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PSYCHIATRIC MORBIDITIES AMONG PATIENTS WITH COVID 19 AT A TERTIARY CARE CENTRE DURING THE 'SECOND WAVE' OF THE PANDEMIC.

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Abstract

Background: The COVID-19 pandemic significantly impacted global health, with physical health complications receiving the most attention. However, the mental health impact remains less studied. This study aims to address that gap.

Aims: The primary objectives were to assess psychiatric morbidity in COVID-19 patients, examine sociodemographic factors, and correlate psychiatric morbidities with these variables.

Methodology: Conducted between May and August 2021, this observational cross-sectional study included 200 RTPCR-positive individuals with mild COVID-19 symptoms, attending Chengalpattu Government Medical College & Hospital and associated COVID care centers. Patients with comorbid medical/psychiatric illnesses or severe COVID-19 were excluded. Data was collected through a semi-structured sociodemographic and clinical profile, with depression and anxiety screened using PHQ-9 and GAD-7 scales. SPSS version 20.0 was used for statistical analysis.

Statistical analysis used: Correlation study using Chi square analysis, Logistic Regression.

Results: The study revealed that 32% of participants had anxiety and 14% experienced depression. Significant associations were found between anxiety and the Hindu religion, depression and the 18–30 age group. PHQ scores were significantly correlated with age, and a strong positive correlation existed between GAD and PHQ scores.

Conclusion: Despite exposure risks during the peak of the pandemic, psychiatrists conducted field interviews revealing a high prevalence of anxiety and depression among COVID-19 patients. Younger individuals, in particular, require targeted psychiatric interventions to prevent long-term morbidity.

Key words: COVID-19 exposure, psychiatric morbidity, depression, anxiety, COVID and Mental health, Sociodemographic profile.

INTRODUCTION:

The SARS-CoV-2 (COVID-19) is an ongoing pandemic ,that is unprecedented in recent times with high rates of mortality and morbidity globally. The consequences of COVID-19 impacts not only the physical health(which have been well documented) but also the mental health, which can have a disastrous effect on the health system .Any infectious disease outbreak or pandemic causes a major setback in the mental health front. This pandemic evidenced an increased levels of relapse in people with pre-existing mental health mental illness and also increased mental health problems in people with no previous mental health disorders (1). Strict pandemic prevention measures, including mandatory school closures, suspension of nonessential production, and

disruptions to income and commercial activities, have significantly impacted people's daily lives and work routines. Studies indicate that measures like quarantine, isolation, and social distancing affect mental well-being and emotional responses to the pandemic.

(2-5)A recent study also suggests that COVID-19 may lead to increased risk of suicide.(6) Previous studies also showed risk for psychological distress may also be greater for those who have friends or family members who have been infected (7). Various surveys have indicated that individuals with COVID-19 often experience symptoms such as anxiety (including post-traumatic stress disorder), depression, and insomnia. (2-5) A recent study (6) indicates that the Corona virus was linked to increased suicide rates. Studies in the past (7) have shown that the family members of those infected have also experienced higher psychological distress.

The Psychological reactions to the pandemic included emotional distress, maladaptive behaviours, and defensive responses such as anxiety, fear, frustration, loneliness, anger, boredom, depression, stress and avoidance behaviours.

Since the psychological impact was huge in a pandemic situation . We wished to study the impact in our population .Very few studies have examined the impact of covid 19 upon the mental health of the Covid positive individuals seeking care at the hospital. Our study attempts to assess infected individuals using objective measures despite the risk of infection to the authors

AIM AND OBJECTIVES :

1] To assess psychiatric morbidity in Covid-19 patients .

2]To study the socio-demographic factors in Covid-19 patients.

3]To correlate the psychiatric morbidities with socio demographic variables.

Methodology: The study was conducted in covid care centers attached to our hospital after approval from our Internal review board and Ethics comittee. It was conducted between May 2021 to August 2021. This is an observational , cross sectional study. Consecutive patients who were RTPCR positive for COVID 19 attending triage centers were examined. 200 consenting RTPCR positive individuals with mild covid 19 symptoms as per WHO criteria were included .Patients who had comorbid medical/psychiatric illness , moderate and severe covid 19 cases and not consenting individuals were excluded. Institutional Ethical Committee approval was sought

A semi structured sociodemographic & clinical profile was administered in person. PHQ – 9[Physical Health Questionnaire] and GAD – 7 [Generalized Anxiety Disorder] scales was administered in person by the authors.PHQ-9 is a reliable and valid measure of depression severity. Each of the 9 items can be scored from 0 (not at all) to 3 (nearly every day). PHQ-9 score can range from 0 to 27, for assessing the severity : 0–4 minimal depression ,5–9 mild depression, 10–14 moderate depression, 15–19 moderately severe depression, and 20 - 27 severe depression. PHQ-9 score ≥10 had a sensitivity of 88% and a specificity of 88% for major depression.(8) GAD-7 is a valid and efficient tool for screening and assessing severity of generalised anxiety disorder(GAD) .It is a 7-item anxiety scale .Scores ranging from 0-21 whereas 0-4 mil d anxiety , 5-9 mild anxiety ,10-14 moderate anxiety and 15-21 severe anxiety . A score of 10 or greater on the GAD-7 represents a reasonable cut point for identifying cases of GAD.(9)

Statistical analysis was done using SPSS (version 20.0).Relationship between categorical variables was assessed through Chi square. P value <0.05 was taken as significant .

RESULTS:

TABLE 1 : SOCIO DEMOGRAPHIC DETAILS

AGE(in years)	Number of persons	Percentage
<18	6	3%
18-30	66	33%
31-	55	27.5%
41-50	34	17%
51-60	23	11.5%
>60	16	8%
TOTAL	200	100%
GENDER		
MALE	121	60.5%
FEMALE	79	39.5%
TOTAL	200	100%
RELIGION		
HINDU	167	83.5%
CHRISTIAN	15	7.5%
MUSLIM	10	5%
OTHERS	8	4%
TOTAL	200	100%
RESIDENCE		
URBAN	75	37.5%
RURAL	125	62.5%
TOTAL	200	100%
EDUCATIONAL STATUS		
UNEDUCATED	23	11.5%

UPTO 5TH STD	31	15.5%
UPTO 10TH STD	41	20.5%
UPTO 12TH STD	26	13%
GRADUATED	79	39.5%
TOTAL	200	100%
OCCUPATION		
UNSKILLED	83	41.5%
SEMISKILLED	54	27%
SKILLED	63	31.5%
TOTAL	200	100%
MARITAL STATUS		
UNMARRIED	41	20.5%
MARRIED	159	79.5%
TOTAL	200	100%

TABLE 2 CLINICAL PROFILE DATA

FAMILY MEMBERSPOSITIVE	NUMBER OF PERSONS	PERCENTAGE
PRESENT	106	53%
ABSENT	94	47%
TOTAL	200	100%
COVID SYMPTOMS		
PRESENT	179	89.5%
ABSENT	21	10.5%
TOTAL	200	100%

TABLE 3: ANXIETY AND DEPRESSION IN COVID 19PATIENTS

ANXIETY (GAD-7)	NUMBER OF PERSONS	PERCENTAGE
PRESENT	64	32%
ABSENT	136	68%
TOTAL	200	100%
DEPRESSION (PHQ-9)	NUMBER OF PERSONS	PERCENTAGE
PRESENT	28	14%
ABSENT	172	86%
TOTAL	200	100%

TABLE 4:RELATIONSHIP BETWEEN SOCIODEMOGRAPHIC PROFILE AND ANXIETY(GAD-7)

	CHI SQUARE VALUE	P VALUE
AGE	0.361	0.99
RELIGION	7.86	0.04
GENDER	0.158	0.69
RESIDENCE	2.451	0.117
EDUCATION	5.28	0.25
OCCUPATION	0.388	0.824
MARITAL STATUS	0.498	0.48

TABLE 5:RELATIONSHIP BETWEEN SOCIODEMOGRAPHIC PROFILE AND DEPRESSION(PHQ-9)

	CHI SQUARE	P VALUE
AGE	26.071	<0.001
RELIGION	8.65	0.034
GENDER	0.154	0.695
URBAN	0.39	0.52
EDUCATION	5.77	0.21
OCCUPATION	2.24	0.32
MARITAL STATUS	7.05	0.008

Table 1 shows 33% of our sample was in the age group 18-30 years .60.5% of our subjects were males and the rest were females . 83.5% of our study population practiced the Hindu religion and 62.5% came from a rural background. 39.5% of the subjects were graduates and 20.5% completed 10 years of school education. 41.5% were unskilled labourers followed by 31.5% were skilled labourers. 79.5% of our patients were married .

As shown on table 2 53% of the sample had family members positive of our study subjects . 89.5% had reported with mild symptoms like cough ,cold, fever, myalgia ,sore throat , loss of smell ,taste and appetite.

A score of greater than or equal to 10 for GAD and PHQ was taken as cut-off. 32%(n=64) of our sample suffered from anxiety. 14%(n=28) of our Covid 19 patients had depression - showed in table 3

Table 4 reveals that there was a relationship between anxiety and the persons belonging to Hindu religion and it was statistically significant (P=0.04). There was no relationship between anxiety and other domains of sociodemographic profile.

Table 5 shows there was relationship between PHQ scores and the age which was statistically significant($p<0.001$) . The Hindus also had greater scores of PHQ that was also statistically significant($p<0.03$)

There was a positive correlation between GAD and PHQ scores that was statistically significant($p<0.001$

There was no relationship between family members being positive and the PHQ and GAD scores .and it was not statistically significant.

In Logistic regression age group between 18-30 suffered from depression which was statistically significant(p value <0.007).

DISCUSSION:

The most unique feature of the study is the fact that the authors wearing full PPE(personal protective equipment) assessed every patient using reliable scales despite the grave health risk involved . Mean age of our sample was 34.56. Majority were married and were graduates in our study which was concordant with the study done by BurçÇagrıPoyraz et al (10)inTurkish population .In the same study depression was 18.8% and anxiety was 18.4%.But in our sample 32%suffered from anxiety which was bit high owing to the questionnaire administered directly to the patients by the authors or it may also be due to the cultural differences . A study done by Miquel A. Fullanaa et al(11) in spanish population there were high levels of anxiety in 54% of population and depression in 42%.The sample of the above study included all mild , moderate and severe covid19 cases but in our sample we studied only mild covid 19 cases which may be the reason for differences in presentation . 16.45% and 23.3% reported to have anxiety and depression respectively in a study done by Amy Dawel et al (12) in Australian population .They found Younger age group and females had high levels of depression and anxiety , In our study there was a high scores of depression among 18-30 years of individual which was concordant with the above study. On studying the Chinese population by zhaoquian et al(13) had found 49.06% of subjects to be depression and 56% of them had anxiety which was not concordant with our study as all covid 19 patients were included in their study . But the younger age group 22-35yrs were affected by depression which was similar to our study .The age group 18-30 years was found to have more depressive scores may be due to fear of infecting other family members , impairment in the daily work activities .Their dependence on others because of isolation and quarantine made them more depressive .If the patient had depression they had their propensity of developing anxiety and vice versa. Anxiety and depression are more common in the same individual and hence proper management to be provided appropriately.

Limitations:

Only mild covid 19 cases were included and other sick cases were excluded as it was tough to administer the scales. Sample size was small as there was risk of exposure and infectivity in interviewing them.

Conclusion:

In spite of the exposure risk the patients were interviewed directly and the psychological impact was noted .The anxiety and depression were prevalent in covid 19 patient which required necessary psychiatric attention .The younger age group had more depressive scores which requires active intervention to prevent further psychiatric illness and morbidity.

Conflict of interest – nil

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