RESEARCH ARTICLE

CHALLENGES FACED BY NURSES DURING COVID 19 PANDEMIC

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ABSTRACT

Background: COVID-19 has become a great public health concern in the world and has been declared a pandemic. It is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). SARS-CoV-2 is a positive-sense single-stranded RNA virus. COVID-19 pandemic has posed a major challenge to the health- care systems across the world. During this acute phase of the pandemic, health care workers have been working day and night to meet the need of the hour and fulfil the requirements of the covid patients and they have been facing various challenges during this pandemic. A study was done to find out the various difficulties faced by nurses anf the possible ways to cope up with the problems. **Methods**: A descriptive research design was used to identify the challenges faced by Indian nurses by using an electronic web-based questionnaire for data collection by using Google forms, with a consent form appended to it. The questionnaire was available to the participants through social media (Whats App, Facebook and Instagram). Study participants included 100 nursing officers of India working in the hospitals dedicated to the admission and hospitalization of COVID-19 patients. **Results:** Findings revealed that 42 nursing officers faced severe challenges while caring for covid-19 patients followed by moderate challenges by 34 nursing officers and mild challenges by 24 nursing officers. **Conclusion:** The study concluded that maximum nursing staff faced severe challenges while serving Covid-19 patients.

INTRODUCTION

COVID-19 has become a great public health concern in the world. The COVID-19 or the coronavirus pandemic, is an ongoing global pandemic, which is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). SARS-CoV-2 is a positive-sense single-stranded RNA virus that is contagious in humans.[1] COVID-19 first case was reported in Wuhan, China in Dec, 2019 and subsequently spread worldwide [2.] It was officially named severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) by the International Committee on Taxonomy of Viruses based on phylogenetic analysis On February 11. The World Health Organization declared a Public Health Emergency of International Concern regarding COVID-19 on 30 January 2020 , and later declared a pandemic on 11 March 2020 [3].

First case of COVID-19 infection was reported in Kerala, India. On January 27, 2020. The modes of transmission for SARS-CoV-2, are droplet, airborne and contact [4]. The severity of COVID-19 symptoms is highly variable, ranging from unnoticeable to life-threatening. According to the National Institute of Health's COVID-19 treatment guidelines, People are characterized as having symptoms of COVID-19 such as cough, fatigue, or loss of taste or smell and in Severe COVID-19 trouble breathing, blue lips or a blue face, persistent pain or pressure in the chest, confusion, excessive drowsiness was reported.[5] Recommended preventive measures include social distancing, wearing face masks in public, ventilation and air-filtering, hand washing, following respiratory etiquettes and monitoring and self-isolation for people exposed or symptomatic. Since the middle of March 2021, the second wave had started, and on 6 may, the highest number of cases (412262) had been identified in India[6].

Medical supplies were the first to be negatively impacted during the pandemic (especially masks, protective gear, and ventilators). Notably, in developing countries, medical supplies were not stocked for more than a few weeks at a time. Further, PPE had to be reallocated to support the frontline health workers (facilitated by suspending all elective surgery). The COVID-19 pandemic posed a major challenge to the health-care systems across the world. During this acute phase of the pandemic, health care workers were working tirelessly day and night to cater their services to covid patient[7]. Nurses are the most vulnerable group being in close contact with the infected people and unfortunately we lose many of the workers to the pandemic. The nurses are committed to serve the society and the biggest challenges they face is to cure and care for the people affected with COVID-19. Nurses are one of the strongest pillars of the health-care delivery system and are always ready to serve the society. Nursing professionals across the country are facing various challenges. Moreover, unclear disease status and uncertainty regarding COVID-19 treatment and care policies exacerbate stress on nurses, affecting nursing care quality and even causing resignations. Hence researcher felt need to explore the challenges faced by nurses.

METHODS

A descriptive research design was used to identify the challenges faced by Indian nurses by using an electronic web-based questionnaire for data collection by using Google forms, with a consent form appended to it. The questionnaire was available to the participants through social media (Whats App, Facebook and Instagram). Study participants included 100 nursing officers of India working in the hospitals dedicated to the admission and hospitalization of COVID-19 patients. The participants were encouraged to roll out the survey to many people as possible. On receiving and clicking the link the participants got auto directed to the information about the study and informed consent. Participation in this study was voluntary and the identification information of participants has not been recorded anywhere on the questionnaire. The online self-reported questionnaire developed by the investigators contained two sections. The first section included demographic data of the participants. The second section identified the challenges faced by nursing officers while dealing with COVID– 19 patients.

RESULTS

Table 1 shows the distribution of staff nurse as per socio demographic variables. It was observed that majority of nurses were less than 30 years of age, residing in hostels and PG's and had experience between 3-7 years and served all categories of Covid-19 patients for the duration of 6 months to one year. Figure 1 depicts the percentage distribution of challenges faced by nurses during Covid-19. It revealed that majority of nurses faced severe challenges i.e 42 % followed by moderate challenges by 34% of nurses and mild challenges by 24 % of nurses.

DISCUSSION

It is an established fact that staff working in healthcare sector are the frontline workers who bear the brunt of increased workload during any pandemic, epidemic or onslaught of any

disease globally. It has been documented in previous studies that excessive work load and fear about health of family members also leads to stress which manifests as insomnia, increased physical weakness, fatigue, decreased immunity, increased susceptibility to infections. Covid 19 pandemic hit the world like a tsunami and had the healthcare sector on verge of collapse. Everybody was left groping in dark with insufficient knowledge about the disease, management and infection control in the present scenario. The lacunae in basic training, insufficient workforce, funds, fear of infection to self, loved ones and increasing mortality data also led to increased stress and deterioration of mental health. We observed that paucity in quantity and quality of PPE (60%), lack of training in protocols about doffing, donning of PPE (75%), and reuse of N-95 mask (85%) increased the rate of infection among healthcare professionals involved in direct care of the COVID 19 infected patients which was similar to the study done in 2020 [8] in which more than 50 percent of the participants showed concern related to resourece avalibility and training. Wearing PPE for a long time resulted in decreased oral intake in terms of food and fluid, sweating (86%) and holding of urine and faeces(75%) which further had a deteriorating effect on health and immunity as was also evident in studies done earlier by Agarwal, et al (2020)[9], stated that wearing of PPE kit and n 95 was associated with excessive sweating (100%), fogging of goggles, spectacles, or face shields (88%), suffocation (83%), breathlessness (61%), fatigue (75%), headache due to prolonged use (28%), and pressure marks on the skin at one or more areas on repeated use (19%). Co-ordination failure amongst the administration sections was quite prevalent which resulted in chaos at workplace (78%). Both medical and paramedical staff was unsure about the safety protocols to decrease the risk of infection i.e (86%) as it is evident in other studies also.

Adversities were also faced by the health care sector employees in terms of social acceptance, being told to vacate the premises along with social stigma of being carrier of infection. Lack of empathy by the people around added up to the mental trauma already being faced (89%) which was quite like the results depicted in the study done at the early stages of the COVID-19 in Wuhan (Kang et al., 2020)[10] depicted that 34.4% (342 of 994) of medical and nursing staff had mild mental health disturbances where as 6.2% (62) had severe disturbances, more over another study (Cai et al., 2020)[11] also showed that 14.1% of health care workers had psychological abnormalities related to work pressure. Dissatisfaction, exhaustion, long duty hours and lack of appreciation was also quite evident (80%) as stated in a previous study that excessive work pressure was responsible for mental distress, insomnia, physical weakness as well as fear of infection of the healthcare professionals [12]. A cross sectional study done in Italy Enmule revealed that (71.2%) had scores of state anxiety, 88 (26.8%) had clinical levels of depression, 103 (31.3%) of anxiety, 113 (34.3%) of stress, 121 (36.7%) of post-traumatic stress. Regarding burnout, 107 (35.7%) had moderate and 105 (31.9%) severe levels of emotional exhaustion; 46 (14.0%) had moderate and 40 (12.1%) [13].

RESULTS

It was found that majority of the nurses faced severe challenges while serving Covid-19 patients. Common challenges faced by nurses across the country were: shortage

Table 1. Distribution of staff nurses as per socio-demographic variables

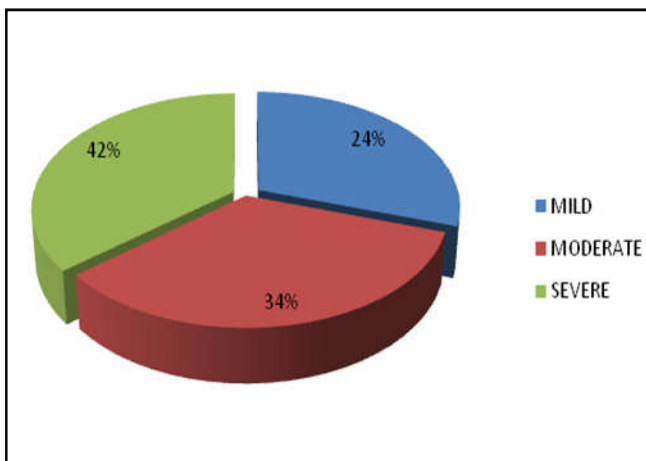|	N=100
Sociodemographic Variables	f
Age (in years)	
Less than 30	54
31-40	42
41-50	04
Educational Status	
ANM	04
GNM	20
B.Sc Nursing	46
Post Graduation and Above	30
Gender	
Female	84
Male	16
Residence	
With family	40
Hostel / PG	60
Marital status	
Married	50
Unmarried	50
Experience	
Less than 3	16
3- 7	40
7-10	34
More than 10 years	10
You have been caring covid patient approximately)	
< 3 months	26
3- 6 months	16
6- 12 months	32
More than 1 years	26
Which Type of patient you have treated most often	
Mild covid patient	00
Moderate covid patient	14
Severe covid patient	26
All of the above	60

Figure 1. Percentage distribution of challenges faced by nurses

of personal protective equipments (PPEs), inadequate training to deal with COVID -19 patients, lack of accommodations, food and transport facilities for nurses, and separate screening, quarantine and admission facilities for nurses in hospitals. It is essential to empower nurses with the right education and skills in handling crisis so that they can confidently deal with challenges.
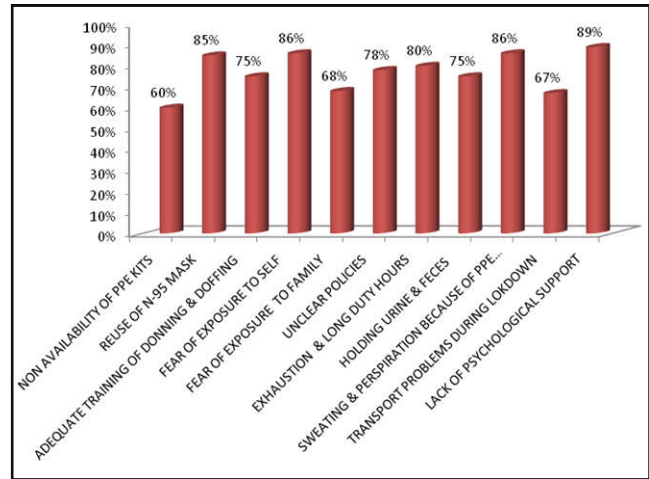

Figure 2. Depicts the major challenges faced by nurses and its percentage

Arrangement of transport facilities to and from the hospital ensured safe travel for the required number of nursing staff. Quarantine beds and facilities for personal hygiene had been assigned in designated areas for nurses who were suspected of having contracted the infection to rest in quarantine when awaiting the reports. An adequate number of PPEs has been made available in the required areas, their judicious use was ensured by personal communication as well as logbooks maintained in these areas; this also helped in restricting the visits of health-care personnel to isolated areas. Communication with the management on a day-to-day basis should be done with formation of the COVID action group. Standard operating procedures and infection control policies formulated by experts should be made readily available to all nurses for reference, whenever required. Regular visits from the supervisors and daily monitoring of the clinical areas will motivate the nursing staff to adhere to their duty schedules. Telephonic counseling should be offered whenever required to help reduce feelings of guilt and to clear doubts.

Social acceptance from neighbours and colleagues can act as a lifeline in fighting with the stress. Though the experience of health care professional was daunting during the pandemic but trying to cope with above problems by resorting to kindness, support groups and putting their faith in God may help. Providing the health care professionals time to time trainings regarding infection control and adequate policies are also needed. Moreover, adequate funds and resources mobilisation is need of the hour to combat with the problems associated with lack of infrastructure and supplies as required. Incentives such as state sponsored insurance policies, financial support can also mitigate the emotional distress and fear of "who will bear the financial requirements of my family if something happens to me". Letters of appreciation by the organisation and sensitization of the society to the needs of the health care workers would motivate them to contribute more during such situations.

CONCLUSION

Thus we suggest that as this pandemic rages with many more unknown adversities lurking behind, health care workers will continue to face social, mental, physical problems related to work and personal front. The health care sector need special consideration and formulation of policies to overcome the

same. Flexible, adjustable policy and protocols can be made by hospital administrators and nursing leaders to overcome these challenges faced by nurses. Nurses are determined to win this war and make significant contributions to the health care of the society.

ACKNOWLEDGEMENTS

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