neal E. Miller, Leonard W. Doob, O. H. Mowrer, and Robert R. Sears. 1939. *Frustration and Aggression.* Yale University Press. https://doi.org/10.1037/10022-000

Express Healthcare. 2020. "UP to Bring Ordinance against Attacks on Healthcare Workers," April 30, 2020. https://www.expresshealthcare.in/news/up-to-bring-ordinance-against-attacks-on-healthcare-workers/419600/

Felson, Richard B. 2020. "Is Violence Natural, Unnatural, or Rational?" *British Journal of Sociology* 60 (3, October 2009). https://doi.org/10.1111/j.1468-4446.2009.01257.x

Financial Express. 2019. "AIIMS Resident Doctors to Boycott Work Tomorrow in Support for Striking Kolkata Doctors," 2019. https://www.financialexpress.com/india-news/aiims-resident-doctors-to-boycott-work-tomorrow-in-support-for-striking-kolkata-doctors/1606761/

Ford, Steve. 2020. "Attacks against Nurses 'Must Be Condemned' as World Fights Covid-19." *Nursing Times*, 19–22. https://www.nursingtimes.net/news/policies-and-guidance/attacks-against-nurses-must-be-condemned-as-world-fights-covid-19-21-05-2020/

Forgione, Paola. 2020. "New Patterns of Violence against Healthcare in the COVID-19 Pandemic | Blogs BMJ," 19–20. https://blogs.bmj.com/bmj/2020/05/15/new-patterns-of-violence-against-healthcare-in-the-covid-19-pandemic/

Fouad, Fouad M, Annie Sparrow, Ahmad Tarakji, Mohamad Alameddine, Fadi El-Jardali, Adam P Coutts, Nour El Arnaout, et al. 2017. "Health Workers and the Weaponisation of Health Care in Syria: A Preliminary Inquiry for The Lancet-American University of Beirut Commission on Syria." *Lancet (London, England)* 390 (10111): 2516–26. https://doi.org/10.1016/S0140-6736(17)30741-9

Ghosh, Kanjaksha. 2020. "Violence against Doctors: A Wake-up Call" 148 (2): 130–33. https://doi.org/10.4103/ijmr.IJMR

Gohain, Hiren. 2018. "National Register of Citizens," December 15, 2018. https://en.wikipedia.org/wiki/National_Register_of_Citizens

Haar, Rohini J, Casey B Risko, Sonal Singh, Diana Rayes, Ahmad Albaik, Mohammed Alnajar, Mazen Kewara, Emily Clouse, Elise Baker, and Leonard S Rubenstein. 2018. "Determining the Scope of Attacks on Health in Four Governorates of Syria in 2016: Results of a Field Surveillance Program." *PLoS Medicine* 15 (4): e1002559. https://doi.org/10.1371/journal.pmed.1002559

Hindustan Times. 2019. "Doctors' Strike Highlights: Week-Long Strike Called off after Mamata Banerjee Accepts Demands to Scale up Security|Hindustan Times." *Hindustan Times*, June 17, 2019. https://www.hindustantimes.com/india-news/doctors-on-nationwide-strike-assault-on-doctors-in-west-bengal-live-updates/story-OMF8n4Qz1hRy0g9brr7b3I.html

India Today. 2020. "Embarrassed by Attack on Health Workers in Indore, Muslim Organisation Issues Apology in Newspaper," April 6, 2020. https://www.indiatoday.in/india/story/indore-attack-health-workers-in-muslim-organisation-issues-apology-newspaper-1664007-2020-04-06

Insecurity Insight. 2020a. "Attacks on Health Care during the COVID-19 Pandemic." *Insecurity Insight.* http://insecurityinsight.org/projects/aid-in-danger/aid-security-and-covid-19

Insecurity Insight. 2020b. "COVID-19: Pandemic Attacks on Healthcare in 2020." *Insecurity Insight.* http://insecurityinsight.org/projects/aid-in-danger/aid-security-and-covid-19

Kashmir Observer. 2020. "Doctors Halt Work in Hajin against DC's Misbehaviour," April 9, 2020. https://kashmirobserver.net/author/sofi/

Knor, Jiří, Jaroslav Pekara, Jana Šeblová, David Peřan, Patrik Cmorej, and Jitka Němcová. 2020. "Qualitative Research of Violent Incidents toward Young Paramedics in the Czech Republic." *Western Journal of Emergency Medicine* 21 (2): 463–68. https://doi.org/10.5811/westjem.2019.10.43919

Ling, Lowell, Gavin M. Joynt, Jeff Lipman, Olivier Joannes-Boyau, and Jean-Michel Constantin. 2020. "COVID-19: A Critical Care Perspective Informed by Lessons Learnt from Other Viral Epidemics." *Ncbi.Nlm.Nih.Gov.* https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7119083/

Livemint. 2020. "Health Workers Battle Virus, Social Discrimination," April 8, 2020. https://www.livemint.com/news/india/health-workers-battle-virus-social-discrimination-11586366032350.html

Magnavita, Nicola, Tarja Heponiemi, and Francesco Chirico. 2020. "Workplace Violence Is Associated With Impaired Work Functioning in Nurses: An Italian Cross-Sectional Study." *J NursScholarsh.* 2020;52(3):281-291. https://doi.org/https://doi.org/10.1111/jnu.12549

Magnavita, Nicola, Enrico Di Stasio, Ilaria Capitanelli, Erika Alessandra Lops, Francesco Chirico, and Sergio Garbarino. 2019. "Sleep Problems and Workplace Violence: A Systematic Review and Meta-Analysis." *Frontiers in Neuroscience* 13 (October). https://doi.org/10.3389/fnins.2019.00997

Manila Bulletin News. 2020. "39 Arrested for Attacks, Discrimination on Healthcare Workers," May 1, 2020. https://news.mb.com.ph/2020/05/01/39-arrested-for-attacks-discrimination-on-healthcare-workers/

Mexico News Daily. 2020. "2 Women Arrested in Querétaro for Attacking Health Worker," April 23, 2020. https://mexiconewsdaily.com/news/coronavirus/2-women-arrested-in-queretaro-for-attacking-health-worker/

Miller, Neal E. 1941. "Frustration-Aggression Hypothesis." Classics in the History of Psychology. 1941. https://psychclassics.yorku.ca/FrustAgg/miller.htm

Fernandes de Oliveira, Gabriela, Breno Resende Rodrigues da Cunha, Anderson de Cintra Souza, Mariana Giorgiani, Juliana Rizza Ribeiro Batista, Paula Monikee Rezende Alves, Maria Tereza Néri Rosa, and Stefan Vilges de Oliveira. 2019. "Epidemiological Profile of Violence against the Elderly in the State of Minas Gerais, Brazil." *SciMedicine Journal* Vol. 1(2) (December). https://doi.org/10.28991/SciMedJ-2019-0102-1

Peng, Wei, Gan Ding, Qi Tang, and Lingzhong Xu. 2016. "Continuing Violence against Medical Personnel in China: A Flagrant Violation of Chinese Law." *BioScience Trends* 10 (3): 240–43. https://doi.org/10.5582/bst.2016.01094

Rajratnam, Milind, and Srishti Bhargav. 2020. "COVID-19 – XV: Atrocities against Healthcare Workers- Why India Needs a Comprehensive Legislation ?|Word Press." *Criminal Law Studies Journal*, 1–4. https://criminallawstudiesnluj.wordpress.com/2020/05/13/covid-19-xv-atrocities-against-healthcare-workers-why-india-needs-a-comprehensive-legislation/

Ronald L. Akers. 2012. *Criminological Theories: Introducton and Evaluation*. Second. Vol. 4.

Schablon, Anja, Dana Wendeler, Agnessa Kozak, Albert Nienhaus, and Susanne Steinke. 2018. "Prevalence and Consequences of Aggression and Violence towards Nursing and Care Staff in Germany—A Survey." *International Journal of Environmental Research and Public Health* 15 (6). https://doi.org/10.3390/ijerph15061274

Scroll. 2020. "Coronavirus: Health Workers in Bihar Attacked in Four Districts during Screening," May 6, 2020. https://scroll.in/latest/959454/coronavirus-health-workers-in-bihar-attacked-in-four-hotspots-during-screening

Sharma, Neeraj, Zubeda Hasan, Anoop Velayudhan, D K Mangal, and Shiv Dutt Gupta. 2020. "Personal Protective Equipment: Challenges and Strategies to Combat COVID-19 in India : A Narrative Review." https://doi.org/10.1177/0972063420935540

The Economic Times. 2020. "Covid-19: How Healthcare Workers Are Paying a Heavy Price in This Battle," April 12, 2020. https://economictimes.indiatimes.com/news/politics-and-nation/covid-19-how-healthcare-workers-are-paying-a-heavy-price-in-this-battle/articleshow/75099895.cms

The Hindu. 2020. "Padarayanapura Residents Blame Breakdown in Communication," May 10, 2020. https://www.thehindu.com/news/cities/bangalore/padarayanapura-residents-blame-breakdown-in-communication/article31392305.ece

The Hindustan Times. 2020. "Asha Worker Attacked for Collecting Data on COVID-19 Patients in Odisha," April 24, 2020. https://www.hindustantimes.com/india-news/asha-worker-attacked-for-collecting-data-on-covid-19-ve-patients-in-odisha/story-AZxHd8YHM1zGLnPkBdMUmN.html

The Indian Express. 2020. "Staff at Ghaziabad Hospital Alleged Misbehaviour by Patients, Probe On," April 3, 2020. https://indianexpress.com/article/cities/delhi/staff-at-ghaziabad-hospital-allege-misbehaviour-by-patients-probe-on-6344816/

The Logical Indian. 2020. "Bengaluru: Locals Attack BBMP Health Officials, 59 Arrested |The Logical Indian," April 21, 2020. https://thelogicalindian.com/news/bengaluru-locals-attack-bbmp-health-officials-20693

The New Indian Express. 2020. "Nurses Complain of Misbehaviour by Quarantined Coronavirus Suspects at Ghaziabad Hospital," April 3, 2020. https://www.newindianexpress.com/nation/2020/apr/03/nurses-complain-of-misbehaviour-by-quarantined-coronavirus-suspects-at-ghaziabad-hospital-2124985.html

The Quint. 2020. "COVID-19: 5 Held for Allegedly Misbehaving with ASHAs in Bengaluru |The Quint," April 3, 2020. https://www.thequint.com/coronavirus/covid-19-asha-workers-manhandled-in-bengaluru-residents-refuse-info

The Statesman. 2020. "Assaults on Corona Warriors Continue as Doctors, Health Workers Attacked in Delhi, UP," April 15, 2020. https://www.thestatesman.com/india/assaults-corona-warriors-continue-doctors-health-workers-attacked-delhi-1502877767.html

The Tribune India. 2020. "Group of Youths in Panchkula Colony Misbehave with Women Health Workers amid Coronavirus Lockdown," April 9, 2020. https://www.tribuneindia.com/news/chandigarh/group-of-youths-in-panchkula-colony-misbehave-with-women-health-workers-amid-coronavirus-lockdown-68866

The Washington Post. 2020. "As Coronavirus Fears Grow, Doctors and Nurses Face Abuse, Attacks|The Washington Post," April 8, 2020. https://www.washingtonpost.com/world/the_americas/coronavirus-doctors-nurses-attack-mexico-ivory-coast/2020/04/08/545896a0-7835-11ea-a311-adb1344719a9_story.html

The Wire. 2020. "From Beating Pots and Pans to Beating Doctors, Coronavirus Fight Takes Bizarre Turn," May 6, 2020. https://thewire.in/rights/doctors-assaulted-coronavirus

Thethaitanger News. 2020. "FIR Lodged in Misbehavior with Health Workers," April 26, 2020. https://www.bhaskar.com/news/fir-lodged-in-misbehavior-with-health-workers-074212-7094479.html

Tian, Jia, and Li Du. 2017. "Microblogging Violent Attacks on Medical Staff in China: A Case Study of the Longmen County People's Hospital Incident." *BMC Health Services Research* 17 (1). https://doi.org/10.1186/s12913-017-2301-5

Times of India. 2019. "National Register of Citizens (NRC): All You Need to Know," December 20, 2019. https://timesofindia.indiatimes.com/india/national-register-of-citizens-all-you-need-to-know/articleshow/72853566.cms

Times of India. 2020a. "Coronavirus Scare in Bengaluru: Poor Government Coordination Hits Outbreak Management," March 13, 2020. https://timesofindia.indiatimes.com/city/bengaluru/bengaluru-poor-government-coordination-hits-covid-19-outbreak-management/articleshow/74603510.cms

Times of India. 2020b. "COVID-19 : Laws Related to Quarantine in India." Times of India, March 25, 2020. https://timesofindia.indiatimes.com/blogs/legally-speaking/covid-19-law-related-to-quarantine-in-india/

Tonnaer, Franca, Maaike Cima, and Arnoud Arntz. 2016. "Aggression." In *The Handbook of Forensic Psychopathology and Treatment*, 270 – 312. London: Routledge.

WHO-Newsroom. 2019. "WHO Director General Praises Bravery of Health Workers during Visit to Eastern Democratic Republic of Congo Following Fatal Attacks on Ebola Responders." WHO. 2019. https://www.who.int/news/item/01-12-2019-who-director-general-praises-bravery-of-health-workers-during-visit-to-eastern-democratic-republic-of-congo-following-fatal-attacks-on-ebola-responders%0A

WHO Newsroom. 2020. "Countering Misinformation about COVID-19 |World Health Organization." *WHO-Newsroom*. https://www.who.int/news-room/feature-stories/detail/countering-misinformation-about-covid-19

World Health Organization. 2002. "World Report on Violence and Health."

World Medical Association. 2020. "COVID-19 Pandemic Response." *73rd World Health Assembly, Agenda Item 3.* https://apps.who.int/gb/ebwha/pdf_files/WHA73/A73_CONF1Rev1-en.pdf