

FRONTLINE WORKERS' ENCOUNTERS WITH COVID-19: WITH SPECIAL REFERENCE TO HEALTHCARE WORKERS, POLICE PERSONNEL AND SANITATION WORKERS

Abstract

World epidemiology has witnessed a number of fatal occurrences of pandemics in the past, the recent being the COVID-19 pandemic. The sudden outbreak of the SARS-CoV-2 stream of virus in 2019 affected many lives. Given the unpreparedness and the nature of the virus, controlling its spread across the Globe was a challenging task. At this time of need, to aid the functioning of the entire population, the frontline workforce which includes the healthcare system, police, and sanitation workers, among many other professions, became the direct focal point to deliver the much-needed services. This resulted in unprecedented pressure leading to experiences of severe stress and negative emotions. However, there were positive experiences as well. The present article explores the wide range of positive and negative emotions experienced by Frontline Workers with special reference to medical health workers, sanitation workers, and police personnel during the pandemic. The study is expository in nature, conducted through extensive secondary research, reviewing various recent research literature including grey literature and verbatims of COVID-19 Frontline Workers. The major negative implications identified among Frontline Workers of COVID-19 are anxiety, stress, increasing employee turnover, suicidal tendencies, and burnout. The leading factors were direct exposure to the malignant novel virus, lack of facilities and methods to cope with the disease, isolation, and continuous work schedules with pressure. The article also elaborates on the positive implications, including, a higher

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sense of self, better job satisfaction, development of new skills, stronger resilience, and increased altruistic behaviour experienced by the Frontline Workers.

Keywords: Mental Health, COVID-19, Frontline Workers, Stressors, Positive & Negative Implications.

I. INTRODUCTION

The world was taken aback by the sudden outbreak of a new strain of the SARS-CoV-2 Virus in 2019. From ordinary man to the World Health Organization, there were attempts to study the novel virus along with devising a suitable mode of treatment. The gradual advancements in healthcare and vaccination rollout could not catch up with the rapid spread of the pandemic. At the surface level, it was seen that the virus affected the individual's respiratory health condition but the fear and panic surrounding the disease caused even further complications (University of Nottingham, 2022). To stop the virus from spreading, countries started implementing lockdowns nationwide but had to face significant socio-economic repercussions (Li & Niu, 2021). The novel virus and its effects were studied in detail and guidelines were produced based on the nature of the virus (Centers for Disease Control and Prevention [CDC], 2021). Public measures like social distancing, and quarantine, were implemented to isolate the infected and curb the spread of the virus. This cut all avenues of social support escalating the already distressing situation which was new to most of the population (Hwang et al., 2020).

Since its initial discovery in Wuhan, China in December 2019, the extremely contagious coronavirus disease (COVID-19) has spread to 212 countries and territories, infecting millions of people. The WHO on 30 January 2020 declared a Public Health Emergency of International Concern and on 11 March 2020 classified the outbreak as a pandemic, due to the widespread nature of the virus across multiple regions of the World (Ghosh et al., 2020).

The situation was no different in India. India made its best attempts to implement the guidelines given by the WHO. But it was not an easy task due to the collectivistic culture and growing population density. (Chen & Biswas, 2022; Badra et al., 2020) On January 30, 2020, the first case of COVID was identified in Thrissur, Kerala. On March 25, 2020, a national lockdown was enacted by the government because of the gradual increase in cases (India Times, 2022). As of May 8, 2020, India had over 3.7 million confirmed infections, a rapidly scaling number of COVID-19 cases (Kumar et al., 2020). India had the second-highest number of COVID-19 cases (The Guardian, 2020) but India tackled the issue diligently irrespective of having several challenges (Sharma et al., 2020). The major issue was convincing the people to abide by the guidelines, towards which the contribution of the Frontline Workers is incredible (The Straits Times, 2021).

II. COVID-19 FRONTLINE WORKERS

Frontline Workers represent the category of workforce who have direct interaction with the public (HR Cloud, 2022). They constitute 62 percent of essential workers including 52 percent constituting of but are not limited to healthcare workers, protective service workers (police and EMS), cashiers in grocery and general merchandise stores, production and food processing workers, janitors and maintenance workers, agricultural workers, truck drivers, and educators (Blau et al., 2022). During critical and life-threatening situations like COVID 19 when most of the workforce relied on remote functioning options like working from home to prevent the spread of the novel virus, Frontline Workers had to come out of their homes and meet the people including the infected ones. Sanitation workers, the police force, bank employees, and vendors for essential commodities were on duty to cater to the necessities of the general population (HR Cloud, 2022). With the situation going beyond control, the healthcare system had to over-function to treat and aid the infected population (Sengupta et al., 2021).

While the entire nation was safeguarded in lockdown, these occupations were functional to maintain the life and health of society. Their contributions were indeed heroic and soon received massive appreciation for the efforts of service with terms like “Corona Warriors” (Pandey & Sharma, 2020), and “heroes” referring collectively to Frontline Workers (Lohmeyer & Taylor, 2021). As Frontline Workers continued to render their service with full commitment, they also had to encounter their battles with the pandemic. The present article throws light upon the pandemic experience of Frontline Workers like medical healthcare workers, sanitation workers, and police.

1. Experiences of Medical Healthcare Workers (MHW) during COVID-19: Since COVID-19 was a pandemic calling for a health emergency, the Medical Healthcare Workers (MHW) were the first shield of defense to contain the virus (Pandey & Sharma, 2020). Personal Protection Equipment (PPE) kits were one of the safety measures mandatorily employed in frontline workers. However, along with being extremely efficient in preventing virus contraction, they caused suffocation, heat, fatigue, breathlessness, and dehydration among the MHWs while they were utilized for extensive hours of duty (Agarwal et al., 2020). There has always been an ever-growing gap between the available resources and their allocation to the population in need in the healthcare setting which was further widened during COVID-19. Distribution of resources in such circumstances led to unhealthy competition along with a conflict between the different hierarchies of power and affluence (Kluge, 2007; Sengupta et al., 2021). Due to an inadequate supply of beds, medicines, and in particular, PPE kits, the MHW was instructed to reuse or manage with the limited supply of resources, owing to the fear of contraction of the virus. One of the doctors narrated the experience as follows,

“There is a serious shortfall of PPE. We are forced to reuse them since they are not readily available... The gloves, masks, sanitizers and other disinfectants have suddenly become so important but scarce...” (Sengupta et al., 2021)

Various factors like undiagnosed conditions or unusual presentations of certain cases could cause hindrances in diagnosis or detection thereby posing an increased threat not only to the healthcare workers who were in direct contact but also to visitors and other patients in the hospital (Kok, 2020). The additional impact on MHW was caused due to the suffering and death of the patients which added to the difficulty, worry, and depressive symptoms.

"It was so traumatic to break the news to his wife. The patient was with us for 45 days. This helplessness breaks you down more. This disease is so unpredictable." (Biswas, 2020)

The nature of the work did not guarantee safety from contracting the disease in Medical Health Workers. There was a barrier to meeting their family due to the fear of spreading the virus- especially to the elderly and young children,

“I worried about spreading the infection to my family, they are old and have chronic diseases. If they got the infection, it might threaten their lives... in fact, this point was the main source of my stress.” (Khatatbeh et al., 2021)

“I have small kids, and if I infected patients also, that would be an issue.....My parents live with me... they are old, and my kids are small. I was scared like what if I infected

them....so when I used to go inside the home the first thing I did was to take a bath...” (Romate & Rajkumar, 2022)

The MHWs had to face severe social isolation to keep the virus infection in check. (Romate & Rajkumar, 2022). Another challenge of social isolation was when landlords or homeowners did not allow the medical health care workers to get back home after a COVID duty because of the fear of transmission.

“I stay in rented accommodation. The landlord of the house has asked me to either go to any relative’s place or vacate the house since he fears that I might be a carrier of infection. No explanations are working to convince him...” (Sengupta et al., 2021)

However, the effects of COVID-19 are not just restricted to the negative effects. Over time, as they got familiarized with the disease, there was a sense of relief. There were also cases of increased responsibility among the MHW in treating the patients. There were acts of altruistic connection to extend their help and service using the best of their potential and skills.

“We must try our best to win this battle. As healthcare providers, we are at the forefront. I fight for my family, and I fight more for this society.” “This is my duty because I am a medical worker. No matter what will happen...” (Liu et al., 2020)

Another wave of positivity among medical healthcare workers was seen through motivating factors like gratitude and fulfilment in saving lives and treating patients in need (Beena, 2020).

“It took almost two weeks for him to recover completely. After his discharge when he came to whisper a note of thanks, I was moved by his gesture, indeed a rewarding moment for the entire medical team. As tears rolled down my cheeks, I savoured the joy of saving one life – a feeling much beyond any other joys in life”

“I also had an opportunity to assist the birthing process of one of my COVID-positive pregnant women. Wearing a PPE kit and conducting the delivery was a new experience for me. As I finished the delivery, with folded hands and tears in her eyes, she expressed her gratitude to me. It was such a blissful experience for me.” (Beena, 2020)

- 2. Experiences of Sanitation Workers during COVID-19:** It is estimated that there are about 5 million sanitation workers in India (TOI, 2021). Sanitation workers have played a significant role in human society but hardly received any recognition. The services rendered during the pandemic shed light on their unmatched contribution to maintaining the hygiene of society. Sanitation work consists of various domains like cleaning toilets, segregating dry waste with wet waste and biomedical waste, septic tanks, and operating sewage treatment plants (Water Aid India, 2021).

It further escalated during the pandemic as they were dealing with a deadly virus and yet received no guidelines, instructions, or training regarding their safety (Nigam & Dubey, 2020; WaterAid India, 2021). Although importance was given to hand hygiene during the pandemic it was observed that 40 per cent of the sanitation workers did not have access to a functional hand washing station at their worksites (Mander et al., 2020).

Lack of awareness, negligence and reluctance among the general public made the job of sanitation workers even more challenging.

“Relatives and patients who visit the hospitals often dispose masks and gloves outside the gates.” (ThePrint, 2020)

“Our co-worker has already got infected, and so has his mother.” (ThePrint, 2020)

“People don’t dispose of their waste, they just throw it out. They just throw waste from their balconies. People throw glass bottles and our co-workers have got hit by them and also fainted.” (The Indian Express, 2020)

Because sanitation work is considered to be of low grade, they are looked down on by society. Despite their important contribution, the lack of respect, consideration, and recognition, made the sanitation workers feel unappreciated.

“People don’t look at us. If they look at us, they look at us with disgust. They look at us as if we are coronavirus.” (The Indian Express, 2020)

The sanitation workers at the hospital have also reported on other issues, “Due to high temperature, it is difficult to wear a full apron which is made of plastic. Other than that everything is OK.”

“We worked wearing PPE kits for six hours without food and water. Only after taking off the protective gear can we even attend to nature’s call. But now I feel more hurt with the rude behaviour of people and the health staff than the physical distress I experienced inside the PPE kit.” (TOI, 2020)

“We have not received PPE kits even during this second wave. We are made to sanitize the premises of the company twice daily although there are very few officials at the office. And we are not given additional payment for the double workload.” (The Wire, 2021)

The verbatims indicate the discomfort associated with the necessary safety measures that added to their negative experiences at work. There was also a peaking increase of 23% in their work hours during the pandemic (TOI, 2021).

Amidst the challenges faced during the pandemic, the relentless work done by the sanitation workers finally received the recognition and appreciation they deserved throughout. The Vice President of India, Venkaiah Naidu, extends his gratitude to sanitation workers for their dedicated service during the pandemic on mediums like Twitter and news platforms (NDTV, 2022).

- 3. Experiences of the Police Workforce during COVID-19:** As a frontline agency, the Indian Police has strived at multiple levels of service delivery. India's police-to-population ratio is 193 to 100,000, which is significantly lower than that of other nations (The Hindu Businessline, 2020). Due to the need for strict law enforcement during the pandemic, there was increased difficulty in maintaining the lockdown guidelines amongst the public (Boovaragasamy et al., 2021).

The unanticipated nature of the novel pandemic situation had a taxing effect on the police force. A police personnel expressed, “In my three decades of police service, I have never experienced a crisis of this magnitude.” (Aljazeera, 2021)

Non-availability of basic amenities and refreshments due to the closure of shops added to the difficulties faced. “Patrolling and crowd control in COVID-19-affected areas is becoming more dangerous than fighting criminals. At least in those cases we can see the enemy.” (Reuters, 2020)

As the lockdown persisted, it brought along a host of social challenges, exacerbating an alarming surge in reports of domestic violence. However, the workforce already being overworked at containment zones and in enforcing public guidelines, they were unable to handle the situation efficiently (Krishnakumar & Verma, 2021).

The unexpected deaths, restriction on movement, and the emotional riots causing increased unrest in the public were some of the challenges faced that police had to tackle very diligently. This required the essence of professional as well as personal sense among the police personnel (The Hindu Businessline, 2020).

“Dead bodies keep piling high at the crematorium due to the space crunch and relentless deaths. It’s heart-wrenching. But we are trying to give people dignity in death.” (Aljazeera, 2021)

The determination and commitment of the police force throughout the pandemic was unmatched. The extent of dedication was depicted in the type of work they did. One such instance was observed in a pregnant Deputy Superintendent of Police who was patrolling the streets, selflessly, despite belonging to the listed vulnerable population. She emphasized the value that the police department places on public safety.

“We, the police force, together are trying to explain to the public to not leave their houses unless it is extremely necessary. We are here on the roads for your safety and we want y’all to be at your own homes for the same.” (India Today, 2021, 00:54)

A study reported that almost three-fourths of frontline police personnel had evidence of past COVID-19 infection at the end of the first wave in January 2021, just before the introduction of COVID-19 vaccination (Bhartiya et al., 2022).

Despite the evident risk of contagion to police families, efforts have been made to keep strong social support to motivate the police to prioritize their responsibilities.

“I don’t want to take leave at a time when people need me. My family and superiors support me fully in this. My daughter told me unblinkingly ‘Papa, please don’t come back. You’re doing the right thing’. Their support gives me the strength to do my job well.” (Aljazeera, 2021)

The police force, reported high levels of knowledge, favourable attitudes and good compliance with recommended practices about COVID-19 during the raging pandemic, and even during the decline phase after the first wave. This signifies their seriousness about the

dreaded disease and commitment to helping the community in controlling the pandemic and its impact (Bhartiya et al., 2022).

The police also devised innovative tactics to raise public awareness about the pandemic, including the "Hand Wash dance" in an attempt to encourage safe behaviours.

“We have created a symbolic picture to show Corona has come to the roads. I thought that we police would hit(people) with sticks or take strict steps. But I thought of doing it entertainingly and making people aware so they become more careful, because as per my experience, I have seen if we explain things to people with love, then they implement it in a better and a swift manner.” (Global News, 2020)

III. EFFECTS OF THE PANDEMIC ON FRONTLINE WORKERS

From a comprehensive overview of all the literature and verbatims, it was observed that the experiences of Frontline Workers across all domains were mixed. Some of the major negative and positive observations are discussed below.

1. Negative effects

- **Stress:** Stepping out of the safe premises of home for work was itself stressful during the pandemic. Prolonged schedules of work added to the stress, and low sleep levels led to conditions of insomnia, further leading to negligence or mishaps among Frontline Workers (Kushal et al., 2018; Nameirakpam et al., 2021). As a method of law enforcement, it was observed that the police were acting more violently, which also is an indication of rising stress and frustration (Shoib et al., 2022). The hindrance caused by the PPEs for smooth and easy functioning and mobility also added to the source of work-related stress and burnout among the Frontline Workers. (Gupta et al., 2020). The lack of expertise in treating COVID-19 patients was one of the prominent reasons for stress experienced by medical healthcare workers (Tian et al., 2020). An online survey of Maharashtra police department personnel indicated that nearly 50 per cent of them had mental disturbances due to COVID-19 (Kokane et al., 2020).
- **Anxiety:** The abundance of information, including misinformation about the nature and spread of the infection especially by the news agencies and social media, caused enormous confusion, stress and anxiety across the population (Rocha et al., 2021). The stress and trauma were increased due to the violent behaviour and non-cooperation of family members and the general public toward Frontline Workers (Chhablani & Choudhari, 2022). The anxiety of not being able to provide satisfactory service and being humiliated by the patient parties, in several instances, unfortunately, resulted in the suicide of Frontline Workers (Joseph, 2020).
- **Depression:** As the virus was extremely contagious, the symptoms and severity of health complications were also unpredictable. The increasing death rates during the peak time of the pandemic led to the medical healthcare workers adapting a workstyle that appeared mechanical. Witnessing deteriorating health conditions and increasing death rates of patients or fellow Frontline Workers contributed to depression and also a high prevalence of PTSD symptoms (Sahebi et al., 2021; Gupta et al, 2021). There also was additional fear

of transmitting the infection to children and families which lead to a higher prevalence of depression, along with anxiety and distress. They were also prone to become the silent victims of negative coping strategies like alcoholism, because of the lack of awareness about mental health issues like depression caused by high-stress work environments, especially among police personnel (Nameirakpam et al., 2021).

- **Burnout:** As reported by Frontline Workers there was a high prevalence of fatigue and burnout during the pandemic compared to the pre-COVID-19 era, the prime reasons being the schedule and use of PPE kits (Agarwal et al., 2020). A recent systematic review of five studies on burnout reported that the prevalence of burnout ranged from 16 to 50%. (Reardon et al., 2020). Managerial inadequacy was also seen due to hierarchical differences in work settings, adding to the pressure, stress, and discrimination among certain sections of the workforce (Sengupta et al., 2021). The frontline worker-to-patient ratio being more saturated towards the patient side added to an increase in the work responsibilities of the Frontline Workers, leading to feelings of helplessness (Romate & Rajkumar, 2022). Problem-solving skills were affected adversely leading to the deterioration in the quality of life among healthcare workers (Korkmaz et al., 2020).
 - **Social isolation:** Though COVID-19 Frontline Workers were struggling hard to serve the people, they experienced social isolation repeatedly. Some Frontline Workers were restricted from entering the area or locality and in some instances, they were restricted from entering their homes (Sengupta et al., 2021). The perceived stigma from family members and society increased feelings of social isolation, especially among medical healthcare workers (Cabarkapa et al., 2020).
 - **Occupational Disruption:** The increased levels of work-related stress, and anxiety with a lack of gratitude portrayed through violent behaviours from the public led to the Frontline Workers feeling demotivated to continue with their duties. It was also seen that many aspiring doctors and other Frontline Workers decided to change their career paths to avoid similar circumstances during any such future pandemic situations (World Economic Forum, 2023).
2. **Positive Effects Experienced by Frontline Workers:** Like a coin has two sides, so is the experience of Frontline Workers during the pandemic. There is also evidence of Frontline Workers experiencing intense positive experiences which are discussed below.
- **Social Support:** Social support was crucial in encouraging the commendable services of the Frontline Workers that came through family, friends, and co-workers (Sujiv et al; 2022; Aljazeera, 2021). The Government and other organizations also extended their support through various measures (Press Information Bureau [PIB], 2021; NDTV, 2021). The increased violence against healthcare workers was kept in check through stringent law enforcement to safeguard their rights and protect the Frontline Workers under the Epidemic Diseases (Amendment) Ordinance, 2020 (PRS Legislative Research, 2020).
 - **Sense of Accomplishment and Purpose:** Though some Frontline Workers saw their work as a necessity to take care of their families, focusing on the monetary aspects, some saw their duty as a noble service to society. This attitude of working for the greater good

motivated them to serve during the COVID-19 pandemic (Romate & Rajkumar, 2022; Beena, 2020). As they adopted coping skills, a considerable percentage of Frontline Workers started accepting the stressful events as a part of their job and experienced a sense of accomplishment and purpose of doing the duties as a service. (Cabarkapa et.al., 2020; Dhillon et al., 2022).

- **Altruism:** Frontline Workers saw their duty as a noble cause, hence helping the citizens in time of crisis by defining their professional identities as being altruistic (Sajjad et al., 2021). The frontline workforce has exhibited altruism by going above and beyond their assigned duties to provide essentials and vitals to the public during the peak of the pandemic (The Hindu Businessline, 2020).
- **Adaptability:** After gauging the pattern of the virus spread, India showed a commendable comeback in terms of dealing with the pandemic (Sharma et al., 2020). Frontline Workers along with the administrative authorities built adaptive strategies to the evolving protocols, guidelines and treatment interventions (Urvashi et al., 2020).

3. Strategies for Further Improvement of Mental Health: Upon studying the work nature of Frontline Workers during the pandemic, it becomes evident that it was complex and challenging. However, by devising strategies, workplace or legal guidelines, and better resource management the number of negative effects experienced by Frontline Workers during intense work phases like the pandemic can be reduced considerably. Emphasis on the positive psychological effects should be encouraged to promote optimistic thinking and focus on the greater good. To tackle similar situations in the future, with a combination of various researchers, here are some proposed methods to improve the overall well-being of Frontline Workers:

- Frontline Workers face various challenges in their jobs, which have only been exacerbated by the pandemic. Thus, timely and convenient interventions could be implemented aiming to support the mental well-being of Frontline Workers (Hooper, et al, 2021; De Kock et al., 2021).
- Well-curated psychological workshops and training to prepare Frontline Workers to build efficient coping mechanisms to stay prepared and resilient during any degree and form of a future crisis, through methods like CBT or DBT-based Resilience Training and Mindfulness (Benhamou & Piedra, 2020).
- Encouraging Frontline Workers to emphasize and share their positive experiences which in turn can motivate their peers to focus on the positive aspects as well and reflect on this perspective (Pan American Health Organization [PAHO], 2021).
- Increasing awareness through mass media among the general public regarding the situation, which includes, risks, available facilities, roles, and responsibilities of the Frontline Workers, thereby stimulating responses with respect, understanding, and empathetic support (PAHO, 2021).

- Continuous assessment of the frontline workforce in terms of skill sets and resources to promote optimal functioning in diverse settings (Alreshidi et al., 2020).
- Organizations could demonstrate their support by including the Frontline Workers in the decision-making process as well as providing incentives in terms of appreciation and monetary benefits (Morishita et al., 2022).

4. Limitations: One of the limitations of the present article is that due to the unequal availability of resources, the present study inclined more toward medical health workers and the least towards Sanitation workers.

5. Implications of the Study

- Identifying areas for improvement so as to tackle the future possibilities of a pandemic in a better well-informed way.
- The valuable insights into the experiences of frontline workers provided in the study can assist in the development of policies and guidelines to better support and protect frontline workers.
- The study includes the collected information regarding the mental health implications faced by frontline workers which can help healthcare organizations and authorities design and implement effective mental health support programs tailored to the needs of frontline workers.
- Acknowledging the positive experiences and their inferences becomes important to foster resilience and well-being among workers through appreciation and support programs.

IV. CONCLUSION

During the crisis of COVID-19, there was economic, social, and political chaos across the population. Amidst this, the Frontline Workers were the first line of defence against all unanticipated challenges. This role resulted in several psychological effects, consisting of mental constraints of stress, anxiety, burnout, fatigue, lack of sleep, and motivation which in turn led to a detachment from job responsibilities, impacting the quality of their work. Contrastingly, there were also positive impacts on the mental health of the Frontline Workers observed through altruism, job satisfaction and contentment with health progress in the nation, leading to productivity and an optimistic work attitude. The understanding of this must result in generating better approaches to addressing and managing risks during any form of crisis in the future. Proactive and well-informed strategies can be designed and implemented through stronger mental preparedness and higher organizational support for better output in the overall system of functioning of Frontline Workers across domains in the country.

V. DECLARATION OF CONFLICT OF INTEREST

The authors of the present article declare that there is no conflict of interest.

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