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To assess basic knowledge of covid-19 and impact of covid-19 on mental health status of nursing staff working in covid-19 hospital atmosphere

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Abstract

Introduction: Coronavirus disease 2019 (COVID-19) is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Common symptoms include fever, cough, fatigue, shortness of breath, and loss of smell and taste. While the majority of cases result in mild symptoms, some progress to acute respiratory distress syndrome (ARDS) possibly precipitated by cytokine storm, multi-organ failure, septic shock, and blood clots. Nursing is a profession within the health care sector focused on the care of individuals, families, and communities so they may attain, maintain, or recover optimal health and quality of life. Nurses may be differentiated from other health care providers by their approach to patient care, training, and scope of practice. Nurses develop a plan of care, working collaboratively with physicians, therapists, the patient, the patient's family, and other team members that focuses on treating illness to improve quality of life. In the United Kingdom and the United States, advanced practice nurses, such as clinical nurse specialists and nurse practitioners, diagnose health problems and prescribe medications and other therapies, depending on individual state regulations.

Material and Method: Descriptive and co-relational approach was used for the study. The subject for the study was n=71 Nursing staff by using convenient sampling technique. A well prepared structured questionnaire was prepared by using Google link and used to collect the data, which comprise of section- A dealt with socio demographic data. Section- B dealt with assessment of the basic knowledge of Covid-19 among the Nursing staff and section -C dealt with assessment of impact of Covid-19 on Mental Health Status of Nursing staff working in Covid-19 Hospital Atmosphere by using standardize questionnaire by using Hospital Anxiety and Depression Scale (HADS).

Results: Study findings that majority 35.21% that is 25 nurses had borderline abnormal depression status, 33.80% that is 22 nurses had borderline abnormal depression status and 30.98% that is 22 nurses were not having any depression status where as majority 43.66% that is 31 nurses were shows the normal anxiety status, 32.39% that is 23 nurses had abnormal anxiety status and 23.94% that is 17 nurses were having borderline anxiety status.

Conclusion: At conclusion study reveals that majority 43.66% that is 31 nurses were shows the normal anxiety where as majority 35.21% that is 25 nurses had borderline abnormal Depression status.

Keywords: Covid-19, staff nurse, mental health status, hospital

Introduction

Coronavirus disease 2019 (COVID-19) is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). It was first identified in December 2019 in Wuhan, Hubei, China, and has resulted in an ongoing pandemic. The first confirmed case has been traced back to 17 November 2019 in Hubei. As of 8 August 2020, more than 19.2 million cases have been reported across 188 countries and territories, resulting in more than 718,000 deaths. More than 11.6 million people have recovered.

Common symptoms include fever, cough, fatigue, shortness of breath, and loss of smell and taste. While the majority of cases result in mild symptoms, some progress to acute respiratory distress syndrome (ARDS) possibly precipitated by cytokine storm, multi-organ failure, septic shock, and blood clots. The time from exposure to onset of symptoms is typically around five days, but may range from two to fourteen days.

The virus is primarily spread between people in proximity, most often via small droplets produced by coughing, sneezing, and talking. The droplets usually fall to

the ground or onto surfaces rather than travelling through air over long distances. However, the transmission may also occur through smaller droplets that are able to stay suspended in the air for longer periods of time in enclosed spaces, as typical for airborne diseases.

Nursing is a profession within the health care sector focused on the care of individuals, families, and communities so they may attain, maintain, or recover optimal health and quality of life. Nurses may be differentiated from other health care providers by their approach to patient care, training, and scope of practice. Nurses practice in many specialties with differing levels of prescription authority. Many nurses provide care within the ordering scope of physicians, and this traditional role has shaped the public image of nurses as care providers. However, nurse practitioners are permitted by most jurisdictions to practice independently in a variety of settings. Since the postwar period, nurse education has undergone a process of diversification towards advanced and specialized credentials, and many of the traditional regulations and provider roles are changing.

Nurses develop a plan of care, working collaboratively with physicians, therapists, the patient, the patient's family, and other team members that focuses on treating illness to improve quality of life. In the United Kingdom and the United States, advanced practice nurses, such as clinical nurse specialists and nurse practitioners, diagnose health problems and prescribe medications and other therapies, depending on individual state regulations. Nurses may help coordinate the patient care performed by other members of a multidisciplinary health care team such as therapists, medical practitioners, and dietitians. Nurses provide care both interdependently, for example, with physicians, and independently as nursing professionals.2

Roy D *et al*. published an online article in the Asian Journal of Psychiatry to study the level of knowledge, attitude, anxiety & perceived mental healthcare need in Indian population during COVID-19 pandemic an cross-sectional, observational study with snowball sampling technique. An online semi structured questionnaire sent through emails, WhatsApp and other social media to the participants. The online self-reported questionnaire consisted of four sections; awareness (knowledge), attitude, anxiety and perceived mental health care needs among 662 responders who had a moderate level of knowledge about the COVID-19 infection and adequate knowledge about its preventive aspects. The attitude towards COVID-19 showed peoples' willingness to follow government guidelines on quarantine and social distancing. The anxiety levels identified in the study were high. More than 80% of the people were preoccupied with the thoughts of COVID-19 and 72% reported the need to use gloves, and sanitizers. In this study, sleep difficulties, paranoia about acquiring COVID-19 infection and distress related social media were reported in 12.5%, 37.8%, and 36.4% participants respectively. The perceived mental healthcare need was seen in more than 80% of participants. The study felt that there is a need to intensify the awareness and address the mental health issues of people during this COVID-19 pandemic.3

A cross-sectional, survey-based, region-stratified study conducted by Lai J *et al*. in China included 1257 health care workers in 34 hospitals. The degree of symptoms of depression, anxiety, insomnia, and distress was assessed by the Chinese versions of the 9-item Patient Health Questionnaire, the 7-item Generalized Anxiety Disorder scale, the 7-item Insomnia Severity Index, and the 22-item Impact of Event Scale–Revised, respectively. Of all participants, 764 (60.8%) were nurses, and 493 (39.2%) were physicians; 760 (60.5%) worked in hospitals in Wuhan, and 522 (41.5%) were frontline health care workers. A considerable proportion of participants reported symptoms of depression (634 [50.4%]), anxiety (560[44.6%]), insomnia (427 [34.0%]), and distress (899[71.5%]). Multivariable logistic regression analysis showed that there was a lower risk of experiencing symptoms of distress in participants from outside Hubei province compared with those in Wuhan (odds ratio [OR],0.62;95% CI,0.43-0.88; p=.008). The study concluded that nurses, women, frontline health care workers engaged indirect diagnosis, treatment, and care of patients with COVID-19 were associated with a higher risk of symptoms of depression.4

Present study was develop "To assess basic knowledge of Covid-19 and impact of Covid-19 on Mental Health Status of Nursing staff working in Covid-19 Hospital Atmosphere."

Objectives of the study
1. To assess the basic knowledge of Covid-19 among the Nursing staff working in Covid-19 Hospital Atmosphere.
2. To assess impact of Covid-19 on Mental Health Status of Nursing staff working in Covid-19 Hospital Atmosphere.

Material and Method
Descriptive and co-relational approach was used for the study. The subject for the study was n=71 Nursing staff who is working in the as a clinical nurse or a nursing tutor in the designated institute where Covid-19 patient are being admitted and getting the treatment for their disease by using convenient sampling method. A well prepared structured questionnaire was prepared by using Google link and used to collect the data, which comprise of section- A dealt with socio demographic data. Section- B dealt with assessment of the basic knowledge of Covid-19 among the Nursing staff and section -C dealt with assessment of impact of Covid-19 on Mental Health Status of Nursing staff working in Covid-19 Hospital Atmosphere by using standardize questionnaire by using Hospital Anxiety and Depression Scale (HADS).

Inclusion Criteria
▪ Nursing Staff who are
▪ Below the age group of 40 years
▪ Willing to participate and co-operate in the study.
▪ Able to understand and follow Marathi and English.
▪ Present during the data collection period.

Exclusion Criteria
▪ Nursing Staff who are
▪ Above the age group of 40 years
▪ Not working in the Covid-19 hospital atmosphere.

Sattistical analysis
The collected data was organized, tabulated and analyzed by using descriptive statistic that is in frequency, percentage.

Results
Demographic finding includes (39%) belongs to the age group of 26-30 years. Majority of the sample (86%) were

belongs to the Hindu religion. Highest percentages (72%) of nursing staff were married. Highest percentages (73%) of nursing personnel were from the designation of clinical nurse and 27% of nursing staff were from nursing tutor designation. More than half of the samples (56%) of them are of females.
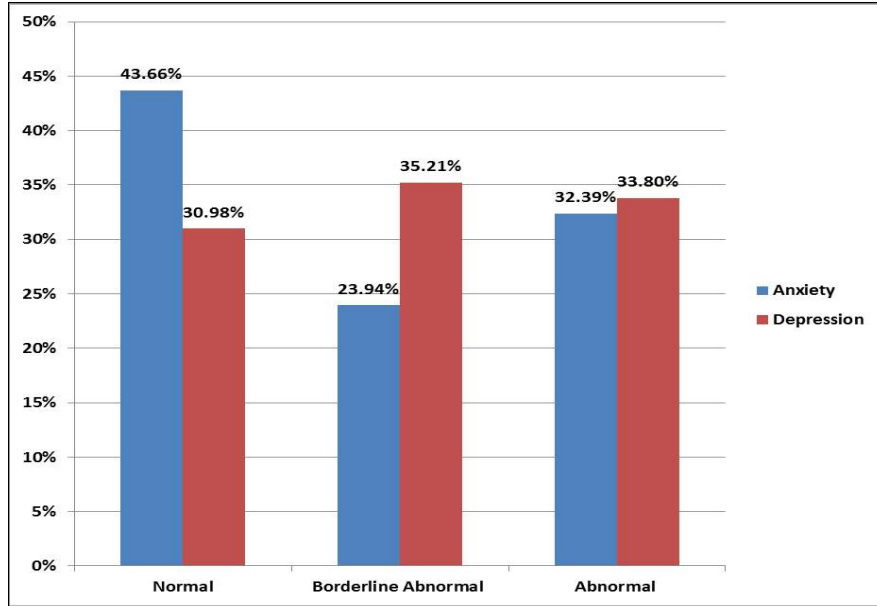

Fig 1: Assessment of impact of Covid-19 on Mental Health Status of Nursing staff working in Covid-19 Hospital Atmosphere

Table 1: Distribution of level of Depression working during Covid-19

n=71

SN	Depression Status	Frequency	Percentage (%)
1	Normal	22	30.98%
2	Borderline Abnormal	25	35.21%
3	Abnormal	24	33.80%
	Total	71	100%

Distribution of level of depression among nursing staff working during Covid-19 shows that majority 35.21% that is 25 nurses had borderline abnormal depression status, 33.80% that is 22 nurses had borderline abnormal depression status and 30.98% that is 22 nurses were not having any depression status. It is interpreted that most of nurses the under study had borderline abnormal depression status working during Covid-19 Duty.

Table 2: Distribution of level of Anxiety working during Covid-19

n=71

SN	Depression Status	Frequency	Percentage (%)
1	Normal	31	43.66%
2	Borderline Abnormal	17	23.94%
3	Abnormal	23	32.39%
	Total	71	100%

Distribution of level of anxiety among nursing staff working during Covid-19 shows that majority 43.66% that is 31 nurses were shows the normal anxiety status, 32.39% that is 23 nurses had abnormal anxiety status and 23.94% that is 17 nurses were having borderline anxiety status. It is

interpreted that most of nurses the under study were not having an any anxiety working towards Covid-19 duty.

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