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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

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Abstract---Introduction: This study was conducted with intention portray the prevalence and the risk factors of psychological distress among nurse working in the front line during the outbreak of COVID-19. Method: This is cross-sectional research design involving 400 front line nurses working in govt hospitals and COVID-19 centers of M.P.A structured self-administered questionnaire consisted of 4 parts was employed to conduct the online survey. Section – A: It contains demographic variables. Section - B Questionnaire to assess occupation and work history, work related information. Section – C Self structured general health questionnaire will be used for assessing the psychological distress. It contains 12 items. 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). Results: among the participants, 80.25% were females and 19.75% were male. Majority of the response was reported from age group of less than 30 years 46% followed by 31-40 years 45.25%, 41-50 years 7%, 51-60years 1% respectively. Nursing 65.75% after that PBBSc Nursing were of 16.7%, GNM is of 12% followed by MSc Nursing 6.25%. Majority if the Participants were married 51.5% followed by 41.75% unmarried and 6.75% Divorced respectively. 84% were facing changes in regular job schedule where as 16% participants are not facing any changes. Maximum 46.75% were facing moderate psychological distress level, 39.50% were having severe level and 13.75% participants were having mild psychological distress level. Conclusion: This study highlighted that the front line nurses were

suffering from varying degrees of psychological distress, which needed early screening and supportive intervention for preventing more serious psychological impact on front line nurses.

Keywords---COVID-19, front line nurses, cross sectional survey, psychological impact, coping strategy.

Introduction

The coronavirus disease 2019 (COVID-19) outbreak has been associated with stress and challenges for healthcare professionals, especially for those working in the front-line of treating COVID-19 patients. The COVID-19 outbreak has been associated with mental problems and challenges for many people, including healthcare professionals treating COVID-19 patients in the front line [1,2,3]. Professionals were reported to have a high risk of experiencing mental health complaints, such as anxiety, stress, depression, sleep disturbance, loss of self-confidence, [4,5,6] as well as physical health complaints [7,8]. Increased mental and physical health problems among healthcare staff in the midst of the pandemic can endanger the accessibility and quality of acute care.

Psychological distress was reported to occur during previous virus outbreaks, and it contributed to the shortage of healthcare staff due to mental illness, sick leave or resignation [9]. The impact of COVID-19 on healthcare professionals' health status have been investigated in many previous studies . However, they have not been adequately explored among front line nursing staff working COVID -19 hospitals. The main purpose of this study is to portray the prevalence and associated factors of psychological distress among front line nurses during COVID-19 outbreak. Early detection of psychological distress and supportive intervention should be taken according to the associated factors to prevent more serious psychological impact on front line nurses.

Nurses were not only experiencing COVID-19 stress and trauma from patients dying, but a few also were grieving the deaths of family members who had contracted the disease. Others felt isolated because they were avoiding contact with children and spouses within their own homes or living in a hotel room provided by the hospital to reduce the risk of spreading the virus. [17] The American Nurses Association (ANA; 2020) conducted a survey in March–April 2020 of 32,000 nurses and found that 87% feared going to work, 36% have cared for an infectious patient without having adequate PPE, and only 11% believed they were well-prepared to care for patients with COVID-19.[10]

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.[18]

COV firstly came to the notice of Chinese public health authority in December as “unknown etiology of pneumonia”. WHO first learned of this new virus on 31 December 2019. On 30 January 2020, The World Health Organization declared the corona virus disease (COVID-19) as a public health emergency of international concern. By November 2020, more than fifty million confirmed COVID-19 cases [2] and 1.25 million deaths due to the corona virus have been reported. In India first case was confirmed on 30 January 2020 in Kerala to a student who returned from Wuhan. On 30th January 2020, As of 28th March, 2020, the total number of positive COVID-19 cases world-wide is 617288, total death reported are 28377 and total recovered patients are 137336. In India, the total number of positive cases are 933, total death reported are 20 and total 84 patients recovered. The number of positive cases are increasing exponentially. [11,12,13]

Our healthcare staff also report increased stress levels when dealing with uncooperative patients which are not adhering to safety instructions, and feelings helpless when dealing with critically ill patients, as there is no definitive treatment available as well as limited intensive care beds and resources. [19]. A survey of nearly 1,300 healthcare workers treating people with COVID-19 in hospitals in China showed high rates of depression, distress, anxiety and insomnia. Guilt, anger, anxiety, fear, shame and depression were all shown which led to resignations and poor work performance indeed, there have been reports of suicide in healthcare workers in Europe during the COVID-19 pandemic. Chronic wakefulness can lead to impairment of concentration, poor vigilance, short term memory, reduced retention capacity, impaired motor skills and clinical judgement. Chronic stress leads to health disorders like backache, fatigue, headache, irritable bowel disorder, anxiety etc. Co-morbidness including diabetes, hypertension or chronic respiratory diseases make one more vulnerable to corona-related complications. [11,12,14, 15,16]

After seeing the facts and above discussion indicates that our front line nurses working in various hospitals during that COVID-19 pandemic may have severe 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 [20]

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.

Objectives of the Study

- 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.
- To find out the association of demographic variables with research findings.
- TO find out coo relation of psychological distress with coping strategy among front line nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak.

Material and Method

Research design and Data collection tool

The present study was intended to find out the Psychological impact of COVID-19 outbreak on front line nurses working in various hospitals of Madhya Pradesh India. So Quantitative research approach & cross sectional survey research design is best suitable for the study. A structured self-administered questionnaire consisted of 4 parts was employed to conduct the online survey. 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. 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). The tool was validated by 15 subject experts. After validation, the reliability of the tool was also calculated The reliability was checked by "Cronbach's Alpha" formula of Section © +0.9034 and Section (d) +0.7868 so tool was found reliable.

Selection of Participants and Study Setting

The data of study was collected by using convenience cluster sampling method. Front line Nurses of various hospitals who are working in various hospitals such as isolation wards, intensive care units, emergency departments, respiratory wards, infection-control office and available at the time of study were included in that study. Sample size was calculated by R SOFT software. Total 400 samples were collected for this study. Samples were collected from Nurses working in various government hospitals of Madhya Pradesh during COVID-19 outbreak in INDIA.

Statistical Analysis

Demographic data of the subjects was analyzed using frequency and percentage Organization of study Findings coping and work life history scores was analyzed using frequency and percentage, Mean and standard deviation Evaluation of stress was evaluated by stress rating scale. The association between selected demographic variables and stress, coping and work life history was calculated by chi square. Reliability was assessed by test re test method. All the analyses will be conducted using SPSS 23.0 (International Business Machines Corporation). p value $<.05$ will be considered to be statistically significant.

Results

After collecting the data, the information was organized and presented under the following 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 among front line nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak.

Section-V: Analysis related to association of demographic variables (personal characteristics) with psychological distress among front line nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak.

Section-VI: Analysis related to association of demographic variables (personal characteristics) with coping strategy among front line nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak.

Section-VII: Analysis related to association of demographic variables of work history with psychological distress among front line nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak.

Section-VIII: Analysis related to association of demographic variables of work history with coping strategy among front line nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak.

Section-IX: Analysis related to coo relation of psychological distress with coping strategy among front line nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak.

Table 1st shows the demographic variables of the participants in frequency and percentage distribution

Demographic Data			
Variables		Frequency	Percentage
Gender	Male	79	19.75%
	Female	321	80.25%
	Transgender	0	0%
Age	<30	184	46%

(in Years)	31-40	181	45.25%
	41-50	31	7.75%
	51-60	4	1%
Professional Educational	GNM	48	12%
	Bsc Nursing	263	65.75%
	PBBSc Nursing	64	16%
	Msc Nursing	25	6.25%
Marital Status	Married	206	51.5%
	Unmarried	167	41.75%
	Divorced	27	6.75%
Department in which you are working during COVID-19 pandemic	COVID I.C.U/HDU	97	24.25%
	Emergency COVID ward	77	19.25%
	Post COVID ward	106	26.50%
	COVID observation wards	120	30%
Total experience	>1 Years	52	13%
	2 - 4 Years	191	47.75%
	5 - 7 Years	147	36.75%
	>8 years	10	2.5%
Vaccination Status against COVID-19	Yes	400	100%
	No	0	0%

The data presented in Table -1 indicates that among the participants, 80.25% were females and 19.75% were male. Majority of the response was reported from age group of less than 30 years 46% followed by 31-40 years 45.25%, 41-50 years 7%, 51-60years 1% respectively. Data shows that most of the participants were Bsc Nursing 65.75% after that PBBSc Nursing were of 16.7%, GNM is of 12% followed by Msc Nursing 6.25%. Majority if the Participants were married 51.5% followed by 41.75% unmarried and 6.75% Divorced respectively. Data shows that out of 400 total respondents majority of nurses were working in COVID observation wards 30% followed by 26.50% in Post COVID ward and 24.25% in COVID I.C.U/HDU with 19.25% in Emergency COVID ward respectively. Data indicates that 47.75% respondents were having total experience of 2-4 Yrs ,36.75% were 5-7 Yrs.13% participants are having experience of less than 1 yr and 2.5% with working experience of more than 8 years respectively. Data shows that out of 400 respondents 100% were fully vaccinated.

Table 2nd shows the demographic variables of the participants in frequency and percentage distribution for their work history

Demographic Data			
Variables		Frequency	Percentage
Are you facing changes in regular job schedule?	Yes	336	84%
	No	64	16%
Are you doing overtime during duties at COVID-19 hospitals	Yes	281	70.25%
	No	119	29.75%

Wearing P.P.E kit and precautionary measures are effective in prevention of infection transmission	Yes	356	89%
	No	44	11%
Have you ever been experienced ill treatment or neglected behavior by society, friends, neighbors due to working in COVID-19 hospital	Yes	293	73.25%
	No	107	26.75%
Are you worried about your own physical health and risk of COVID-19 infection?	Yes	317	79.25%
	No	83	20.75%
Are you concern regarding risk of spread of infection from you to your family	Yes	349	87.25%
	No	51	12.75%

The data presented in Table: 2nd shows that among the 400 participants maximum 84% were facing changes in regular job schedule where as 16% participants are not facing any changes .Findings also depicts that among the participants70.25% were ding overtime duties at COVID-19 hospitals followed by 29.75% with no change in duties.89% of the total participants says that Wearing P.P.E kit and precautionary measures were effective in prevention of infection transmission where as 11% does not find it so. Findings shows that 73.25% of respondents had experienced ill treatment or neglected behavior by society, friends, neighbors due to working in COVID-19 hospital & 26.75% not. About 79.25% were worried about their own physical health and risk of COVID-19 infection while working in COVID-19 hospitals and 20.75% were not worried. Data indicates that 87.25% participants were concern regarding risk of spread of infection from them to their family and 12.75% were not.

Table 3rd shows psychological distress among frontline nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak

Psychological Stress level				
	Mild	Moderate	Severe	Total
Frequency	55	187	158	400
Percentage	13.75%	46.75%	39.50%	100%

The data presented in Table: 3 shows psychological stress level among the front line nurses working in various hospital of the Madhya Pradesh during the COVID-19 outbreak. In this table result shows that maximum 46.75% were facing moderate psychological distress level, 39.50% were having severe level and 13.75% participants were having mild psychological distress level

Table 4th shows the coping strategy among front line nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak

Coping Strategy		
	Positive Coping Strategy	Negative Coping Strategy
Frequency	336	64
Percentage	84%	16%

Table 4th shows coping strategy among front line nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak. In this table 84% participants having positive coping strategy and 16% were having negative coping strategy.

Analysis related to association of demographic variables (personal characteristics) with psychological distress among front line nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak

Age, Professional Educational, Marital Status and Total Experience were having p-value <0.05 so all these variables are found associated with psychological distress scale. Remaining one demographic variables that is Department in which you are working during COVID-19 pandemic have p-value >0.05 so it founds not associated with psychological distress scale. If chi-square calculated value is more than chi-square table value, then there is association between the variables. In this table Gender, Age, Professional Educational, Marital Status and Total Experience were having chi-square calculated value is more than chi-square table value so all these variables are found associated with psychological distress scale. Remaining one demographic variables that is Department in which you are working during COVID-19 pandemic has chi-square calculated value is less than chi-square table so this demographic variable is not associated with psychological distress.

Table 5th shows association of demographic variables (personal characteristics) with psychological distress among front line nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak

Demographic Data						N=400
Variables		p-value	d.f.	Chi-square (Calculated Value)	Chi-square (Table Value)	Inference
Gender	Male	0.0000 2	2	21.3920	5.99	Associated
	Female					
	Transgender					
Age (in Years)	<30	0.0000 2	6	41.4782	12.59	Associated
	31-40					
	41-50					
	51-60					
Professional	GNM	0.0000	6	36.0205	12.59	Associated

Educational	Bsc Nursing	2				d
	PBBSc Nursing					
	Msc Nursing					
Marital Status	Married	.000256	4	21.465	9.48	Associate d
	Unmarried					
	Divorced					
Department in which you are working during covid-19 pandemic	Covid I.C.U/HD U	0.2637	6	7.6647	12.5916	Not Associate d
	Emergency Covid ward					
	Post covid ward					
	Covid observation wards					
Total experience	>1 Years	0.0030	6	19.8153	12.5916	Associate d
	2 - 4 Years					
	5 - 7 Years					
	>8 years					

Section-VI

Analysis related to association of demographic variables (personal characteristics) with coping strategy among front line nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak

If p-value is <0.05 then there is association between the variables. In this table Gender, Professional Educational, Marital Status, Department in which you are working during COVID-19 pandemic and Total Experience were having p-value >0.05 so all these variables are found not associated with coping strategy. Remaining one demographic variables that is Age has p-value <0.05 so it founds associated with coping strategy. If chi-square calculated value is more than chi-square table value, then there is association between the variables. In this table this table Gender, Professional Educational, Marital Status, Department in which you are working during COVID-19 pandemic and Total Experience were having chi-square calculated value is less than chi-square table value so all these variables are found not associated with coping strategy. Remaining one demographic variables that is Age has chi-square calculated value is more than chi-square table so this demographic variable is associated with coping strategy.

Table 6th shows the association of demographic variables (personal characteristics) with coping strategy among front line nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak

N=400

Demographic Data						
Variables		p-value	d.f.	Chi-square (Calculated Value)	Chi-square (Table Value)	Inference
Gender	Male	0.574 2	1	0.3157	3.84	Not Associated
	Female					
	Transgender					
Age (in Years)	<30	0.007 2	3	12.04	7.81	Associated
	31-40					
	41-50					
	51-60					
Professional Educational	GNM	0.086 0	3	6.59	7.81	Not Associated
	Bsc Nursing					
	PBBSc Nursing					
	Msc Nursing					
Marital Status	Married	0.425 4	2	1.70	5.99	Not Associated
	Unmarried					
	Divorced					
Department in which you are working during covid-19 pandemic	Covid I.C.U/HDU	0.308 3	3	3.59	7.81	Not Associated
	Emergency Covid ward					
	Post covid ward					
	Covid observation wards					
Total experience	>1 Years	0.750 0	3	1.21	7.81	Not Associated
	2 - 4 Years					
	5 - 7 Years					
	>8 years					

Section-VII:**Analysis related to association of demographic variables of work history with psychological distress among front line nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak.**

Table 7th shows the association of demographic variables of work history with psychological distress among front line nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak

Demographic Data							
Item no	Variables		p-value	d.f.	Chi-square (Calculated Value)	Chi-square (Table Value)	Inference
Item 1	Are you facing changes in regular job schedule?	Yes	0.0349	2	6.71	5.99	Associated
		No					
Item 2	Are you doing overtime during duties at covid-19 hospitals	Yes	0.0039	2	11.11	5.99	Associated
		No					
Item 3	Wearing P.P.E kit and precautionary measures are effective in prevention of infection transmission	Yes	0.9072	2	0.1947	5.99	Not Associated
		No					
Item 4	Have you ever been experienced ill treatment or neglected behavior by society, friends, neighbors due to working in covid-19 hospital	Yes	0.0816	2	5.01	5.99	Not Associated
		No					
Item 5	Are you worried about your own physical health and risk of covid-19 infection?	Yes	0.1537	2	3.74	5.99	Not Associated
		No					
Item 6	Are you concern regarding risk of spread of infection from you to your	Yes	0.3068	2	2.36	5.99	Not Associated
		No					

	family						
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If p-value is <0.05 then there is association between the variables. In this study two variables related to work history first one is “Are you facing changes in regular job schedule?” and second variable is “Are you doing overtime during duties at COVID-19 hospitals?” were having p-value <0.05 so all these variables are found associated with psychological distress scale. Remaining work history demographic variables item, no 3, item no 4, item no 5 and item no 6 were having p-value >0.05 so it founds not associated with psychological distress scale. If chi-square calculated value is more than chi-square table value, then there is an association and in this table two variables related to work history first one is “Are you facing changes in regular job schedule?” and second variable is “Are you doing overtime during duties at COVID-19 hospitals?” were having chi-square calculated value is more than chi-square table value so all these variables are found associated with psychological distress scale. Remaining work history demographic variables item were having chi-square calculated value is less than chi-square table so these work history demographic variable were found not associated with psychological distress.

Section-VIII:

Analysis related to association of demographic variables of work history with coping strategy among front line nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak.

Demographic Data							
Item no	Variables		p-value	d.f.	Chi-square (Calculated Value)	Chi-square (Table Value)	Inference
Item 1	Are you facing changes in regular job schedule?	Yes	0.6446	1	0.2128	3.84	Not Associated
		No					
Item 2	Are you doing overtime during duties at COVID-19 hospitals	Yes	0.5428	1	0.3704	3.84	Not Associated
		No					
Item 3	Wearing P.P.E kit and precautionary measures are effective in prevention of infection transmission	Yes	0.0094	1	6.74	3.84	Associated
		No					
Item 4	Have you ever been experienced ill treatment or neglected behavior by society, friends, neighbors due to working in COVID-	Yes	0.7300	1	0.1191	3.84	Not Associated
		No					

	19 hospital						
Item 5	Are you worried about your own physical health and risk of COVID-19 infection?	Yes	0.4432	1	0.5880	3.84	Not Associated
		No					
Item 6	Are you concern regarding risk of spread of infection from you to your family	Yes	0.6353	1	0.2250	3.84	Not Associated
		No					

If p-value is <0.05 then there is association between the variables. In this table two variables related to work history only one variable "Item no 3- Wearing P.P.E kit and precautionary measures are effective in prevention of infection transmission?" has p-value <0.05 so this variable is found associated with coping strategy. Remaining work history demographic variables item, no 1, item no 2, item no 4, item no 5 and item no 6 were having p-value >0.05 so these all are found not associated with coping strategy.

If chi-square calculated value is more than chi-square table value, then there is an association and in this table one variables related to work "Item no 3- Wearing P.P.E kit and precautionary measures are effective in prevention of infection transmission?" was having chi-square calculated value more than chi-square table value so it found associated with coping strategy. Remaining work history demographic variables item, no 1, item no 2, item no 4, item no 5 and item no 6 were having having chi-square calculated value is less than chi-square table so these work history demographic variable were found not associated with coping strategy.

Section-IX:

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

Table 9th shows the Analysis related to correlation of psychological distress with coping strategy among front line nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak

Correlation Of Psychological Distress With Coping Strategy						
N1	N2	d.f.	Spearman's-R statistic	p-value	p- value Inference	Spearman's R statistic – inference
400	400	398	+ 0.256	<0.0001	Significant relationship	Weak positive correlation

If p-value is <0.05 then there is a significant relationship. In this table p-value is <0.05 so there is significant relationship between psychological distress and coping strategy. The calculated spearman's R-statistics shows the type of relationship whether it is positive or negative relationship. In this table calculated R-statistics values is $+0.256$ which shows "Weak Positive Correlation" between psychological distress and coping strategy.

Scattered diagram shows the coorelation of psycholglcal distress with coping staregy among frontline nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak

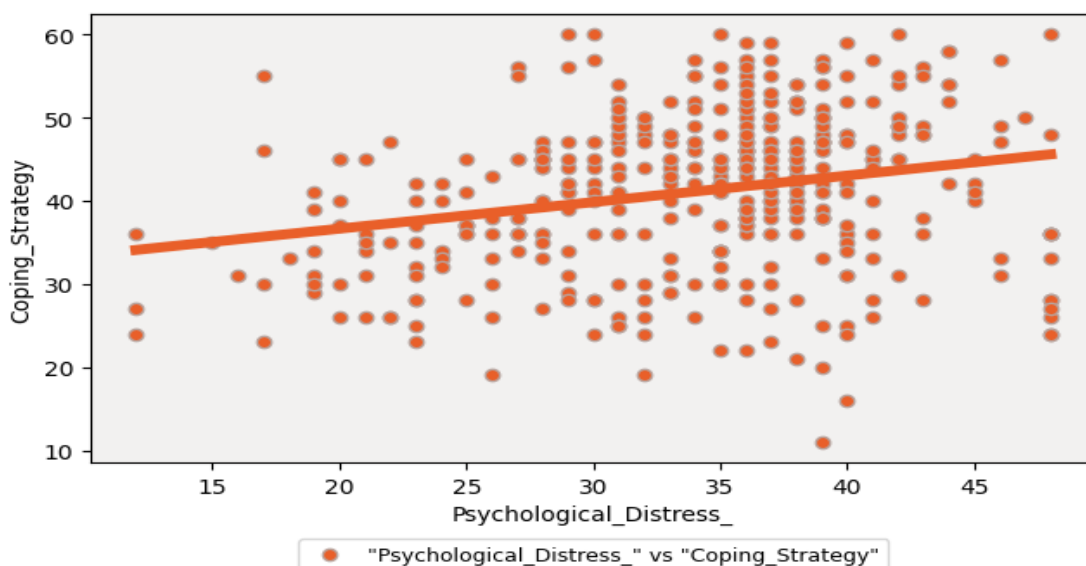


Figure 3 Scattered diagram shows the weak positive correlation of psychological distress with coping strategy among frontline nurses working in various hospitals of Madhya Pradesh during the COVID-19 outbreak

Discussion

Findings clearly indicate that maximum number of total front line nurses participated in the study were facing psychological distress level while working in COVID-19 hospitals. While working in this pandemic front lines nurses are facing various challenges like changes in regular job schedule, doing overtime during duties, fear of infection transmission, worries to transfer infection to family and friends and wearing PPE kit for long hours of etc.

Due to the psychological de-stress front-line nurses were suffering as they were not able to sleep well and feeling difficulty while concentrating on things. Long duty hours and hectic schedules get them fatigued and hence their daily life activities are effected. Findings of the study shows that about half of participants were feeling that they are not playing a useful part in the things and even feeling in capable of decision making about things of their life. The discussion of the

present study was based on the results achieved after the analysis of the collected data.

Limitations

First, the sample size was relatively small. Which might add to the possibility of response bias due to the homogeneity of the sample. Second, the main variables reported in this study were based on self-administered questionnaire. Third, the impact of COVID-19 on the psychological status among frontline nurses might be continuous, changeable and long te

Conclusion

Nurses working in different hospitals or COVID centers were that much strain after duty hours that are not able to enjoy their normal day to day routine activities, they are incapable of facing their own problems and finding solutions for which they need in service programme, training sessions and counselling by experts to improve professional skills as well as psychological strength so that nurses can handle such pandemics know & in future also.

Recommendations

- Increase the sample size in order to increase the generalization of research.
- Thus, nurse managers should pay more attention to the negative emotion and behavior among front line nurses, take target intervention (workplace intervention, stress handling and consultation with psychologist) to improve the coping style for reducing psychological distress.
- 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
- 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.

Conflict of Interest- None to declare by author(s).

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