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A cross sectional survey Study regarding Psychological impact of COVID-19 outbreak on front line nurses working in various hospitals of Madhya Pradesh India-A pilot study

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Abstract
This pilot study was cross-sectional survey intended to check the Psychological impact of COVID-19 outbreak on front line nurses. 40front line nurses were involved in the study. Five standardize scales were used for on line data collection. The criteria regarding participation in study was to be registered nurses who hold either a full-time job status and worked in COVID -19 wards. Survey questionnaires were distributed to 50 nurses and 40 responses were received (80% return rate) online google form was sanded as means of data collection. Percentages, means and standard deviations were the components used under descriptive statistics for analyzing of data. The complete details about character sticks of respondents was out of 40 respondents 24 females and 16 females, hence majority of female nurses were the participants of my study. Majority of the response was reported from age group of less than 30 years 90% followed by 31-40 years 10%.Most of nurses were BSc Nursing 87.5% and only 12.5% are having Master's degree in nursing. Data shows that most of the nurses were unmarried 87.5% and only 12.5%.35% of nurses were working in COVID observation wards, 30% were in Post COVID ward followed by 20% in COVID I.C.U/HDU& 10%in Emergency COVID ward respectively. out of 40 nurses 77.5% are having experience of one year 15% of 2-4 years and 5% are having experience of 5-7 years. Out of 40 nurses 97.5% were vaccinated and only 2.5% is not fully vaccinated.
During data analysis we found that 67.50% were facing mild psychological stress level, 25% were having moderate level and 7.50% participants were having severe psychological stress level. In this study 80% participants having positive coping strategy and 20% were having negative coping strategy.

Keywords: Psychological distress, COVID-19, coping strategies, front line nurses.

Introduction
The current outbreak of the severe acute respiratory syndrome novel coronavirus (SARS-CoV-2) primary reported by Hubei Province of China has spread to the whole China and almost every country around the world. A large number of healthcare providers were diagnosed with COVID-19 all over the world. The corona virus could be transmitted by many ways, direct transmission, contact transmission, aerosol transmission and even fecal-oral transmission (Peng *et al*., 2020). Its powerful transmission speed has caused many infections among healthcare workers and has had a huge impact on the whole WORLD. The day by day increase in the number of COVID-19 patients has posed a great challenge to hospitals and staff during the current scenario of COVID-19, nurses working in the front line in various departments whether it is [emergency department (ED), intensive care unit (ICU), infection department or other departments. Sometimes wearing a full set of protective equipment is very inconvenient also it leads to difficulty in drinking and eating, suffocation difficulty in breathing and unclear vision, perspiration skin infections and many more problems which made the front line nurses to feel a higher level of work intensity and tired The increased workload and physical burden of wearing personal protective equipment was threatening the health of nurses as well as it is increasing psychological distress on them
In addition, front line nurses, particularly those who work directly with corona virus patients, often witness patients suffering and dying, impacting their emotional health and causing compassion fatigue (Alharbi *et al*., 2020) [2].
To effectively play their role during this pandemic, it is essential for nurses to maintain their psychological and mental health (Mo *et al*., 2020; Catt-on, 2020) [8].
Most healthcare professionals are working more than 12 hours a day to keep the services running which is still not enough to take care of the total infected population (0.014% ~ 2 Lacs).

Ac to a study In the ‘’Economic Times’’ in April 2020 hospitals are Hospital: A hotbed for the virus The worst affected by the virus are the people fighting the virus – doctors, nurses - who have no option or protection from prolonged exposure to the virus.

COVID–19 is a disease important in public health globally. As early as November 2019, a pneumonia-like disease emerged in Wuhan, China, which the World Health Organization later called Corona virus Disease 2019 or COVID-19 (WHO, 2020) [18]. Within a few months, COVID–19 has caused significant damage to public health, while causing ¦ financial and fie economic loss in many countries. Globally, confirmed cases of the disease had reached 7 255 960, with 412 583 confirmed deaths.

Vast amounts of evidence have shown a significant association between the COVID–19 outbreak and adverse mental health issues such as stress or burnout, depression and anxiety (Wu *et al*. 2020; Nemati *et al*., 2020; Mo *et al*. 2020) [17, 10, 8].

International Council Of Nurses COVID-19 Update On 13 January 2021mass Trauma Experienced By The Global Nursing Workforce September 2020, ICN released a report, Protecting Nurses from COVID-19 a top priority, revealing the continuing and catastrophic increase in the number of deaths and infections among nurses due to COVID-19, and exposing the associated risks in the pandemic. This report, based on information from our members up to the end of 2020, is intended to highlight the continued critical importance of protecting and retaining the nursing workforce in COVID-19 responses. It also provides an insight into how policy decision-makers in governments, healthcare facilities and health organizations can deliver on their responsibility to support and strengthen the nursing workforce, which is the backbone of health systems. As of 31 December 2020, the ICN data set reveals that more than 1.6 million healthcare workers have been infected in 34 countries. ICN has previously identified a wide range in healthcare worker infection rates (up to 30%) and rates vary at different points in time. However, ICN believes that, on average around 10% of all confirmed COVID-19 infections are among HCWs, with a range of 0-15% [6] much worse, nurses are risking their lives in order to carry out their duties, causing intense fear of being infected or unknowingly infecting others. According to the ICN, about 90 000 or 6% of all confirmed cases of COVID–19 worldwide were healthcare workers. Of this guru, 600 nurses had succumbed to the disease, a gore which was expected to continue rising. In the Philippines, the Department of Health reported a total of 2 736 healthcare workers infected with COVID–19 and 32 deaths. Among these confirmed cases, 1 006 were nurses (Department of Health, 2020) [5]. The potential psychological consequences of the pandemic on healthcare workers surfaced in March amid reports that several nurses caring for COVID-19 patients had committed suicide in Europe.

Nurses often face huge psychological pressure as a result of overwhelming workload, long hours, shift duties, and working in a high-risk environment. Nurses are the front line healthcare professionals who work across acute care hospitals, long-term care agencies, nursing homes, schools, communities, and government healthcare agencies. The multiple roles and functions played by nurses are particularly important during this COVID-19 pandemic by providing health education, screening services, and support for the general public and individuals in high-risk categories.

After seeing the facts and above discussion I as a mental Health nurse assume that our front line nursers working in various hospitals during that COVID-19 pandemic may have saviour psychological impact due to Fear of worthlessness, Guilt, Overwhelming work-pressure, Deprivation of family while being in quarantine, Burnouts, Depression, Fear of infection and outcomes, Uncertainty, PTSD.

Therefore, this study aimed to portray the prevalence and the risk factors of psychological distress among nurse working in the front line during the outbreak of COVID- 19. It was expected the results of this study to provide some useful information for making supportive strategies like Support from Higher authority, Clear communication and regular accurate updates regarding precautionary measures, Sustained connection with family and friends through smartphone, Shorter working duration, regular rest period, rotating shifts, Sufficient supply of appropriate PPE, Arrangements for well-equipped isolation wards specific for infected HCPs, insurance-system for work-related injuries Long term psychological follow-up to improve the mental health of nurses in front line during & after the epidemic and beneficial in decreasing the level of psychological impact. Considering the rationale behind this study, the following objectives were explicate:

To identify the psychological distress among front line nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak.

To assess the coping strategy used for psychological health well-being for front line nurses working in various hospitals of Madhya Pradesh those seeking attention. To Prepare the self-instructional module for coping strategies for nurses having psychological distress.

Material and Methodology

Research Design: This is a cross-sectional research design involving 40 front line nurses working during COVID-19 in a specific district hospital and C.H.C centers of a specific city of M.P. Five standardized scales were used for data collection

Samples and Settings: The pilot study was conducted at District hospital Gwalior. Total 40 samples were selected those were accessible during the study period. Structured questionnaire was administered to samples. The average time was taken by sample for answering the question was 20-30minute.

Tools & data collection: A self-structured questionnaire consisted of 4 parts was used to collect data.

Section A: It contains demographic variables. Seven items were designed to collect participants’ basic demographic information, including Gender, age, marital status, education, working experience, department & vaccination status

Section B: Questionnaire to assess occupation and work history, work related information included changes of regular shift duties, related to overtime working, effectiveness of precautionary measures, behavior pattern of society

Section C: Self structured general health questionnaire will be used for assessing the psychological distress. It contains 12 items. The total score of tool is 48 with scoring level less than 24 for mild stress, 25-35 for Moderate &more than 36 for severe stress.

Section D: Self-structured scale will be used for assessing coping style. The scale consists of 20 items, coping cognitive and behavioral patterns. The scale is further classified in two domains: positive coping patterns (item 1 to item 12) and negative coping patterns (item 13 to item 20) with total score 60 with less than 30 for negative coping and more than 30 for positive coping.

Reliability of tool: Reliability was checked by "Cronbach's Alpha" formula. Investigator calculated the "Cronbach's Alpha Value" of Section©+0.9034 and Section (d)+0.7868 so tool was found reliable.

Ethical Approval and Data Collection

Ethical approval was taken by research ethical committee of the university& permission for data collection was taken by dean of hospital prior to data collection.

After taking the written consent short orientation regarding study and its objectives, nature of research and its benefits for nursing community is done via online platform, 4 meetings were conducted according to time suitability of respondents and in spite of names to maintain confidentiality a unique code is given to each of them. The respondents were asked to complete the questionnaires during their free time and online google form was sanded with given time limit of 20 to 30 minutes to complete the survey.

Results

Final result of the study was chalked out in five sections

Section-I: Analysis related to the demographic variables of the participants in frequency and percentage distribution.

Section-II: Analysis related to the demographic variables of the participants in frequency and percentage distribution for their work history.

Section-III: Analysis related to psychological distress among front line nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak..

Section-IV: Analysis related coping strategy used for psychological health well being among front line nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak.

Section-1 Analysis related to the demographic variables of the participants in frequency and percentage distribution.

Table 1: Shows the demographic variables of the participants in frequency and percentage distribution. N==40

Demographic Data			
Variables		**Frequency**	**Percentage**
Gender	Male	16	40%
	Female	24	60%
	Transgender	0	0%
Age (in Years)	<30	36	90%
	31-40	4	10%
	41-50	0	0%
	51-60	0	0%
Professional Educational	GNM	0	0%
	Bsc Nursing	35	87.5%
	PBBSc Nursing	0	0%
	Msc Nursing	5	12.5%
Marital Status	Married	5	12.5%
	Unmarried	35	87.5%
	Divorced	0	0%
Department in which you are working during COVID-19 pandemic	COVID I.C.U/HDU	8	20%
	Emergency COVID ward	6	15%
	Post COVID ward	12	30%
	COVID observation wards	14	35%
Total experience	>1 Years	31	77.5%
	2 - 4 Years	6	15%
	5 - 7 Years	2	5%
	>8 years	1	2.5%
Vaccination Status against COVID-19	Yes	39	97.5%
	No	1	2.5%

The data presented in Table -1 indicates that among the participants,60%were females and 40% were male. Majority of the response was reported from age group of less than 30 years 90% followed by 31-40 years 10%. Most of nurses were BSc Nursing 87.5% and only 12.5% are having Masters degree in nursing. Data shows that most of the nuses were unmarried 87.5% and only 12.5%.35% of nurses were working in COVID observation wards,30% were in Post COVID ward followed by 20% in COVID I.C.U/HDU& 10%in Emergency COVID ward respectively. out of 40 nurses 77.5% are having experience of one year 15% of 2-4 years and 5% are having experience of 5-7 years. out of 40 nurses 97.5% were vaccinated and only 2.5% is not fully vaccinated.

Section-II: Analysis related to the demographic variables of the participants in frequency and percentage distribution for their work history

Table 2: shows the demographic variables of the participants in frequency and percentage distribution for their work history N=40

Demographic Data			
Variables		**Frequency**	**Percentage**
Are you facing changes in regular job schedule?	Yes	31	77.5%
	No	9	22.5%
Are you doing overtime during duties at COVID-19 hospitals	Yes	31	77.5%
	No	9	22.5%
Wearing P.P.E kit and precautionary measures are effective in prevention of infection transmission	Yes	37	92.5%
	No	3	7.5%
Have you ever been experienced ill treatment or neglected behaviours by society, friends, neighbours due to working in COVID-19 hospital	Yes	35	87.5%
	No	5	12.5%
Are you worried about your own physical health and risk of COVID-19 infection?	Yes	33	82.5%
	No	7	17.5%
Are you concern regarding risk of spread of infection from you to your family	Yes	37	92.5%
	No	3	7.5%

The data presented in Table: 2 shows that among the 40 participants 31 ie (77.5) %are facing changes in regular job schedule.

31 ie.(77.5%) were doing overtime during duties at COVID-19 hospitals.92.5% were felling that Wearing P.P.E kit and precautionary measures are effective in prevention of infection transmission.87.5% had experienced ill treatment or neglected behavior by society, friends, neighbors due to working in COVID-19 hospital. 82.5% were worried about your own physical health and risk of COVID-19 infection and 92.5 were concern regarding risk of spread of infection from you to your family.

Section-III

Analysis related to psychological distress among front line nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak. Psychological ditress level among the 40 front line nurses working in a hospital of the Madhya Pradesh during the COVID-19 outbreak. In this study result shows that maximum 67.50% were facing mild psychological stress level, 25% were having moderate level and 7.50% participants were having severe psychological stress level.

Section-IV

Analysis related coping strategy among front line nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak.

Results in study shows that 80% participants having positive coping strategy and 20% were having negative coping strategy.

Discussion

This study helps in assessing the influence and effects of COVID-19 of front-line nurses working in various hospitals and isolation centers the pilot study was done with 40 samples Tools in 4sections administered to samples via online mode. The average time taken by sample for answering the question was 25-30 minutes. During the time of data collection some times staff nurses are not approachable due to their busy schedule and workload. Some senior staff nurses were facing technical problems for assessing the online data collection tool but after explaining the method to assess online data collection form they were able to it. According to objectives of the study objective one and two were accomplished by demographic variables and work history in section first & section second respectively. Third objective was achieved by analyzing psychological distress among front line nurses worked with COVID-19 patients in section third. In section four analysis of coping strategies was done.

As per objective five association of demographic variables with research findings is not possible because of small sample size. At the end there were no any major problems faced related to data collection during the study and our pilot study was successfully completed.

Conclusion

The conclusion of the study have focused on the important role of hospitals and administrators in supporting front-line nurses in this pandemic there is great need of evidenced biased research, conducting COVID -19 management related training's, providing psychological and emotional support and interventions related to reducing the stress & off course formulation of special policies for them.

As we seen during the study shows psychological stress level among the front line nurses working in various hospital of the Madhya Pradesh during the COVID-19 outbreak. In this study result shows that maximum 67.50% were facing mild psychological stress level, 25% were having moderate level and 7.50% participants were having severe psychological stress level.

It is imperative that hospitals should formulate and develop special In service programme and training sessions to improve professional skill in nurses to handle such pandemics know &in future also. This can be easily done by maintaining social distancing also via webinars, social media platforms or video technologies etc.

Excessive destress provoked by ill treatment from society can also leads to many mental health issues which effects nurses in accomplishment of their daily goals of effectively managing COVID cent-res and providing care to patients so supporting mental, psychological, emotional, and physical health should come first in priority list of nursing administrators and hospital managers. Mental health professional should take the responsibility and ensured for instrumental use during this pandemic in effectively supporting the mental health of front-line nurses.

Implications

Provision of Psychotherapy and psychological treatment will also ensure good mental health for front line nurses which can be easily provided by telepsychiatry, provision of psychological materials (e.g., books, journals on mental health), and counselling or psychotherapy

For reduces the fear and negative emotions associated with the disease and corona virus ensure to provide updated, accurate and latest information. Further, professional nursing organization should provide COVID–19-related resources to nurses, including information on mental and psychological well-being, and the provision of resilience, coping and stress management program mess

Support from family friends and society & peers also plays a vital role in providing since of safety and boost up mental health of front-line nurses. Support from top managers and availability of proper resources like PPE and other infection control supplies is vital to support nurses in their daily practices.

References

1. Ahorsu DK, Lin CY, Imani V, Saffari M, Gri¨ths MD, Pakpour AH. The fear of COVID-19 scale: development and initial validation. International Journal of Mental Health and Addiction, Advanced Online Publication, 2020. https://doi.org/10.1007/s11469-020-00270-8.
2. Alharbi J, Jackson D, Usher K. The potential for COVID-19 to contribute to compassion fatigue in critical care nurses. Journal of Clinical Nursing, 2020. Advanced Online Publication. https://doi.org/10.1111/jocn.15314
3. AIS, “Job Stress-Stress at work”; American Institute of comparison of burnout frequency among oncology physicians and nurses working on the front lines and usual wards during Page 13/18 the COVID-19 epidemic in Wuhan, China. Journal of Pain and Symptom Management. Advanced Online Publication. https://doi.org/10.1016/j.jpainsymman.2020.04.008
4. Catton H, RN MA, BS (Econ) (Hons). Global challenges in health and health care for nurses and midwives everywhere. International Nursing Review. 2020;67(1):4-6.
5. Department of health. updates on novel coronavirus disease (COVID-19) 2020. Retreived from: https://www.doh.gov.ph/2019-nCoV
6. House RJ, Rizzo JR. Role con§ ICT and ambiguity as critical variables in a model of organizational behavior. Organizational Behavior and Human Performance. 1972;7:467-505.
7. International Council of Nurses report COVID 19 updates (13 January 2021) “Mass trouma experienced by the global nurses, 1972. https://www.icn.ch/system/files/202107/ICN%20COVID19%20update%20report%20FINAL
8. Mo Y, Deng L, Zhang L, Lang Q, Liao C, Wang N, Huang H. Work stress among Chinese nurses to support Wuhan in fighting against COVID-19 pandemic, 2020. https://doi.org/10.1111/jonm.1301416.
9. Negin Talaee, *et al*. Stress and burnout in health care workers during COVID-19 pandemic: validation of a questionnaire. 2020 June 6. https://doi.org/10.1007/s10389-020-01313-z.
10. Nemati M, Ebrahimi B, Nemati F. Assessment of Iranian nurses’ knowledge and anxiety toward COVID-19 during the current outbreak in Iran. Archives of Clinical Infectious Diseases, 15(COVID-19). Advanced Online Publication 2020. http://dx.doi.org/10.5812/archcid.102848
11. Nahla Tayyib A, Fatma Alsolami J. Measuring the extent of stress and fear among Registered Nurses in KSA during the COVID-19 Outbreak. Journal of Taibah University Medical Sciences. 2020;15(5):410-416.
12. Pappa S, Ntella V, Giannakas T, Giannakoulis VG, Papoutsi E, Katsaounou P. Prevalence of depression, anxiety, and insomnia among healthcare workers during the COVID-19 pandemic: A systematic review and meta-analysis. Brain, Behavior, and Immunity. Advanced Online Publication 2020. https://doi.org/10.1016/j.bbi.2020.05.026
13. Policy changes in Indian healthcare industry to combat COVID times and future challenges. https://www.linkedin.com/pulse/policy-changes-indian-healthcare-industry-combat-COVID-tarun-kumar/
14. Satici B, Gocet-Tekin E, Deniz ME, Satici SA. Adaptation of the Fear of COVID-19 Scale: Its association with psychological distress and life satisfaction in Turkey. International Journal of Mental Health and Addiction, Advanced Online Publication 2020. https://doi.org/10.1007/s11469-020-00294-0.
15. Sandeep Grover, *et al*. Psychological problems and burnout among medical professionals of atertiary care hospital of North India: A cross-sectional study. Indian Journal of Psychiatry. 2018 April-June, 60(2).
16. Schriesheim C, Tsui AS. Development and Validation of Short Satisfaction Instrument for Use in Survey Feedback Interventions, Paper Presented at the Western Academy of Management Meeting, Phoenix, AZ 1980.
17. Wu Y, Wang J, Luo C, Hu S, Lin X, Anderson AE, Qian Y. A comparison of burnout frequency among oncology physicians and nurses working on the front lines and usual wards during Page 13/18 the COVID-19 epidemic in Wuhan, China. Journal of Pain and Symptom Management. Advanced Online Publication 2020. https://doi.org/10.1016/j.jpainsymman.2020.04.008
18. World Health Organization. Coronavirus disease 2019 (COVID-19) situation report-60[EB/OL] 2020, March20. Retrieved https://www.who.int/emergencies/diseases/novel-coronavirus2019/situation-report
19. William Wilson, *et al*. Prevalence and Predictors of Stress, anxiety, and Depression among Healthcare Workers Managing COVID-19 Pandemic in India: A Nationwide Observational Study. Indian Journal of Psychological Medicine. 2020 July.
20. Xiangfen Su, *et al*. Psychological impact of COVID-19 outbreak on frontline nurses: A cross sectional survey study. wileyonlinelibrary.com/journal/jocn, J Clin Nurs. 2020;29:4217-4226.