Psychological Impact of Covid -19 Pandemic among Nurses Taking Covid Duty in Kerala, India

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Abstract
The study was embarked upon to throw light on the existence/ prevalence of depression, anxiety and stress among nursing professionals working in hospitals treating COVID-19 patients and also to assess the level of the same. This study also aims to study the influence of gender difference, marital status, socio economic status and educational qualification on mental health of nurses dealing with ongoing pandemic. Most Health care workers have been acutely impacted by the widespread social and economic disruption which has impacted the emotional wellbeing of the health care workers. These issues (if any) should be timely addressed to ensure positive mental health and early interventions for COVID -19 healthcare workers. The target population is basically the health care workers (nursing professionals) located across various hospitals in Kerala. Furthermore, this study had been carried out using data obtained by self-administered online questionnaire which comprises of a set of general questions based on previous literature across globe, and standardized DASS 21. The responses are then analyzed using SPSS software. The findings revealed that the gender of the respondents has a substantial impact on the anxiety of nursing professionals treating COVID - 19 patients in hospitals.

Keywords
Nursing Professionals, Stress, Depression, Anxiety, COVID - 19

1.

2. Introduction
The Novel Coronavirus which first appeared in Wuhan, (T Phan 2020) emerged from wet markets (Zhu N, Zhang D, Wang W et al 2020). The first case of human infection occurred in December 2019. The emerging infectious disease (now called COVID-19) has spread across all counties at a very fast pace, affecting people in approx. 210 countries and territories with an infection no. exceeding 7.5 million and approximate death of 1 million (Jalili, et al 2020). On 11th March 2020, World Health Organisation (WHO) declared it a pandemic due to its fast-paced transmission rate and its vital influence on global healthcare systems (WHO 2020). In addition to the deaths, it has caused around the world, the pandemic has caused widespread panic and anxiety among patients, general people, and healthcare workers.

The COVID-19 is known to have limited known effective treatment (Heng Li) and is currently uncontrollable. This potent nature of COVID -19 in combination with a high rate of infection and death rate among commoners and particularly healthcare providers, is likely to take a toll on nurses with regards to anxiety and stress. The social stigma, lack of personal protection equipment (PPE) supplies, and overtime working in PPE suit can all exacerbate the situation. (Sudip Bhattacharya,). In Combination of the aforementioned factors, this pandemic is expected to have an implication on the emotional well-being of the nurses/healthcare providers on COVID- 19 duty (Konstantinos Tsamakis ,2020). Moreover, the emotional wellbeing of the health care providers can affect patients at a minute level. (Talaee, Negin et al 2020) (Embriaco et al. 2007). It not only causes deteriorating physical and mental health outcomes followed by lower motivation, morale and absenteeism. These factors can cause a decline in the standard of treatment rendered by the affected employees resulting in poor patient outcomes (Harnois Phyllis Gabrie 2000). COVID-19 could influence the mental state of people at different strata of society, starting from the patients, staff in health care, to kids and families, and even staff in alternative sectors (Nader et al 2020). The medical health-care workers treating patients who are critically ill, who are experiencing anxiety and other emotional distress due to the illness or experiencing a personal loss are themselves prone to trauma (Qian Liu, Dan Luo 2020). Additionally, high risk of getting infected, simultaneously shouldering burden in the public prevention efforts in hospitals and other COVID care community centres is also taking a toll on

the physical and mental well-being of the health care providers (Kangqi Beng, Hoong Poon, 2020). The difficulties and stress they face may give rise to illnesses like depression, nervousness, Post Traumatic Stress Disorder (PTSD) etc. (Bao, Yanping Sun, Yankun, 2020). As a result, dangers can arise that are greater than the epidemic's own consequences.

1.1 Objectives

- To study the prevalence of emotional distress like depression, anxiety and stress among nurses treating COVID -19 patients
- To assess the level of emotional distress (depression, anxiety and stress) among nurses treating COVID -19 patients
- To study the influence of Gender difference, Marital status, Socio economic status and educational qualification on mental health of nurses taking Covid duty

3. Literature Review

Based on the literature, we understand that COVID -19 not only causes physical distress but also takes a toll on the emotional wellbeing of patients and healthcare providers equally. However, some of the consequences of the pandemic on mental include "suicides, depression, anxiety, stress, insomnia, and terror" (Kapilan, N, 2020). It is not known till date the duration of consequences of the above mentioned physical and emotional distress.
COVID-19 has placed health care staff and their families in jeopardy at a never-before-seen stage, "More than general population covid infections are higher among health care workers", according to evidence from several countries across WHO regions. This could be due to faulty PPE or lack thereof. Various literature shows that the existing public health crisis is taking a toll on their mental health by lowering the quality of emotional well being (anxiety, stress, depression, loneliness). A comparison has been made between health-care staff and war-fighting troops and both have shown similar emotional state. The pandemic has put enormous strain on health-care systems all over the world. (Schwerdtle et al., 2020). All the research are in the nascent stages and there is a copious amount research and knowledge required to understand Corona virus (Jackson,2020).The Nurses understand risks that they might pass on to their relatives. The burden of the potential for infectivity because of insufficient PPE kits or faulty PPE is undeniably high, and for others, occupational quarantine adds to the mix, putting nurses in high-risk situations. Others have been forced to their limits by operating for long periods of time. (Rahman, A. and Plummer, V. (2020) states that "the impact of COVID-19 has resulted in the breakdown of critical management processes, resulting in extensive consequences that go far beyond COVID-19 disease statistics to culminate in harm to the nursing workforce through stress and suicide". Hence, a structured model is required to monitor and support the emotional well-being/ mental health of the nurse in a timely action.
Despite the fact that health workers make up less than approx. 2-3% of the total population in most of the countries (including low to middle income countries), they contribute for roughly 14% cases stated to World Health Organisation.

As discussed earlier, Health workers and professionals exposed to very high-demand environments for extensive periods of time, living in fear of virus transmission and detached from families, have been subjected to extraordinary levels of psychological stress as a result of the pandemic. "Medical professionals which includes doctor were also at a higher risk of taking their on life before COVID-19 struck". A study by (Pappa, S.,2020), states that, "health care professionals, one in four reported depression and anxiety, and one in three suffered insomnia during COVID-19". In addition to that, there have been attempts of suicide on account of contracting COVID 19 (National Herald, 2020). Death of health care professionals in India (Nurses- 3No.s) and doctors – (31 No.s) due to due to COVID-19 has also been reported (Deccan Chronicle. Kaniza Garari).

According to American psychologist association, "Anxiety is a sense of tension accompanied by worried thoughts and physical changes such as elevated blood pressure". The American Psychiatric Association define depression (major depressive disorder) as a "widespread on a borderline level and severe medical condition that affects how you feel, think, and act". It impedes the person's ability to function on a day to day basis at work and home. It is also known to affect physically if left untreated and can lead to suicide in the long run (Torres, F. 2017).

The human body and mind are wired to experience and respond to stress. Stress can be beneficial in that it keeps us alert, motivated, and prepare the mind and body to avoid danger. Stress develops when a person is constantly under challenging environment with no respite. In emergency, the stress response, also known as the "fight or flight response," gets activated. Constant exposure to this challenging environment causes physical and emotional wear and tear.One can be more balanced if they possess internal resources ,(Avadhani et al 2020),"Mindful thinking will make individuals resilient"(Avadhani et al 2020) ,Job performance has increased after career resilience in study by Appanna K K and Vidya D Avadhani "significant relation between meaningful

work dimension of workplace spirituality and Job Involvemen ,there is a level of relationship between a set of spirituality and productivity factors directly or indirectly"(Vivek.S &Amrith).

2.2 Need for study

Based on the previous literature, it is clear that "protecting health workers is the key to ensure a functioning health care system and a thereby a functioning society" amidst pandemic. Most of the frontline workers agonise about the infection itself, being a carrier of the infection, concern over the adequacy of protection, access to healthy and tasty food and separation from families National Institute of Mental Health and Neuroscience (NIMHANS).

The pervasive social and economic disruption has had an effect on the majority of HCWs. As a consequence, a cycle of anxiety, concern, and depression has developed. If not properly identified and addressed, this may escalate into more serious depression, possibly leading to suicidal thoughts and feelings. These concerns should be discussed in COVID-19 care environments to ensure good mental wellbeing and early intervention for frontline staff.

Various studies were conducted in countries outside India. India is one of the few countries severely hit by the pandemic with highest cases being reported and high mortality rate. However, Kerala (a state in India) also has limited no. of studies conducted and therefore the sample is limited to healthcare workers located across various hospitals in Kerala, India.

4. Methods and Data Collection

As discussed in the earlier section, the target population is basically the health care workers located across various hospitals in Kerala. A cross-sectional study had been carried out (December 2020 – February 2021) by undertaking a self-administered online questionnaire consisting of general questions based on previous literature across the globe, and a standardised DASS 21 questionnaires. The Questionnaire is formulated Google Forms and circulated via social media apps, targeting nurses involved in testing, diagnosing, and treatment of COVID-19 patients and suspects.

Inclusion Criteria

Full time Nursing professionals employed in public or private hospitals across Kerala treating COVID patients. It includes only nursing professionals who are willing to participate in the study

Exclusion Criteria

Those already on treatment for psychiatric illness

Sampling method

Convenient Sampling used to recruit nurses for the study with a sample size-200.

Tools

Statistical tool: "Depression, Anxiety Stress Scale 21(DASS21)" developed by Lovibond and Lovibond in 1995 is used in combination with questions based on previous literature. According to Lovibond "DASS-21 offers adequate level of validity and reliability for assessing the stress, anxiety, and depression among people". However, for this study the sample population are nurses undertaking covid duty. Statistical analysis: Analysis has been done Using software SPSS (Software package for Social Sciences) version

5. Analysis and Interpretation

The current study was intended to investigate the Psychological impact of COVID - 19 pandemic among nursing professionals working in hospitals treating Covid patients. The analysis of data has been done to throw light on the major objectives and hypothesis stated for the study. For testing the hypothesis, appropriate statistical techniques such as chi-square tests and independent percentage analysis.

Assessment of level of Stress among nursing professionals treating COVID - 19 patients

Stress among nursing professionals undertaking COVID -19 duty was assessed using DASS. The "Depression, Anxiety and Stress Scale (DASS-21) is a set of three self-report scales designed to measure the emotional states of depression, anxiety and stress" (Lovibond 1995). The level of stress of the respondents for the whole sample was "divided into normal, mild, moderate, severe and extremely severe groups based on the scores obtained for stress in the scale of DASS".

According the DASS procedure, nursing professionals having scores 0 to 14 were treated as Normal; 15 to 18 were treated as Mild; 19 to 25 were treated as Moderate; 26 to 31 were treated as Severe; above 34 were treated as Extremely severe. The percentage of nursing professionals in each group was found and the details of level of stress of nursing professionals are presented in the chart below.

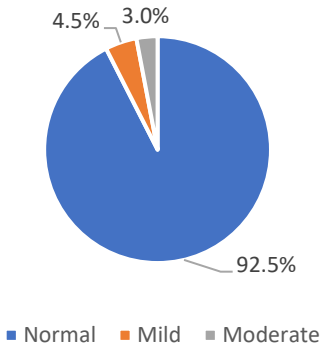

Figure 1: Distribution of the nursing professionals based on the Level of stress

Figure 1 shows that the sample having Normal level of stress is 92.5 percent (185 respondents), mild level of stress is 4.5 percent (9 respondents) and moderate level of stress is 3.0 percent (6 respondents).

Level of depression among nursing professionals treating COVID - 19 patients

Depression among nursing professionals undertaking COVID -19 duty was assessed using DASS. The level of depression of the nursing professionals undertaking COVID -19 duty for the whole sample was divided into groups based on the scores obtained for Depression in the scale of DASS. According the DASS procedure, nursing professionals having scores 0 to 9 were treated as Normal; 10 to 13 were treated as Mild; 14 to 20 were treated as Moderate; 21 to 27 were treated as Severe; above 27 were treated as Extremely severe. The percentage of nursing professionals in each group was found and the details of level of depression of nursing professionals are presented in the chart below. Figure 2 shows that the sample having Normal level is 70.0 percent, mild level of depression is 15.0 percent, moderate level of depression is 13.5 percent and Severe level of Depression is 1.5 percent.

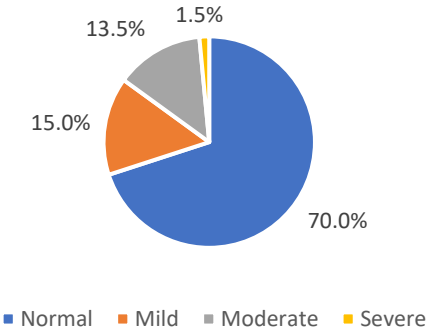

Figure 2: Distribution of the nursing professionals based on the Level of depression

Level of anxiety among nursing professionals treating COVID - 19 patients

Anxiety among nursing professionals undertaking COVID -19 duty has been calculated using DASS.According the DASS procedure, nursing professionals having scores 0 to 7 were treated as Normal; 8 to 9 were treated as Mild; 10 to 14 were treated as Moderate; 15 to 19 were treated as Severe; above 19 were treated as Extremely severe level of anxiety. The percentage of nursing professionals in each group was found and the details of level of anxiety of are presented in the chart below

Figure 3 shows that the sample having Normal is 57.5 percent, mild level of anxiety is 7.5 percent, moderate level of anxiety is 26.5 percent, severe level of anxiety is 6.5 percent and Extreme Severe level of anxiety is 2.0 percent

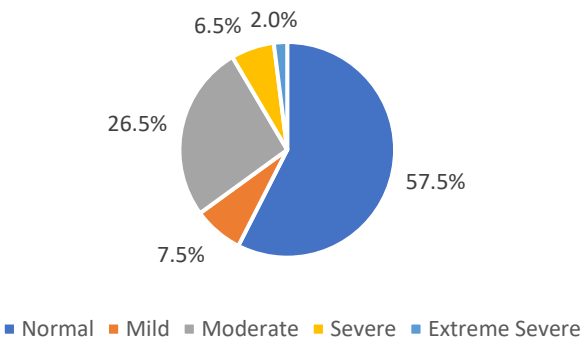

Figure 3: Distribution of the nursing professionals based on the Level of anxiety

Influence of Gender on stress of nurses taking Covid duty
Influence of Gender difference on Stress of the respondents is analysed and presented in Table 1.
Pearson Chi-Square test (Pearson Chi Square = 3.343; df = 2 ; p = 0.188) discloses that there is no significant association between stress levels and gender among respondents, as the p-value obtained is greater than 0.05.

Marital Status as an Influence factor on stress of nurses taking Covid duty
Influence of Marital status on Stress of the respondents is analysed, and it is presented in Table 1
Pearson Chi-Square test discloses that there is no significant association between level of stress and marital status of the respondents, since the p-value obtained is greater than 0.05.

Influence of Education on stress of nurses taking Covid duty
Influence of education on Stress of the respondents is analyzed, and it is presented in Table 1.
Pearson Chi-Square test (Pearson Chi-Square = 4.156; df = 6; p = 0.656) discloses that there is no significant association between level of stress and educational status of the respondents, as the p-value obtained is greater than 0.05.

Influence of Age on stress of nurses taking Covid duty
Influence of age of the respondents on Stress of the respondents is analysed, and it is presented in Table 1.Pearson Chi-Square test discloses that there is no significant association between level of stress and age category of the respondents, since the p-value is obtained greater than 0.05.

Influence of Type of hospital on stress of nurses taking Covid duty
Influence of type of hospital of the respondents on Stress of the respondents is analysed, and it is presented in Table 1. Pearson Chi-Square test discloses that there is no significant association between level of stress and type of hospital (government and private) of the respondents, since the p-value obtained is greater than 0.05.

Influence of Gender on depression of nurses taking Covid duty
Influence of Gender difference on depression of the respondents is analysed, and it is presented in below Table No 2.Pearson Chi-Square test (Pearson Chi-Square = 6.587; df = 3 ; p = 0.086) discloses that there is no significant association between level of depression and gender of the respondents (male and female) of the respondents, since the p-value obtained is greater than 0.05.

Marital Status as an Influence factor on depression of nurses taking Covid duty
Influence of Marital status of the nursing professionals on depression working in hospitals treating COVID - 19 patients is analysed, and it is presented in Table 2.Pearson Chi-Square test (Pearson Chi-Square = 3.863; df = 6 ; p = 0.695) discloses that there is no significant association between level of depression and marital status of the respondents (divorced, married and unmarried) of the respondents, since the p-value obtained is greater than 0.05.

Influence of Education on depression of nurses taking Covid duty
Influence of education on depression of the respondents is analysed, and it is presented in Table 2.Pearson Chi-Square test (Pearson Chi-Square = 9.332; df = 9 ; p = 0.407) discloses that there is no significant association between level of depression and educational status of the respondents of the respondents, since the p-value obtained is greater than 0.05.

Influence of Age on depression of nurses taking Covid duty
Influence of age of the respondents on depression of the respondents is analysed, and it is presented in Table 2 Pearson Chi-Square test (Pearson Chi-Square = 8.320; df = 9 ; p = 0.502) discloses that there is no significant association between level of depression and age category of the respondents of the respondents, since the p-value obtained is greater than 0.05.

Influence of Type of hospital on depression of nurses taking Covid duty
Influence of type of hospital of the respondents on depression of the respondents is analysed, and it is presented in Table 2.Pearson Chi-Square test (Pearson Chi-Square = 4.799; df = 3 ; p = 0.187) discloses that there is no significant association between level of depression and type of hospital (government and aided) of the respondents of the respondents, since the p-value obtained is greater than 0.05.

Influence of Gender on anxiety of nurses taking Covid duty
Influence of Gender difference on anxiety of the respondents is analysed, and it is presented in Table 3.Pearson Chi-Square test discloses that there exist significant association between level of anxiety and gender of the respondents (male and female) of the respondents, since the p-value (0.019) is less than 0.05.

Marital Status as an Influence factor for anxiety of nurses taking Covid duty
Influence of Marital status on anxiety of the respondents is analysed, and it is presented in Table 3.Pearson Chi-Square test (Pearson Chi-Square = 7.612; df = 8 ; p = 0.472) discloses that there is no significant association between level of anxiety and marital status of the respondents (divorced, married and unmarried) of the respondents, As the p-value is greater than 0.05.

Influence of Education on anxiety of nurses taking Covid duty
Result of influence of education on anxiety of respondents presented in Table 3.Pearson Chi-Square test discloses that there is no significant association between level of anxiety and educational status of the respondents of the respondents, as the p-value obtained is greater than 0.05.

Influence of Age on anxiety of nurses taking Covid duty
Influence of age of the respondents on anxiety of the respondents is analysed, and it is presented in Table 3.Pearson Chi-Square test (Pearson Chi-Square = 17.914; df = 12 ; p = 0.118) discloses that there is no significant association between level of anxiety and age group of the respondents of the respondents, since the p-value obtained is greater than 0.05.

Influence of Type of hospital on anxiety of nurses taking Covid duty
Influence of type of hospital of the respondents on anxiety of the respondents is analysed, and it is presented in Table 3. Pearson Chi-Square test discloses that there is no significant association between level of anxiety and type of hospital (government and aided) of the respondents of the respondents, since the p-value obtained is greater than 0.05.

Table 1: Level of stress

Level of Stress based on gender of the respondents									
Level	Normal		Mild		Moderate		Total		Pearson Chi-Square 3.343; df=2; p=0.188
Female	149	93.70%	5	3.10%	5	3.10 %	159	100.00 %	
Male	36	87.80%	4	9.80%	1	2.40 %	41	100.00 %	
Total	185	92.50%	9	4.50%	6	3.00 %	200	100.00 %	
Level of Stress based on marital status of the respondents									
Level	Normal		Mild		Moderate		Total		Pearson Chi-Square = 5.635; df = 4 ; p = 0.228
Divorced	5	100.00 %	0	0.00%	0	0.00 %	5	100.00 %	
Married	58	92.10%	5	7.90%	0	0.00 %	63	100.00 %	
Unmarried	122	92.40%	4	3.00%	6	4.50 %	132	100.00 %	

Total	185	92.50%	9	4.50%	6	3.00 %	200	100.00 %	
Level of Stress based on education of the respondents									
Level	Normal		Mild		Moderate		Total		Pearson Chi-Square = 4.156; df = 6 ; p = 0.656
BSc Nursing	133	91.70%	7	4.80%	5	3.40 %	145	100.00 %	
Intern	12	100.00 %	0	0.00%	0	0.00 %	12	100.00 %	
MSc Nursing	30	93.80%	2	6.20%	0	0.00 %	32	100.00 %	
Nursing Assistant	10	90.90%	0	0.00%	1	9.10 %	11	100.00 %	
Total	185	92.50%	9	4.50%	6	3.00 %	200	100.00 %	
Influence of Age on stress of nurses taking Covid duty									
Level	Normal		Mild		Moderate		Total		Pearson Chi-Square = 6.345; df = 6 ; p = 0.386
20-30	113	93.40%	4	3.30%	4	3.30 %	121	100.00 %	
30-40	42	87.50%	5	10.40 %	1	2.10 %	48	100.00 %	
40-50	21	95.50%	0	0.00%	1	4.50 %	22	100.00 %	
50+	9	100.00 %	0	0.00%	0	0.00 %	9	100.00 %	
Total	185	92.50%	9	4.50%	6	3.00 %	200	100.00 %	
Influence of Type of hospital on stress of nurses taking Covid duty									
Level	Normal		Mild		Moderate		Total		Pearson Chi-Square = 3.883; df = 2 ; p = 0.143
Government Hospital	141	94.60%	5	3.40%	3	2.00 %	149	100.00 %	
Private Hospital	44	86.30%	4	7.80%	3	5.90 %	51	100.00 %	
Total	185	92.50%	9	4.50%	6	3.00 %	200	100.00 %	

Table 2: Level of depression

Level of depression based on gender of the respondents										
Level	Normal		Mild		Moderate		Severe		Total		Pearson Chi-Square = 6.587; df = 3 ; p = 0.086
Female	117	73.60 %	21	13.20 %	18	11.30 %	3	1.90 %	159	100.00 %	
Male	23	56.10 %	9	22.00 %	9	22.00 %	0	0.00 %	41	100.00 %	
Total	140	70.00 %	30	15.00 %	27	13.50 %	3	1.50 %	200	100.00 %	
Level of depression based on marital status of the respondents										
Level	Normal		Mild		Moderate		Severe		Total		Pearson Chi-Square = 3.863; df = 6 ; p = 0.695
Divorced	4	80.00 %	0	0.00%	1	20.00 %	0	0.00 %	5	100.00 %	
Married	42	66.70 %	10	15.90 %	11	17.50 %	0	0.00 %	63	100.00 %	
Unmarried	94	71.20 %	20	15.20 %	15	11.40 %	3	2.30 %	132	100.00 %	
Total	140	70.00 %	30	15.00 %	27	13.50 %	3	1.50 %	200	100.00 %	
Level of depression based on education of the respondents										

Level	Normal		Mild		Moderate		Severe		Total		
BSc Nursing	101	69.70%	23	15.90%	19	13.10%	2	1.40%	145	100.00%	Pearson Chi-Square = 9.332; df = 9 ; p = 0.407
Intern	9	75.00%	2	16.70%	1	8.30%	0	0.00%	12	100.00%	
MSc Nursing	24	75.00%	2	6.20%	6	18.80%	0	0.00%	32	100.00%	
Nursing Assistant	6	54.50%	3	27.30%	1	9.10%	1	9.10%	11	100.00%	
Total	140	70.00%	30	15.00%	27	13.50%	3	1.50%	200	100.00%	
Level of depression based on age level of the respondents											
Level	Normal		Mild		Moderate		Severe		Total		Pearson Chi-Square = 8.320; df = 9 ; p = 0.502
20-30	82	67.80%	20	16.50%	17	14.00%	2	1.70%	121	100.00%	
30-40	34	70.80%	4	8.30%	9	18.80%	1	2.10%	48	100.00%	
40-50	18	81.80%	3	13.60%	1	4.50%	0	0.00%	22	100.00%	
50+	6	66.70%	3	33.30%	0	0.00%	0	0.00%	9	100.00%	
Total	140	70.00%	30	15.00%	27	13.50%	3	1.50%	200	100.00%	
Level of depression based on type of hospital of the respondents											
Level	Normal		Mild		Moderate		Severe		Total		Pearson Chi-Square = 4.799; df = 3 ; p = 0.187
Government Hospital	105	70.50%	25	16.80%	18	12.10%	1	0.70%	149	100.00%	
Private Hospital	35	68.60%	5	9.80%	9	17.60%	2	3.90%	51	100.00%	
Total	140	70.00%	30	15.00%	27	13.50%	3	1.50%	200	100.00%	

Table 3: Level of anxiety

Level of anxiety based on gender of the respondents												
Level of anxiety	Normal		Mild		Moderate		Severe		Extreme Severe		Total		Pearson Chi-Square = 11.810; df = 4 ; p = 0.019
Female	99	62.30%	12	7.50%	34	21.40%	10	6.30%	4	2.50%	159	100.00%	
Male	16	39.00%	3	7.30%	19	46.30%	3	7.30%	0	0.00%	41	100.00%	
Total	115	57.50%	15	7.50%	53	26.50%	13	6.50%	4	2.00%	200	100.00%	
Level of anxiety based on marital status of the respondents												
Level of anxiety	Normal		Mild		Moderate		Severe		Extreme Severe		Total		Pearson Chi-Square = 7.612; df = 8 ; p
Divorced	4	80.00%	0	0.00%	1	20.00%	0	0.00%	0	0.00%	5	100.00%	
Married	38	60.30%	5	7.90%	13	20.60%	7	11.10%	0	0.00%	63	100.00%	
Unmarried	73	55.30%	10	7.60%	39	29.50%	6	4.50%	4	3.00%	132	100.00%	
Total	115	57.50%	15	7.50%	53	26.50%	13	6.50%	4	2.00%	200	100.00%	

													= 0.472
Level of anxiety based on education of the respondents													
Level of anxiety	Normal		Mild		Moderate		Severe		Extreme Severe		Total		Pearson Chi-Square = 10.111; df = 12 ; p = 0.606
BSc Nursing	79	54.50%	13	9.00%	39	26.90%	11	7.60%	3	2.10%	145	100.00%	
Intern	8	66.70%	1	8.30%	3	25.00%	0	0.00%	0	0.0 0%	12	100.00%	
MSc Nursing	23	71.90%	0	0.00%	8	25.00%	1	3.10%	0	0.0 0%	32	100.00%	
Nursing Assistant	5	45.50%	1	9.10%	3	27.30%	1	9.10%	1	9.1 0%	11	100.00%	
Total	115	57.50%	15	7.50%	53	26.50%	13	6.50%	4	2.0 0%	200	100.00%	
Level of anxiety based on age level of the respondents													
Level of anxiety	Normal		Mild		Moderate		Severe		Extreme Severe		Total		Pearson Chi-Square = 17.914; df = 12 ; p = 0.118
20-30	62	51.20%	9	7.40%	41	33.90%	6	5.00%	3	2.5 0%	121	100.00%	
30-40	33	68.80%	2	4.20%	8	16.70%	4	8.30%	1	2.1 0%	48	100.00%	
40-50	15	68.20%	2	9.10%	4	18.20%	1	4.50%	0	0.0 0%	22	100.00%	
50+	5	55.60%	2	22.20%	0	0.00%	2	22.20%	0	0.0 0%	9	100.00%	
Total	115	57.50%	15	7.50%	53	26.50%	13	6.50%	4	2.0 0%	200	100.00%	
Level of anxiety based on type of hospital of the respondents													
Level of anxiety	Normal		Mild		Moderate		Severe		Extreme Severe		Total		Pearson Chi-Square = 9.410; df = 4 ; p = 0.052
Government Hospital	91	61.10%	11	7.40%	39	26.20%	7	4.70%	1	0.7 0%	149	100.00%	
Private Hospital	24	47.10%	4	7.80%	14	27.50%	6	11.80%	3	5.9 0%	51	100.00%	
Total	115	57.50%	15	7.50%	53	26.50%	13	6.50%	4	2.0 0%	200	100.00%	

6. Conclusion

Prevalence of Stress, Depression and Anxiety is 7.5%, 30%, 42.5% respectively among nurses taking covid duty. It is concluded that out of total 200 nursing professionals only 4.5 percent have mild level of stress and 3.0 percent have moderate level of stress, 30.0 percent have depression with different level as mild 15.0 percent, moderate 13.5 percent, and severe 1.5 percent and 42.5 percent have anxiety with different level as mild 7.5 percent, moderate 26.5 percent, severe 6.5 percent and extremely severe 2.0 percent.Research reveals that there is no significant influence of Gender difference, Marital Status, Educational Qualification, Age and type of hospital on stress and depression among sample populationStudy discloses that there is no significant influence of Marital Status, Educational Qualification, Age Category and type of hospital on anxiety of the nursing professionals undertaking COVID-19 duty. However, there exists significant influence of gender of the respondents on anxiety among sample population. Considering the percentage of normal level of anxiety, 62.3% of the respondents experienced high anxiety among females. Whereas, among males and 39.0% of the respondents experiences low anxiety. Considering the events around the outbreak of corona virus, it is quite

natural to have anxiety and fear among female due lots of issues such as dealing with at risk patients and family members, keeping kids occupied amidst high duty schedule and managing household responsibilities. The anxiety, if not managed early can lead to excessive stress and depression with good family support, working.

7. Limitations

This study does not consider the duration of duty (shift) per week. The emotional well being is likely to get affected for nursing professionals with longer working hours. The above study reveals that women experienced higher level of anxiety. However, it is to be noted that, 80% of the respondents are women. The result is likely to change if the male to female respondent ratio is 50:50.

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