



A STUDY TO ASSESS THE WORK STRESS OF INDIAN NURSES HELPING IN COMBATING COVID-19 PANDEMIC IN RAJASTHAN, INDIA

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Background of the study:

COVID 19 (coronavirus disease 2019) pandemic has compromised the wellbeing of millions of people worldwide. Its high transmission rate causes significant stress and emotional trauma for the frontline healthcare workers (HCWs) who are directly involved in the treatment and care of COVID 19 patients. They are under the constant stress of acquiring infection and transmitting it to their family members. The unclear nature of the disease and lack of definitive treatment further adds on to the stress of HCWs. Past experiences of epidemics and pandemics indicate that the recent COVID 19 outbreak can have a significant psychological impact on the frontline HCWs. But, the stress of each pandemic varies because of the different rates of infectivity, mortality, and availability of treatment. It also varies among different geographical regions due to differences in local climate, prevailing cultural practices and beliefs, and available resources. Also, individuals from different professions, age groups, and gender can experience a different level of stress and use different coping strategies. There are limited studies on the psychosocial impact and coping strategies of COVID 19 among the frontline HCWs of India and no study on HCWs of Rajasthan. The experience and dilemma of frontline HCWs working in personal protective equipment (PPE) suit has not been studied in detail before. So, the present study was planned with the primary objective to know the proportion of different types of psychosocial impact, Sources of stress, and coping strategies among frontline HCWs working in PPE suit in Western Rajasthan during the COVID 19 outbreak.

Frontline healthcare personnel, mostly registered nurses, are examples of health workers who play an important part in the process of giving care to infected individuals. Nurses have a greater risk of developing mental health issues because of the nature of their work, which often requires them to perform more than their capabilities and includes the possibility that they may themselves get infected. According to the available research, frontline employees have an alarmingly high frequency of mental health issues, which are mediated by a wide variety of biopsychosocial variables.⁴ In spite of this, the mental health concerns of frontline nurses and other health professionals are often ignored.⁵ There is a common assumption that this demographic segment faces this kind of catastrophe on a regular basis, and as a result, they should be able to handle themselves and their situation well. The COVID-19 pandemic was the most recent addition to the list of infectious diseases that may cause widespread epidemics. Mental health problems are associated with patients, particularly with those who are associated with quarantine/ isolation or social distancing, despite the fact that the psychological effects of the pandemic are becoming more publicly recognised and that attempts are being made to ameliorate such effects. There is still a shortage of scientific literature on the psychological effect of the pandemic (particularly COVID-19) on frontline nurses.⁶ India was not exempt from being susceptible to the effects of COVID-19 or the medico-socio-economic difficulties that were associated with it. In light of the limited resources at hand for the availability of healthcare in the country, a number of measures have been taken. These measures include the deployment of a lockdown, the sharp decline of daily schedule outpatient services, the temporary suspension of elective surgeries, gyroscopic duty shifts in phases, and many other similar measures. The lessons that were learned from the experiences of other countries that were affected earlier and the steps that those countries took to alleviate the psychological impact that COVID-19 had on nurses can serve as a guide for India in the context of the strategy and execution of countermeasures to Chettinad Health City Med. J. 2023; 12(3) mitigate the medico-psychological impact of COVID-19 among frontline workers. Nurses may experience severe psychological strain. Moreover, it has been noted that those who work in hospitals and treat patients who have COVID-19 have a self perception of being ostracised and rejected by others (such as family or friends), due to the fact that they treat patients in hospitals.⁷ Some research, like that

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conducted by Hernandez et al.⁸ and others, has shown a connection between the experience of stress and the stigma that nurses and patients with infectious diseases face. To the greatest of our understanding, there have been no previous investigations carried out up to this point in India that investigate the stigma and perceived stress among medical professionals employed at COVID-19-designated facilities. At the moment, much of the attention that has been paid to research on the epidemic situation caused by COVID-19 has been directed toward epidemiological inquiry, methods of prevention and control, and methods of diagnosis and treatment.⁹ The amount of studies that have been carried out to investigate the mental health problems that clinical medical practitioners faced during the COVID-19 pandemic is rather low. The current study aimed to investigate the relevant negatively affecting variables related to the creation of psychosocial interventions for Indian nurses so that they are able to adapt to scenarios involving public health emergencies. Additionally, the purpose of the study was to examine the work stress among Indian nurses in Sikar who were helping in the fight against the COVID-19 virus.

Materials and method:

This survey study used a cross-sectional approach in which 179 nurses from Sikar responded to a questionnaire that was administered online. The objective of this study was to assess the work stress of the Indian nurses in Sikar who were helping in combating the COVID-19 pandemic. Instruments for the collection of data, such as the Self rating Anxiety Scale (SAS) and the Indian edition of the Stress Overload Scale (SOS), were used. In order to investigate the potentially relevant influences, explanatory single-factor correlation analysis, as well as multiple regression analysis, were used. The hospital's ethics committee clearance was obtained before the start of data collection after which formal consent from hospital in-charges was obtained. Data were collected from the nurses who worked at hospitals that supported COVID-19 treatment in Sikar after receiving online informed consent. The criteria for inclusion were as follows: participants had to be nurses from the hospital in Sikar who were actively involved in the fight against COVID 19; participants had to have joined the clinical frontline to partake in the rescue work; and participants had to have volunteered to take part in this study. The nurses, numbering around 220, were asked to take part in

this research. Data were collected from May 1, 2020 to May 31, 2020. A total of 179 **nurses** participated in the study as a consequence of a response rate of 81.36%.

Results:

There was a favourable correlation between this nurse group's ratings on the Stress Overload Measure and their scores on the Self rating Anxiety Scale. It has been found that working hours per week for most nurses (37.99%) ranged from 55 to 60 hours which was the most critical factor for the rising work stress in the sampled nurses. Rest time, that is sleeping time, was also getting reduced and nurses were not able to get the essential sleep, which clinically raised the work stress. Among the participants, 24.02% were not able to take a proper diet, which may trigger work stress. Most of the nurses had dependent children in the family who were mainly depending on them, and due to the increase in duty hours and severities of contamination, nurses were under tremendous stress. The feeling of financial insecurity, if any mishap happened to them, also increased the stress in 51.40% of nurses. Overall findings showed that the level of stress was high among the nurses who experienced any financial insecurity owing to mishaps, did not have adequate sleep, were not able to take a proper diet, performed duties for long periods, and had dependent children at home. The findings of the present research identify a positive correlation between work stress and working hours (as working hours increase, the work stress level also increases). Proper sleep and work stress also showed a positive correlation (good sleep reduces work stress). The findings of the present research identify a positive correlation between work stress and working hours (as working hours increase, the work stress level also increases). Proper sleep and work stress also showed a positive correlation (good sleep reduces work stress).

Conclusion:

The Coronavirus poses a significant threat to the general health of people all around the world. The COVID-19 pandemic is difficult to contain and very contagious. It poses significant difficulties for social, preventive and control efforts, as well as for therapy on the frontlines. At times of public health emergency, special attention should be paid to the mental strain experienced by nurses. In this research, the levels of occupational stress experienced by nurses in Sikar who were assisting in the battle against the

COVID-19 pandemic were explored. In general, there was a lot of pressure put on the nurses in Sikar who were involved in treating COVID-19 patients. The total count of working hours per week, dependent kids in the household, the perception of financial insecurity in the event of an accident, and anxiety were the primary and significant factors that affected the stress of nurses. The study provides valuable insights into the impact of the COVID-19 pandemic on nurses. The findings of the study can inform nursing practice and policy to better support nurses and improve the quality of care for patients during pandemics. It did not matter if the participants were the only child in their families or not. The research also presented and offered some approaches to alleviate the stress, and provided some tactics that may serve as a model for nurses in other countries who are attempting to maintain their mental health.

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