

A Longitudinal Descriptive Study to Understand Mental Health Issues among COVID-19 Patients Admitted in a Tertiary Care Hospital, Varanasi, India

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Abstract: *The researcher conducted a longitudinal descriptive study to understand the levels of stress, anxiety and depression among COVID-19 patients admitted in Apex Super Specialty Hospital, Varanasi India using DASS-21 scale. The data collection was done from August 2020 to October 2020 among conscious patient with prior consents from eligible patients using consecutive sampling method. The DASS-21 tool was administered to the respondents along with basic demographic data. The major analysis was done by using SPSS (20.0 version). the result suggest that out of 96 samples 91.6% (88) had no stress and 1.04% (1) had extreme stress, 79.16% (76) had no anxiety and 2.08% (2) had extreme anxiety. 90.62% (87) had no depression and 1.04% (1) had extremely severe depression. On associating the demographic variables there was significant association with between marital status and Stress, Anxiety and Depression and also significant association between Sex and Anxiety and Depression. The researchers after conducting the study feel that psychological support to the COVID-19 positive patients must not be an adjuvant therapy rather it should be in the main stream treatment while handling the patients The result also suggests that most of the married men were more prone for stress, depression and anxiety.*

Keywords: COVID-19, depression, anxiety, stress, India

1. Introduction

The health authorities of every nation are striving to find a cure for the current Pandemic of COVID-19. A worldwide hunt for a vaccine for the coronavirus (COVID-19) disease is underway, even as the global tally due to the infection has risen to more than 45 million, where in the mortality due to the pandemic in India has crossed 80 Lakh population [Manral.K, 2020]. In March 2020 the World health organization declare a China originated SARS family virus named Novel Corona Virus or COVID as a Pandemic Outbreak which causes severe acute respiratory syndrome and common cold. [Coronavirus disease 2019 (COVID-19), 2020]

According to the AAMPR news publication the potential public health threat posed by COVID-19 is very high, especially among the health care workers caring for patients with COVID-19 and people who are in Close contacts of persons with COVID-19 [(n.d.). Retrieved October 30, 2020]. As per an online study conducted among health care personnel caring directly for COVID-19 patients in India suggests that out of 350, 3.7% were experiencing severe stress, 11.4% were experiencing depressive symptoms requiring treatment and 17.7% were having anxiety symptoms requiring further evaluation. Women had approximately two times the increased odds of developing moderate- or high-level stress, depressive symptoms requiring treatment, and anxiety symptoms requiring further evaluation. [Wilson, W., Raj, J. P., Rao, S., Ghiya, M., Nedungalaparambil, N. M., Mundra, H., & Mathew, R. 2020]

The psychological effects of the pandemic are best understood in terms of psychiatric and psychological problems that were present before the pandemic and the pathoplastic effects of the pandemic on these problems; the responses to social isolation and lockdown; the psychological response to the diagnosis, public responses to those with symptoms suggestive of COVID-19 infection, as well as the aftermath of the infection [D, 2020]

As per a meta-analytic study conducted by Mr. Rajkumar concludes that particular populations like older adults, the homeless, migrant workers, the mentally ill, pregnant women and Chinese students studying overseas that may be more vulnerable to the mental health impact of the COVID-19 pandemic [Rajkumar R. P. (2020)] which clearly suggests that mental health issues are at stake and it needs immediate focus and intervention and continuous evaluation.

A team in Pakistan has conducted a cross-sectional descriptive study among COVID-19 positive patients to understand the Depression, Stress and Anxiety, out of total 61 study subjects, 72.1% had normal score of depression. Anxiety and stress were reported to have normal score among 75.4% of the patients. Females in our study were determined to have significantly higher level of depression, anxiety and stress ($P < 0.00$) in comparison with those of males [Shahid, R., Raheel Raza, M., Umar, M., Zeb, S., Shehryar, M., Ambreen, S., & Ahmed, M., 2020]

Hence the researchers were more focused to find the mental health effects of the COVID-19, especially among the patients who have been admitted with a positive diagnosis of COVID-19 in Apex Super specialty Hospital, Varanasi India which would give all the health care authorities a newer aspect of understanding and managing mental health among the COVID-19 patients until discovery of the cure or invention of the vaccine.

2. Methodology

The researcher (s) conducted a longitudinal descriptive study from August 2020 to October 2020 among conscious, willing and patients who can understand, read and write Hindi admitted in Apex Super specialty Hospital, Varanasi India were collected through consecutive sampling. Patients who are not willing or on full or partial ventilator support were excluded for the study. To explore the depression, anxiety and stress among the patients DASS-21 questionnaire (Hindi version) was administered. The nurses who were priorly trained by the researcher (s) on administering the questions to the patients and who are under caring the patients were asked to conduct the interview with the patients in which after a debriefing to the patient and getting a self attested consent signature the DASS-21 questionnaire (Hindi Version) was administered along with a basic demographic data. SPSS (20.0 version) was used to calculate the Chi square test.

3. Result

After tedious data scrutinizing, compilation and analyzing the result, the study suggests that out of 96 study samples 91.6% (88) of the study population had no stress, 6.25% (6) had mild stress, 1.04% (1) had moderate stress and 1.04% (1) had extreme stress. 79.16% (76) had no anxiety, 10.41 (10) had mild anxiety, 6.25% (6) had moderate stress, 2.08% (2) had severe stress and 2.08% (2) had extreme anxiety. 90.62% (87) of the study population had no depression, 3.12% (3) had mild depression, 4.16% (4) had moderate depression, 1.04% (1) had severe depression and 1.04% (1) had extremely severe depression.

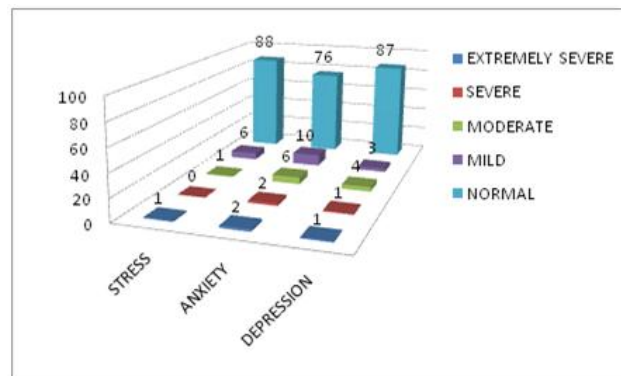


Figure 1: Level of Stress, Anxiety and Depression among the study samples

The researcher (s) collected seven major demographic variables like age, sex, educational qualification, dietary pattern, marital status and residence which the researcher felt might have association with the levels of stress, anxiety and depression.

Table 1: Distribution of Levels of Stress, Anxiety and Depression among the Demographic Variables

Sl. No	Demographic Variable		Stress					Anxiety					Depression				
			Normal	Mild	Moderate	Severe	Extremely severe	Normal	Mild	Moderate	Severe	Extremely severe	Normal	Mild	Moderate	Severe	Extremely severe
1	Age	31-40 Yrs (15)	14	0	1	0	0	13	1	0	0	1	14	0	0	1	0
		41-50 Yrs (22)	17	5	0	0	0	12	6	2	2	0	20	0	2	0	0
		51-60 Yrs (24)	24	0	0	0	0	19	2	3	0	0	22	2	0	0	0
		Above 60Yrs (35)	33	1	0	0	1	32	1	1	0	1	31	1	2	0	1
2	Sex	Male (81)	74	5	1	0	2	67	8	4	0	2	76	1	2	1	1
		Female (15)	14	1	0	0	0	9	2	2	2	0	11	2	2	0	0
3	Marital status	Married (89)	81	6	1	0	1	69	10	6	2	2	80	3	4	1	1
		Widowed (7)	7	0	0	0	0	7	0	0	0	0	7	0	0	0	0
4	Educational status	Primary education (10)	6	4	0	0	0	8	2	0	0	0	8	2	0	0	0
		Higher education (12)	8	2	1	1	0	11	0	1	0	0	11	0	1	0	0
		Diploma (6)	3	0	0	3	0	6	0	0	0	0	6	0	0	0	0
		Graduate (39)	32	2	2	1	2	36	1	0	0	1	34	1	2	1	1
		Post graduate and above (29)	25	0	3	1	0	25	3	1	0	0	28	0	1	0	0
5	Dietary pattern	Vegetarian (69)	54	4	5	5	1	63	3	2	0	0	63	1	4	1	0
		Mixed (27)	20	4	1	1	1	23	3	0	0	1	24	2	0	0	1
6	Occupation	Employed (56)	43	4	5	4	0	52	4	0	0	0	53	1	2	0	0
		Unemployed (10)	9	0	0	0	1	9	0	0	0	1	9	0	0	1	0
		Housewife (13)	7	4	1	1	0	9	2	2	0	0	9	2	2	0	0
		Retired (17)	15	0	0	1	1	16	1	0	0	0	16	0	0	0	1
7	Residence	Rural (40)	33	2	2	2	1	39	0	0	0	0	37	2	0	1	0
		Urban (56)	41	6	4	4	1	47	6	2	0	1	50	1	4	0	1

On associating the demographic variable with the stress levels there was a significant association at $p < 0.05$ between the marital status and stress level with $\chi^2 = 18.35$ $p = 0.001$. On associating the anxiety levels with sex of the responders there was a significant association at $p < 0.05$ with $\chi^2 = 9.51$ $p = 0.04$ and significant association was also found between anxiety and marital status at $p < 0.05$ with $\chi^2 = 9.51$ $p = 0.049$. On associating the depression level with the demographic variables there was significant association with sex of the responders at $p < 0.05$ with $\chi^2 = 14.73$ $p = 0.005$ and significant association was also found with the marital status of the responders at $p < 0.05$ with $\chi^2 = 15.50$ $p = 0.0037$.

4. Discussion

The researchers after conducting the study feel that psychological support to the COVID-19 positive patients must not be an adjuvant therapy rather it should be in the main stream treatment while handling the patients. The result also suggests that most of the married men were more prone for stress, depression and anxiety. This may be because of the societal convention dictates on the importance and responsibility of a family head especially in countries like India where in the joint family system is still a part of the core cultural system. A detailed phenomenological qualitative study might shine much more light on this aspect.

5. Conclusion

The researcher feels that immense training on the importance of counseling and mental health management for the immediate care takers of the COVID-19 patients especially the doctors and nurses.

The current pandemic condition has made clear that other than its pathological effect on the community COVID-19 has equal effect on the psychological aspects of the individual, family, community and the whole community.

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