

Impact of COVID 19 on Health Care Personnel

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Abstract

The outbreak of COVID 19 is highly challenging for the frontline worker that is health care personnel. This novel virus originated from Wuhan China, December 2020, as this deadly virus is highly contagious it affected all globally. WHO declared pandemic on March 2020, and also published guidelines to be followed by the HCP while providing patient care. HCP face multiples issues continuously which develop while providing patient care such as occupational burnout due to shortage of manpower. HCP also faced physical and psychological violence during delivering patient care which is again too stressful. Many HCP works overtime of 12 to 13 hrs due to shortage of manpower and also many patients got admitted daily. Those health workers who got contacted without proper PPE, they used to keep quarantine. Due to this HCP are kept separation from family members and this is again stressful for the concern person especially lady HCP having small children at home. Apart from these many issues, HCP also faced imbalance nutrition, deprive sleeping pattern, racism issues especially to north east Indian HCP, transports issue due to lock down, lack of PPE, impaired coping mechanism with children.

Key words: HCP, WHO, PPE, COVID 19, Stress, burn out

Introduction

A new coronavirus that previously has not been identified in humans emerged in Wuhan, China in December 2019. Signs and symptoms include respiratory symptoms and include chill, fever, cough, tiredness, sore throat, muscle aches, Headache, shortness of breath, loss of taste and smell and chest pain. In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome and sometimes death. World health organization has announced COVID-19 outbreak as a pandemic in March 2020.¹

The rapid spread of the Coronavirus Disease 2019 (COVID-19) pandemic poses unprecedented challenges throughout the world. Health-care providers are vital

resources for every country. Their health and safety are crucial not only for continuous and safe patient care, but also for control of any outbreak in today's world. Unfortunately, Health care personnel are the one who is facing one of the main challenges on caring COVID 19 patient in health sectors across the country. Physicians, nurses, nursing assistants, therapists, technicians, emergency medical service personnel, dental personnel, pharmacists, laboratory personnel, autopsy personnel, and contractual staff all come under HCP category.

As the pandemic accelerates, access to personal protective equipment (PPE) for health workers is a key concern. Medical staffs are prioritised in many countries, but PPE shortages have been described in the most affected facilities. Some medical staff are waiting for equipment while already seeing patients who may be infected or are supplied with equipment that might not meet requirements. Alongside concerns for their personal safety, health-care workers are anxious about passing the infection to their families. Health-care workers who care for elderly parents or young children will be drastically affected by school closures, social

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distancing policies, and disruption in the availability of food and other essentials.² Health care personnel (HCP) who are routinely exposed to viral respiratory infections in the workplace may transmit infection to others. WHO is working closely with global experts, governments and partners to rapidly expand scientific knowledge on this new virus and to provide timely advice on measures to protect people's health and prevent the spread of this Outbreak? Hazards include pathogen exposure, duration of working hours, psychological distress, coping mechanism with patients and with their family members. fatigue, occupational burnout, stigma, and physical and psychological violence.

Following are the areas of concern for health personnel during covid 19³ :

1. Occupational burnout
2. Physical and psychological violence
3. Separation from family members
4. Imbalance nutrition
5. Deprive sleeping pattern
6. Social problems specially racism issue
7. Transport
8. Lack of PPE
9. Impaired coping mechanism with children

Occupational Burnout

Healthcare workers and caregivers are desperately needed during the global response to the outbreak, but represent one of the most vulnerable populations in terms of contracting the highly virulent disease. Many of them infected as evidence, more than 100 doctors, 30 Nurses and Nursing Assistance in Italy have died from COVID -19 since the outbreak began. **Prashasti Awasthi (2020)**. The virus has infected more than 548 doctors, nurses and paramedics across India. **Harshit Sabarwal (2020)**. These all create panic atmosphere to everyone and lots of pressure on the left over few HCP to provide holistic care. HCP are the one who are actively involved in screening and providing COVID 19 patient care. As they themselves are not immune to this deadly virus, HCP develop insecure and stress. Many hospitals

are facing the shortage of manpower as if any HCP exposes to such patient without proper PPE knowingly or unknowingly, they have to go for quarantine. Due to this shortage of manpower and many infected cases goes on increasing in COVID 19 wards and ICU, there are sudden changes in management of situations with patient care. All the HCP got workover loaded some nurses are doing 12 Hours duty continuously. These all developed stress, anxiety, depression, helplessness, frustration, maladjustment. HCP are facing many issues concerning of patient care, as this is a deadly virus every individual especially patient family member, media person, political leaders, NGO are very much vigilance on the pattern of patient care and updating the conditions of the COVID 19 patient's situation. These all provide much more stressful platform for all the HCP. As this is a novel virus, all the HCP are also developing new habits of providing care to patient following the guidelines of WHO, and developing new habits takes times, during this periods many HCP face stressful life. HCP also face a problem for the lack of PPE in many hospitals. Staff nurses given resignation from their duty as they have been instructed to used one PPE in a day, sometime not available.

Physical and Psychological Violence

Nurses are being forced to work overtime, shave their heads for hygiene purpose in China as published in (The New York times) Nurses are also struggling to get necessary menstruation supplies, menstruation has become an occupational hazard for female nurses, they were provided adult diapers. Staff nurses are finding it hard to use bathroom with all their PPE that is not fitting or adequate, the diapers just add one more layer of frustration.⁴

After working mandated shifts, nurses are then being quarantined away from their families for two-week incubation period to ensure they aren't passing the virus on them. Doctors and nurses find difficulty for separate changing room, bathroom, removal of shoes and separate shoes rack in the hospital. This all create mentally disturb and obsess on the sensation of presence of virus in all the object surrounding them. As these practices are not habitual by the health personnel they keep forgetting or mistakenly skips some or the other precautionary protocols given by WHO, therefore it

really gives psychologically disturb and increase anxiety to all the care providers. It results today that many of the health personnel got infected with deadly COVID 19. Stones were pelted on doctors and nurses who went for surveillance in areas where cases were detected for contact tracing as evidence from video shown in TV news and many social media. Two teams comprising doctors and Accredited Social Health Activist (ASHA) and Auxiliary Nurse Midwife (ANM) workers were visiting the locality, when locals started pelting them with stones in Indore, MP ⁵

Separation From Family Members:

As COVID 19 is highly contagious, frontline health personnel especially lady doctors and staff nurses faced many problems such as separation from their children. Due to overtime working of 12hrs to 13 hrs continuously and family separation, it gives stress environment to the health care personnel. As they are frontline care provider many of them got infected while providing care. Figures from China's National Health Commission show that more than 3300 health-care workers have been infected as of early March and, according to local media, by the end of February at least 22 had died. In Italy, 20% of responding health-care workers was infected, and some have died. Reports from medical staff describe physical and mental exhaustion, the torment of difficult triage decisions, and the pain of losing patience and colleagues, all in addition to the infection risk. **(The lancet,2020)**⁶

According to NDTV, 30 March 2020, 14 medical staffers, including doctors and nurses, which was treating COVID-19 patients at RML Hospital, has been sent into home quarantine. Home quarantine is too difficult to follow all the guidelines. Children need their mother while sleeping, during lunch but during quarantine period it is really stressful. It is just like away from home inside the home. After return back from duty, they will keep themselves quarantine for at least 5 to 6 hrs before coming contact with family members. While HCP often accept increased risk of infection, as part of their chosen profession, they often exhibit concern about family transmission, especially involving family members who are elderly, immunocompromised, or have chronic medical conditions. While the CDC and Occupational Safety and Health Administration provide clear recommendations, it is evident that more

is required to optimize safety in the current environment. Ensuring care of HCP's family members would enhance workforce confidence and availability, but the feasibility and advisability of family priority is yet to be determined. For front-line caregivers, the concerns about transmitting the virus to family members will need to be addressed.

Imbalance Nutrition

Although we do not have concrete evidence regarding specific dietary factors that can reduce risk of novel virus COVID-19, we do know and accepted that eating a healthy diet, maintaining physically active, managing stress, and getting enough sleep boost our immune system strong. Deficit or imbalance nutrition can land us to various physical and mental disturbances. Balanced diet helped us keep the immune system strong and thus make our body to fight against micro organism. Therefore, it is imperative for all of us to pay attention to our diet and nutritional status during the ongoing COVID-19 pandemic. As HCP are overburdened with COVID 19 patients they hardly eat their meal on time and skip the same many at times. It is another big task and challenging for all the HCP to remove PPE before having foods. Many HCP got obsess about the presence of this deadly virus in their pantry also in their surroundings. These mental disturbed added losses of appetite, which again leads to nutrition imbalance. In some countries, restaurants and take-away offers are being limited and some items in supermarkets are becoming less available.

Limited access to fresh foods may lead to an increased consumption of highly processed foods, which tend to be high in fats, sugars and salt. Such changes in eating behaviour could have a negative effect on the immune system, overall physical and mental health, and the well-being of HCP.

Deprive Sleeping Pattern

Nurses get nearly 90 minutes less sleep before a shift compared with days off, posing a potential risk to patient safety, researchers in the US have warned long before COVID -19 outbreak. Sleep deprivation increases as HCP provide their services in shift. Up to 75% of shift workers experience some degree of fatigue and sleepiness while on duty. As nurses are on shifts duty which last longer than 12 hours, nurses work overtime, or nurses do not receive adequate rest breaks.

We must emphasize that regular sleep and rest help to increase the stamina of HCP which he or she can work effectively with 100% efficiency. Study was conducted on 1563 health workers and analysis has been done on sleep deprivation. Study result shows that 87.1 % of the sample suffer from Insomnia related problem due to work stress & depression (Chenxi Zhang 2020)⁷. As all the HCP are currently facing stress due to shortage of manpower as well as panic situation observing daily patient are dying, these factors enable HCP sleep deprive problem and hence poor immune system.

Social Problems Specially Racism Issue

On the onset of this deadly virus many HCP especially who are from north eastern India faced problem of Racism during this pandemic. They have been treated like this because COVID 19 originated from Wuhan, China. Many incidents are reported in INDIA itself that health care workers were attacked, harassed and humiliated by their neighbors and landlord. They were asked to vacate the room by landlords as they fear that it will lead to further spread of COVID-19. Nurses and doctors while returning back to their homes were not allowed by the villagers and society in which they were residing. HCP the frontline workers are truly worrier, they are still continuing to take care of patients with such an annoying situation. Racism against north eastern staff nurses is very pathetic, due to stress and insecure environment many north east staff nurses resign from their job. Quantitative studies have shown that frontline health-care providers treating patients with COVID-19 have greater risks of mental health problems, such as anxiety, depression, insomnia, and stress. Staff nurse in Siliguri was not allowed to enter her rented accommodation by her neighbors and house owner landlord and neighbors due to her Mongolian look and her profession (Thongkholal Haokip 2020)⁸

Transport

Another big challenge faced by the health personnel include transportation facility. In an amid of lockdown due to pandemic all the govt and private transportation facility were completely suspended. Many HCP don't have their own private vehicles, and they faced many problems during handing over and taking over. Due to this i.e. failure of timely reporting in hospital, it creates a stressful atmosphere in the workplace. And as social

distancing was the Rhyme of the hour, asking lift from someone known or unknown also a problem. But later on some govt transport facilities were provided but it was also not adequate enough to meet everyone's requirement. As the number of cases were increasing, interstate and intra state movement of HCP were also restricted. They were asked to stay back in their workplace area and not to come back to home (another state) as seen in Delhi and UP state.

Lack of Personal Protective Equipment.

Worldwide data shows that most patients are asymptomatic or mildly symptomatic. They can infect others. The demarcation of Covid and non-Covid areas coupled with scarce testing put health care workers at risk," General Secretary, Resident Doctors' Association, AIIMS. Prevention of infection to HCP is of utmost importance in the war against COVID 19 because they are the first and last line of defence.

Lack of supply of PPE Kits has led to increase number of health workers being infected. Even without proper PPE they are sent to the containment zone for screening and case finding. Liberal use of PPE and increased testing on an urgent basis alone can protect health care workers and patients from infection. Many doctors' associations have urged the government to provide proper protection to health care providers. The Federation of Resident Doctors' Association (FORDA) of India has demanded a separate treatment facility for Covid-19 positive doctors and other medical staff. "Rather than admitting doctors in various hospitals, there needs to be a uniform policy for admission and a designated Covid-19 hospital for doctors and other medical staff."⁹

Impaired Coping Mechanism with Children

In a bid to stem spread of the virus, schools in India are being shut indefinitely. It's been a longest holiday for all children and parents. But for the health workers its difficult to handle and take care of children with their work stress and fear of contracting COVID 19 to their children .In the beginning children don't understand the situation of why they are being house arrested for. These all provide another stressful life for health care providers.

Summary

Hospital personnel, including caregivers, support staff, administration, and preparedness teams, all will be stressed by the challenges of a prolonged response to COVID-19, and leadership must emphasize the importance of self-care as the center of the response. Transparent and thoughtful communication could contribute trust and a sense of control. Ensuring that workers feel they get adequate rest, are able to tend to critical personal needs (such as care of an older family member), and are supported both as health care professionals and as individuals will help maintain individual and team performance over the long run. Provision of food, rest breaks, decompression time, and adequate time off may be as important as provision of protocols and protective equipment as days turn into weeks, then months. Frequent information and feedback sessions with local managers and the broader facility community, complemented by clear, concise, and measured communication, will help teams stay focused on care and secure in their roles.

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