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Health Care Workers and COVID 19: How to Face Challenges?



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ABSTRACT

During this large threat of COVID19, the Health Care Workers (HCW's) are having more exposure and risk of acquiring an infection while treating the patient directly. Because of a sudden outbreak and exposure to COVID19 infection, most hospital beds have been converted into COVID19 care units to match the critical measures of maintenance. The present study is an attempt to identify the obstacles and current challenges faced by the HCW's and suggestions to reduce the load on their shoulders so that health-care settings run smoothly and effectively. We have searched the scientific literature database using the terms: coronavirus, COVID19, health care workers, and challenges. Articles with appropriate topics and fulfilling the objectives were included in the present study. Day by day COVID19 increases the demand for dependent patient care, so the HCW's are constantly caring for the patients and spend long hours. During the initial stage of the COVID19 pandemic frontline, health-care workers did not adhere the effective personal protection before commencing the treatment. During an emergency response, health-care members have not had enough time for meticulous training and practice and lack of direction and supervision amplify the risk of infection. It may cause significant physiological, psychological and occupational related stress. For the effective management of the COVID19 pandemic either raise or train more health care workers in the intensive care units according to the ratio. Implementing social support led program among HCW's may help to reduce mental stress psychological barriers.

1. Introduction

In COVID 19 crisis, all Health Team Workers (HCW) are putting their full effort and continuously checking on the patients' rights through the pandemic period. During the treatment, HCW's surveillance, and collaboration with health team members, is essential in improving the healing. HCW's at the forefront of health care response were in unmatched positions, making high-stakes decisions for patients and their own lives. The roles like health care provision, health education, and most crucial mental support to the quarantined or admitted persons whose relatives are not with them, are vital in this COVID19 pandemic. This pandemic is testing health care systems and the health care workers, and they are under immense pressure to contain the COVID19. In a COVID19 hospital, it is difficult to treat children and older adults with comorbid illness, cognitive impairments and behavioral symptoms. But the HCW's can make them more comfortable during disease with effective treatment with nursing care. The present article is an effort made to discover the obstacles faced by the HCW's and suggestions to reduce the burden on their shoulders so that health-care settings operate smoothly and effectively.

2. Materials and Method

The terms: coronavirus, COVID19, health care workers, and challenges were used in search of the literature in Web of Science, Science Direct, JAMA, Oxford, BMJ, The Lancet, and PubMed journals to find the articles published till Sept 1st, 2020, with no restrictions to language and region. Open source documents from organizations were also searched. The reference lists of all studies were checked, e.g., WHO, Centers for Disease Control and Prevention (CDC)- Atlanta. Studies with inappropriate topics were excluded. The titles and summaries of the articles collected were screened separately by two authors.

3. Adopting COVID 19 Care Units- New Transformation

Because of sudden outbreak and exposure to COVID19 infection, most of the hospital inpatient beds were converted into the triage room, isolation /holding ward, and respiratory intensive care units as equal to critical care standards. Temporary ambulatory units and tents are prepared in the hospital's space for screening and triage [1]. This step also requires more sophisticated planning, the transformation of health team members by providing basic and advanced training in critical care in the view of COVID19. The HCW's are being trained on PPE-donning and doffing,

infection-control, and handling of high-profile medical equipment in a short time [2,3]. The historical outburst of SARS-CoV2 infection wrecked the complete hospital services within days. Meetings were conducted with health care workers by Teleconferences. They were instructed to check the body temperature daily two times and report online to prevent an intra-hospital outbreak [4]. When COVID19 reaches community spread in a country, community health physicians, officers, and community Nurses should gear up the early identification among the grass-root level for intervening referral system follow up. The rural hospitals may help to safeguard the community people from COVID19 waves [5]. Robust public health nursing infrastructure must be prepared in the state and central levels to afford essential public health services [6].

4. Risk of Infection

Health workers are at the forefront of the response to the COVID19 outbreak and are exposed to hazards that put them at risk of infection. There is neither effective treatment against COVID19 nor any vaccine available. But the rapid spread of COVID19 can be stopped by prevention aspects and the promotion of social distancing. The WHO provides a short-term direction for Infection Prevention and Control (IPC), aiming to prevent the hospital from COVID19 outbreak. IPC policy directs to provide education, hands-on training for the staff and promotes fundamental prevention aspects in the long-term care facilities [7]. Infection prevention is a top priority of any caregiver at all times. IPC is a constant, high concentration required process throughout the day to keep patients, colleagues, and ourselves safe. Pressing an elevator knob makes you stop and think about the increased risk of infection [8]. During the initial stage of the COVID19 pandemic, health care workers did not comprehend the severity of the pathogen, awareness of PPE was not sufficient, and the central issue was inadequate personal protection. So, frontline health-care workers did not adhere to adequate personal protection before commencing the treatment. Large numbers of infected patient's admission, more work intensity with less rest, and a shortage of PPE led to an increase in the transmission of infection to the health care workers. During an emergency response, health-care members have not had enough time for thorough 'training and practice,' and lack of supervision amplifies the risk of infection [9].

Health care providers, although in a confined isolation ward, were anxious about unintentional, occupational exposure, and of transmitting the virus to their equals. Anyone who coughs or sneezes in the ward with simple flu symptoms causes panic. Time after time, they were monitoring their physical condition to evade infecting others. When doing donning and doffing, all were reviewing the steps and fear of doing wrong because it may cause occupational exposure [10]. So, the proficient HCWs can be served as chief mentors and consultants in the hospitals during the COVID19 pandemic. Well trained HCWs in the elected hospitals can make educational videos for the HCW's about infection control measures and the provision of care to infected or suspected patients. Nurse-led quarantine care call centres can be implemented for HCW's under quarantine to ensure the strategy and practice proper infection control actions to prevent the spread of COVID 19 [11]. The HCW's are bearing the disruptive spread of COVID19 directly and combating with all their strength with a shortage. Still, their hard work will not only ease the trouble on the health care delivery system but also help toward the health of the Nation [12]. In COVID19 ICU, Physician and Nurses are expected to perform Nebulization, Oxygen administration, Sample collection, assisting in endotracheal intubation/care, and CPR. These procedures may elevate the infection risk to HCW's. Hence, adequate Air filtering/ exchange and appropriate use of quality PPE help to reduce the risk of COVID19 spread. Double gloving, correct techniques of donning and doffing, right disposal of PPE, and staff sanitization is also an essential element in infection control [13,14].

5. Working with PPE

The hospitals must provide reasonable IPC and PPE supplies like face-masks, gloves, soap, and water, cleaning supplies in sufficient quantity to those involved in care of suspected or confirmed COVID19 patients [15]. In COVID19 units, performing all medical procedures and other related responsibilities wearing PPEs for long hours is a significant physical and professional challenge. Full PPE in an ICU/Isolation COVID19 ward is a sealed airtight shielding kit that causes excessive sweat, so their dress became drench leading to physical stress. The centralized air-conditioning was turned off during summer to reduce the infection. Hence, drench clothes cause excessive sweating. Sometimes health workers experience breathing difficulty, anoxia, and increased heart rate because of heat. Glasses and protective goggles are hazy due to body temperature and difficult to palpate the vein for venepuncture with three-layer gloves and write

in the records. Sometimes the drug and their name must be checked with physician order so close to the face shield. In every hospital, there was no sufficient PPE, so the HCW's were trying to save them by doing long hours duty and avoid using the restroom because if we can't protect ourselves, how can we treat our patients [10]. The President of the trained nurses association of India reported that the nurses were forced to reuse the PPE in non-COVID19 wards. Many organizations were instructing the underpaid staff nurses to buy the PPE at their own cost. They are working with dedication to overcome the COVID19, find themselves in danger that nobody will support if they fell into poor health [16].

Sometimes, HCW's are wearing adult diapers to decrease the utilization of PPE and consuming less water and food during their shift. They should speak louder to communicate with patients and HCW's with an N95 mask, and their skins & facial features were momentarily blemished. Many HCW's also cut and shaved their hair to reduce cross-infection [17].

6. Buckled Work Schedule / Shift

Physicians and nurses require ideal work pressure and fortitude to maintain the Quality of Patient Care. In the case of stretched working schedules, they may not add effective standard service, which can cause an adverse effect on patient care and the health care system. Hence, definite 'working schedule hours' of the HCW's and 'ideal work hours per shift' to be prepared. Excessive working hours may be associated with less attention to the patients in the intensive care unit, and this can be managed by assigning more staff according to patients [18]. Making duty rotation during an excessive inpatient admission with COVID19, the administrator must be concerned about the factors which will affect each shift schedule. It must be feasible as per the hospital setting. Most of the Staff prefer continuous duty with overlapping by one hour at the end of each shift. So, that they may not be wasting the hospital resources, frequently performing a procedure, exposed more to the infection [19]. Now a day's most of the hospitals are postponing the regular OPD, cancelation of planned surgeries except emergency and labor OT, activating the workforce to tackle tele-health and quarantine due to shortage of staff and different work schedules. So, the importance of critical care unit and emergency is always kept at high-level clinical care activity during the COVID19 pandemic. Nurse shortage and their turnover make remaining health care workers take further responsibilities above their comfort. So, the nurses

may divide a significant workload among themselves, and pushing others to do the remaining work causes less exhaustion with job satisfaction [20].

7. Shortage of COVID 19 Team

Physicians are playing a significant role in health care management. They have to be enough for essential and primary treatment. There was a shortage of surgeons, obstetricians & gynecologists' and pediatricians at the community health center level because of workforce shortages and absenteeism [21,22]. Accessibility of HCW's is also getting more in demand because they are getting ill or quarantined. So, the medical and paramedical students were undergoing various fast track courses by continuing education for their pandemic placement [23,24].

The employment and immigration of nurses to developed countries, and other concerns like nurse burnout, unequal growth, raising individual life expectancy, violence in health settings also increases the demand of nurses [25]. ICN and WHO emphasizing the significance of nurses to remain protected through their nursing care measures. Nurses are always showing the obligation and kindness by putting their life at risk in COVID19 duties. The government also needs to take steps aptly to deal with the forthcoming nurses' shortages with adequate incentives [26]. In India, the nurse-patient ratio was 1:483, implying a lack of two million nurses due to job insecurity for the contractual nurses, the minimum wage in both the government and private hospitals, unfavorable work environment, and infrastructure amenities [27].

Due to a shortage of staff nurses, the retired nurses were called to continue their job, and most of the nurses delayed their retirement so they can contribute their roles in the improvement of patient care during COVID19. The Solution for managing the COVID19 pandemic is only increasing and training the intensive care staff as per ratio [28,29]. Effective infection-controlled environments, policies, and incentives promote increased staff retention during outbreaks [30]. There is a massive shortage of nurses due to the demand-supply gap in the local level institutions, and because of the current crisis, the working staff is also giving resignation for stress and parents' concern [31,32]. A solution to managing the shortage of health care staff would be adherence to the roster, overtime with remuneration, changing nurse-patient ratio, and an intelligent placement for the staff who are having experience in ICU, Triage, and emergency.

These staff nurses can manage well and have adequate skills to manage COVID19 with just retraining. Meanwhile, other staff nurses can undergo structured protocol up-skill training regarding the care of COVID19 with the experts [14].

8. Ethical Challenge

COVID19 guidelines should provide clear direction for HCW's about when PPE is essential and encourage practical use. Organizations should prepare a policy about holdup or deny the treatment when the PPE is not available to minimize the risk for HCWs and others. In the actual situation, the HCW's may result in the dilemma of whether to save critically ill patients' life with often inadequate or poor-quality resources and uncontrolled contagion. But PPE is vital to guard themselves to treat more patients and liable to the Medical and Nursing profession with morals. This likely situation should not be underestimated, and at the same time, HCW's perform all Patient-related care to minimize distress and to give support hand to the staff who can act safe and sound [33,34].

Withdrawing or withholding emergency support to the patient is honesty more troubling for HCW's because they are accountable for their every action. So, the legal regulations and professional guidelines must be strong enough to save the HCW's. American Nurses Association (ANA) recognizes the hazard of the COVID19 pandemic and directed the nurses not to perform the duties if they feel unsafe due to lack of PPE, support of family and personal needs, and concern about ethical and sound shelter [35]. As per national guidelines (Royal College of Physicians, 2020), the physician should establish the decision inevitably whether the treatment can be contributed to the patient or not. This act also makes the public aware that doctors and nurses can ignore certain patients under specific criteria [36].

9. Psychosocial Challenge

There is more risk of development of psychological symptoms (depression, anxiety, insomnia, and distress) in HCW's who are in direct contact with COVID19 cases. Hence, they need individual intervention to augment the mental well-being of physicians, nurses, and Frontline workers requiring particular care [37]. HCW's feel glad and respite when the patient is showing good responses to the treatment. However, they feel powerless if the condition becomes worse. The patient's death causes significant mental trouble to the HCWs; hence they are exercising

daily with emotional distress and sorrow. Offering sustenance to the family and commiseration to the deprivation of the nearest one is another worry [10]. Mental Health of the HCW's must be pushed and make a specific sound supporting system. If burnout exceeds among them, they may away from the workforce, policymaking, and other health care delivery purposes. HCW's should be acknowledged and made discernible during this crisis [38].

HCW's are always having the motivation to save the patient's life. Still, if patients are dying in the bunch, it's challenging to see them and become a less personal and professional realization. Notably, the young team experienced a severe psychological crisis due to less experience in the critical care unit. In the COVID19 era, the HCW's are losing their empathy due to extreme physical and emotional stress; those results in "compassion fatigue". So, they should support themselves when facing misery, panic, and anxiety to control their psychological distress and negative coping strategies. Hence, they should pass through vigorous counseling to prevent Post-Traumatic Stress Disorder (PTSD) [39-41].

The nurses are always worried about insufficient workforce and the absence of coordination while caring for deteriorates patients. Most of the nurses are ready to face death, but they are worried about the future of their family members, i.e., bidirectional concerns. The stress can be overcome by self-confidence, serenity, leisure, social support, and adaptation of the situation [42]. This pandemic has strained the 'already stressed' health care system. They are equally providing care to critically sick patients, intervening triage protocols, communicating with family members, and doing care of dying patients. The HCW's were working with severe burnout and stress because they are forced to work in the units with a lot of new protocols, which is not much familiar to them. Contradictory protocols and guidelines are available in an online database regarding infection prevention control. So, the Hospital experts should adopt definite Infection Prevention Control for the hospital managers, HCW's including nurses [44]. Implementing Social support led programs among HCW's may help to reduce mental stress/psychological barriers. This action promotes significant emotional resilience, and they should be advised to share their feelings with each other time to ventilate the negative thoughts [45].

10. Conclusion

Even though there was unfairness against HCW's in public, they are served with commitment and compassion and preoccupied with their everyday work. They are fighting with COVID19 with significant challenges. Despite the shortage of staff and protective equipment, they are in a condition to perform additional study during this COVID19 encounter. There is more chance of physical exhaustion, depression, insomnia, and post-traumatic stress among health care workers involved in the COVID19 battle. During the initial period, pessimistic emotions were the foremost issues, but positive emotions steadily improved. Self-coping style, emotional support, and professional growth are essential for physicians and nurses to preserve mental wellness. In battle, no one will stand in front; nevertheless, HCW's are proud of their profession now and supporting the Nation and the world. They must be recognized and honor for the selfless work.

11. Ethical Approval: Not required

12. Conflicts of Interest: The authors declare no conflicts of interest.

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