

A Retrospective Study to Assess the Level of COVID-19 Stress and Resilience among Staff Nurses in Selected Hospitals, Chennai.

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Abstract

Background: COVID 19 is pandemic is a non-natural disaster that had an impact on mental health and psychosocial conditions of everyone, predominantly health of nurses had large impact on their emotional responses and coping strategies. This study was conducted to evaluate nursing student's views on the COVID - 19 pandemic and their stress level and their ability to recover from stress-related to COVID-19 among staff nurses.

Materials and Method: In this cross-sectional research design 100 staff nurses were randomly selected who worked between Feb 2021 to April 2021 in COVID unit. Data was collected by Google form developed for this study to collect data using Nurses stress scale and Brief Resilience Scale.

Results: The study reveals that 54% of staff nurses experienced mild stress, 14% moderate stress and 32% had no stress with 61% of nurses had normal resilience and 39 % No resilience . It was found that there was no significant association between the demographic variables and Nurses level of stress with the level of resilience.

Conclusion: Nurses are more stressful and facing challenges. Early psychological intervention is particularly important to nurses in this pandemic. When stressed nurses constantly adjust cognitive evaluation through professional knowledge to promote self-psychological balance and take initiative to seek team support prevent injuries caused by stress which has significance for mental health.

Key word: COVID-19, Stress, Resilience, Staff Nurses,

Date of Submission: 15-03-2022

Date of Acceptance: 31-03-2022

I. Introduction

The Corona Virus Disease (COVID 19) pandemic has exposed the nurses to stressful conditions that pressurize their ability to work and to handle their families. Hence it is censorious to study the Nurse's stress level and their resilience. The COVID-19 outbreak has had a major consequences on everyone's lives many of us are facing challenges that can be stressful overwhelming and cause strong emotions in adults and children public health actions such as social distancing or necessary to reduce the spread of code 19 but they can make us feel isolated and lonely and can increase stress and anxiety learning to cope with stress healthily will make you the people you care about and those around you become more resilient CDC¹. Resilience can be considered as a personal strength that can contribute to positive functioning and optimal development and prevent negative emotions, thoughts, and behaviors². The most commonly experienced stressors were reading hearing about the severity and contagiousness of COVID-19 uncertainly about the length of quarantine and social distancing requirements and changes to social and daily personal care routine. Financial concerns were rated most stressful³. A study have stated that the resilience they have shown is negatively associated with indicators of mental ill-being including negative effects depression and anxiety, and possibly associated with indicators of mental health including positive affect, life satisfaction, subjective well-being and flourishing⁴

Hence, the purpose of this study is to assess the level of stress and resilience experienced by nurses who worked in COVID areas, Apollo hospitals, Chennai. The investigators assumed that Nurses working in COVID areas will feel stressed and the level of resilience may also vary among individuals. The objective of the study was to assess the ability to recover from stress-related to COVID-19 among staff nurses, to find out the association between the selected demographic variables with COVID-19 stress among staff nurses and to find out the association between nurses' level of stress and the level of resilience.

II. Materials and Methods

A quantitative approach and retrospective research design was selected to assess the relationship between the level of stress and resilience of staff nurses worked in covid areas. The study period lasted from Feb 2021 to April 2021. The nurses who worked in covid areas during the study period were selected as samples for the study. A purposive sampling technique was used and 100 staff nurse's samples that met the inclusion criteria were selected as study samples. A total 100(both male and female) Staff nurses were in this study.

Study location: Apollo Hospitals, Chennai, Tamil Nadu.

Study Duration: Feb 2021 to April 2021.

Sample size: 100 Staff Nurses.

Data collection method

The research tool used for data collection had three sections.

Part A: Demographic variables of the nurses such as gender, educational status, area of work, years of experience, history of covid 19, family history of covid 19, area of residence, and vaccination status.

Part B: Nurses stress scale which is a 4-point Likert scale (Never-1, Sometimes-2, Frequently -3, and Very Frequently -4) with 21 parameters, a minimum score of 24, and a maximum score of 84. The total scores ranging between 21-36 were rated as NO stress, 37-51 Mild stress, 52-66 Moderate stress, and 67-84 severe stress.

Part C: The Brief Resilience Scale a standardized tool was used to assess the perceived ability to bounce back or recover from stress. The BRS consists of six items assessing the ability to bounce back .Each item is rated on a 5-point scale from strongly disagree to strongly agree the overall BRS score is estimated by reverse scoring 3 items and then adding all items and such that scores can range from 6 to 30 with higher scores on the BRS indicating greater resilience⁵.

Ethical clearance was obtained from the institutional Ethics committee of Apollo hospitals Chennai. Formal permission was obtained from the Director of Nursing Apollo Main Hospitals and consent was obtained from the samples. Google form link for the questionnaire was shared with the registered nurses through group WhatsApp.

III. Result

The data was analyzed using descriptive statistics to find Frequency &Percentage distribution and inferential statistics (Chi square) was used to assess the association between Nurses level of stress and the level of resilience.

The following are findings based on the objectives to assess the Level of COVID-19 Stress and Resilience Among Staff Nurses

Table no 1: Frequency and percentage distribution of demographic Variables of the staff nurses.
N=100

Demographic variables	Frequency	Percentage
Gender		
Male	8	8
Female	92	92
Educational status		
GNM	9	9
Bachelor in nursing science	91	91
Master in nursing science	0	0
Worked unit (Feb 2021 to April 2021)		
Covid ICU	66	66
Covid Ward	34	34
4.Years of experience		
1 to 5 years	78	78
6 to 10 Years	19	19
>10 Years and above	3	3
5.Confirmed with COVID-19 (Feb 2021 to April 2021)		
Yes	32	32
No	68	68
6.Family members confirmed with COVID-19 (Feb 2021 to April 2021)		
Yes	22	22
No	78	78
7.Area of residence		

Hostel	80	80
Day scholar	20	20
8.Vaccination status (Feb 2021 to April 2021)		
1 st dose vaccinated	12	12
2 nd dose Vaccinated	75	75
Not vaccinated	13	13

Table no 1: reveals that 92% of the staff nurses were female. 91% of were Bachelor of science in Nursing ,80% were hostilities. 68% did not have history of COVID and 75% of staffs were fully vaccinated (2 doses).

Objective no 1: To assess the level of stress among Staff Nurses who worked in COVID areas.

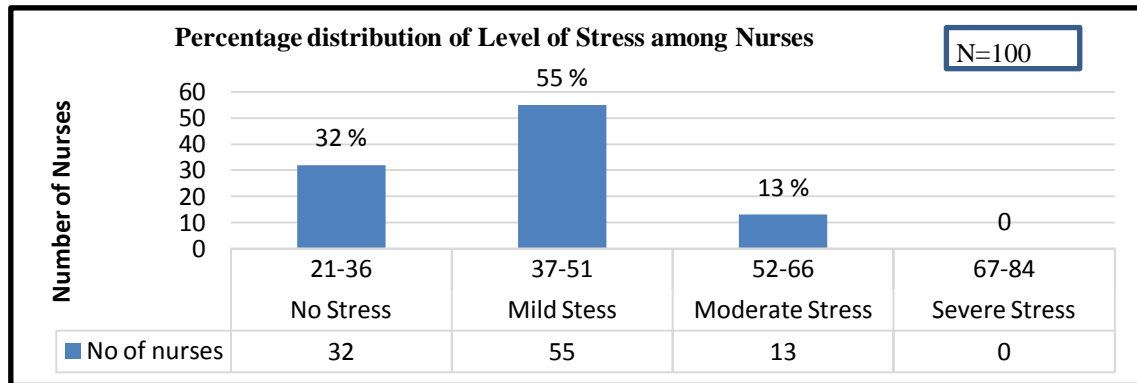


Figure no 1: Level of Stress among Nurses depicts that 54% of samples experienced mild stress,14% moderate stress and 32% had no stress as per objective 1 to assess the level of stress related with COVID-19 among staff nurses.

Objective no 2. To assess the ability to recover from stress among Staff Nurses who worked in COVID areas.

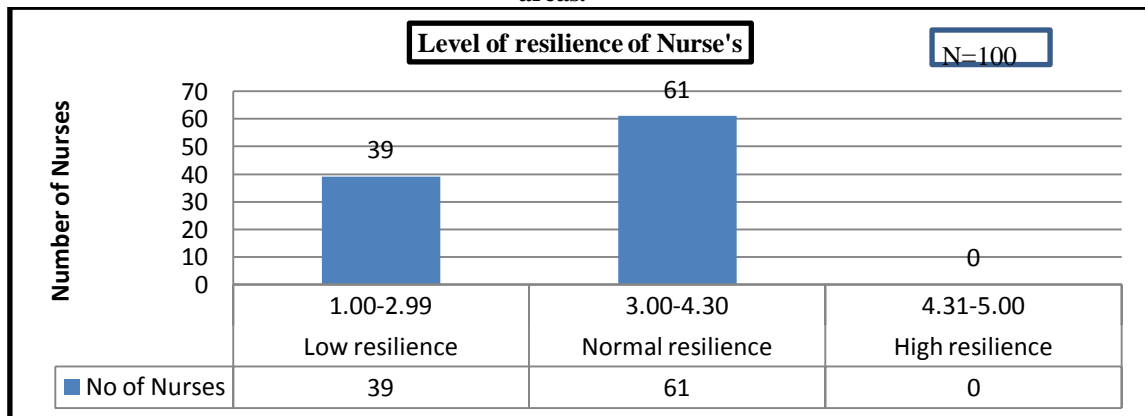


Figure no 2. Level of Resilience among Nurses revealed that 61% of nurses had normal resilience and 39 % had no resilience .

Table no 2. Association between the selected Demographic Variables with COVID-19 stress among Staff Nurses. (N=100)

Demographic Variable s	No Stress	Mild Stress	Moderate Stress	Chi Square	df	p Value(<0.05)	Remark
Gender							
Male	1	6	1	1.6064	2	5.99	Not Significant
Female	30	49	13				
Educational status							
GNM	4	5	1	0.4263	2	5.99	Not Significant

BSC N	28	48	14				
Worked unit (Feb 2021 to April 2021)							
Covid ICU	19	35	11	1.5793	2	5.99	Not Significant
Covid Ward	13	19	3				
Years of experience							
1 to 5 years	25	40	11				
6 to 10 Years	4	14	2	3.4712.	4	9.49	Not Significant
>10 Years and above	2	1	1				
Diagnosed to have COVID-19 (Feb 2021 to April 2021)							
Yes	9	21	2	3.4174	2	5.99	Not Significant
No	23	33	12				
Family members diagnosed to have COVID-19 (Feb 2021 to April 2021)							
Yes	6	13	4				
No	26	41	10	0.6069	2	5.99	Not Significant
Area of residence							
Hostel	25	44	10				
Day scholar	7	10	4	0.699	2	5.99	Not Significant
Vaccination status (Feb 2021 to April 2021)							
1st dose vaccinated	5	7	1				
2nd dose vaccinated	20	42	11	2.0676	4	9.49	Not Significant
Not vaccinated	6	6	2				

Table no 2 shows that the calculated chi-square value is less than the table value which reveals that there was no significant association between the demographic variables and the covid 19 stress at P<0.05 level of significant

Table no 3: Association between Nurses Level of Stress and the level of resilience among Staff Nurses. (N=100)

Level of Stress	Low resilience	Normal resilience	Chi Square	df	p Value(<0.05)	Remark
No Stress	12	20				Not Significant
Mild Stress	23	31	0.2386	2	5.99	Significant
Moderate Stress	6	8				

Table no 3 shows that the calculated chi square value is less than the table value which reveals that there was no significant association between the nurses level of stress and level of resilience among the staff nurses at P< 0.05 level of significant .

IV. Discussion

The study depicts that 54% of samples experienced mild stress and 61% of nurses had normal resilience. There is no association between the demographic data with the level of stress the level of resilience at $p < 0.05$ level of significance.

The current study findings contradict the study conducted by Thomas G. Kannampallil (2020) on “Exposure to COVID-19 patients increases physician trainee stress and burnout “. Among the 393 trainees who were surveyed, the exposed group had a higher prevalence of stress (29.4% vs. 18.9%), and burnout (46.3% vs. 33.7%). Hence further studies can be done with bigger sample size to support the presence study⁶.

V. Conclusion

Nurses are more stressful in facing challenges. Early psychological intervention is particularly important to nurses in this pandemic. It is best to conduct stress assessment and screening of nurses immediately after receiving the pandemic prevention task and to provide professional flexible and psychological intervention to promote the emotional release and improve nurses' mental health. When stressed nurses constantly adjust cognitive evaluation through professional knowledge to promote self-psychological balance and take initiative to seek team support will prevent injuries caused by stress which has significance for mental health.

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Ms. Sudha Sundaramoorthy, et. al. "A Retrospective Study to Assess the Level of COVID-19 Stress and Resilience among Staff Nurses in Selected Hospitals, Chennai." *IOSR Journal of Nursing and Health Science (IOSR-JNHS)*, 11(02), 2022, pp. 06-10.