

Psychological Impact of COVID-19 among the Survivors

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ABSTRACT

Corona virus disease 19 (COVID 19) pandemic has had a negative impact on mental health of the survivors. It is important to identify factors that modulate stress response to this pandemic. Patients recovering from COVID-19 may face a second challenge – coping up with disease's psychological health ramifications. This is true particularly for patients who required ICU and intubation. These people may experience 'post-intensive care syndrome' which can manifest as a combination of cognitive, physical, and psychological impairments following stay in intensive care unit for critical illness. PICS (post-intensive care syndrome) impacts even the caregivers and family. Objective: This prospective cross-sectional study aimed to assess the impact of the COVID-19 on mental health of the survivors. Results: It was found that moderate and severe anxiety was present in 7(5.9%) and 2(1.7%) participants respectively and clinically significant anxiety was present in 6(5%) and 9(7.6%) had mild anxiety. PTSD was present in 9(7.6%) of the patients and 5(4.2%) had clinically significant depression. Conclusion: There is a high prevalence of depression, clinically significant anxiety, and posttraumatic stress among the survivors of COVID-19.

Key words: Post-COVID -19, Psychological impact, Anxiety, Depression, PTSD

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shown that, people of younger age, women and those with poor quality of sleep were at high risk for mental health problems [9,10].

INTRODUCTION

Severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) infection has caused unprecedented disruption in human lives [1]. After admission for COVID-19 the patients are subjected to psychological stress due to boredom, social isolation, and loneliness. The symptoms like, cough, fever and respiratory distress and uncertainties of new illness will add more fear of life [2].

It's already known that pandemics can cause threat to mental health [3,4]. The psychological response to SARS-COVID 19 pandemic was like any natural disasters or calamities impinging upon the public [5] and can cause distress among the affected population [6]. Recent studies have found that COVID-19 has had negative impact on mental health and 16-18% of the participants have shown anxiety and symptoms of depression [7,8]. It was cognitive sequelae and post-traumatic stress disorder (PTSD) has been implicated in survivors of COVID -19 induced acute respiratory distress syndrome (ARDS). Studies have

MATERIALS AND METHODS

We undertook this study to assess the prevalence and risk factors of psychological distress among survivors of COVID-19 at 30 and 60 days after hospital discharge between May 25 and June 26, 2021, in a tertiary care hospital in Chennai. Surveys were done using questionnaire with telephonic interview and online both in English and local language (Tamil). Participants who had previous history of psychiatric illness were excluded in the study. First part of survey questions includes demographic details of the study participants like age, sex, education, occupation, income strata [11] (according to modified Kuppasamy scale), previous history of psychiatric illness (anxiety, depression, PTSD) and presence of common physical symptoms of COVID-19 during and after hospitalisation. PTSD checklist for DSM-5 was used to assess PTSD with questions in relation to COVID-19 (with PCL-5 score ≥ 31 was considered positive) [12]. 8-item Patient health questionnaire was used to assess depression and PHQ-9 score ≥ 10 was considered

positive [13]. To determine COVID-19 recovery questions like “how much have you recovered to preCOVID-19 state?” (3- fully, 2-mostly, 1- a little, 0- not at all). Based on cumulative score of Likert scale, anxiety was classified as severe (15-21), moderate (10-14), and mild (0-9). A score of 8 was used as cut-off for diagnosing clinically significant anxiety [14].

by google forms, 29 by telephone), of them 58.5% were male and mean age was 42.5 year. Mean length of COVID 19 stay was 9 days, 25(21.1%) were admitted in ICU admission and only 2 (1.7%) required intubation with mechanical ventilation. 25(21.1%) of the participants had co-morbidities like diabetes, hypertension, cardiovascular disease and 35 (29.7%) required oxygen supplementation (Table 1).

RESULTS

Out of 350 eligible patients 118 completed the survey (89

Table 1: Demographic and COVID19 data of the survivors.

Demographic characteristics		GAD-7	PHQ 9	PCL-5
Age in years	N/%	N/%	N/%	N/%
20-29	24/20.3%	3/12.5%	3/12%	1/5.3%
30-39	34/28.8%	7/29.1%	8/32%	6/31.6%
40-49	40/33.9%	8/33.3%	9/36%	7/36.8%
50-60	12/10%	5/20.8%	4/16%	3/15.8%
>60	18/15%	1/4.1%	1/4%	2/10.5%
Total	118	24/20.3%	25/21.1%	19/16%
Sex				
Male	69/58.5%	9/37.5%	14/56%	11/57.8%
Female	49/41.5%	15/62.5%	11/44%	8/42.1%
Marital status				
Yes	85/72%	17/70.8%	16/64%	14/73%
No	25/21%	5/20.8%	7/28%	4/21%
Single	8/6.8%	2/8.3%	2/8%	1/5.2%
Employed				
Yes	80/67.8%	16/66.7%	17/68%	11/57.9%
No	38/32%	9/37.5%	8/32%	8/42.1%
Socio-economic status				
Upper class	8/6.7%	1/4.1%	1/4%	1/5.3%
Upper middle	28/23.7%	5/20.8%	4/16%	3/15.8%
Lower middle	36/30.5%	8/33.3%	8/32%	7/36.8%
Upper Lower	27/22.9%	6/25%	9/36%	6/31.6%
Lower	19/16%	4/16.7%	3/12%	2/10.5%
Underlying illness/co-morbidities				
Yes	25/21%	5/20.8%	7/28%	5/26.3%
No	93/78.8%	19/79.2%	18/72%	14/73.7%
Hypertension	8/6.8%	2/8.3%	2/8%	1/5.2%
Diabetes mellitus	5/4.2%	1/4.1%	2/8%	1/5.2%
Asthma	2/1.7%	0	1/4%	0
Hypothyroidism	4/3.3%	0	1/4%	1/5.2%
Cardiovascular disease	2/1.7%	1/4.1%	0	1/5.2%
Chronic kidney disease	1/0.8%	1/4.1%	0	0
Others	3/2.5%	0	1/4%	1/5.2%

It was found that moderate and severe anxiety was present in 7(5.9%) and 2(1.7%) participants respectively and clinically significant anxiety was present in 6(5%) and 9(7.6%) had mild anxiety. PTSD was present in

9(7.6%) of the patients and 5(4.2%) had clinically significant depression. Moderate to severe depression was found in 3(2.5%) and moderate depression in 2(1.7%) (Table 2).

Table 2: Psychological symptoms scores (posttraumatic stress disorder check list-5, Patient Health Questionnaire-9, Generalized anxiety disorder-7).

Psychological symptoms scores	N	%
PCL-5		
>31	9	7.60%
PHQ- 9		
Clinically significant depression (>10)	5	4.20%
Severe depression (20-27)	2	1.70%
Moderate - severe depression (14-19)	3	2.50%
Moderate depression (10-14)	4	3.40%
Mild depression (5-9)	5	4.20%
Minimal depression (1-4)	6	5%
Total	25	21.10%
GAD-7		
Clinically significant anxiety >8	6	5%
Severe (15-21)	2	1.70%
Moderate (10-14)	7	5.90%
Mild (0-9)	9	7.60%
Total	24	20.30%

DISCUSSION

With sudden rise in COVID 19 cases in second wave in India, many patients were suffering from psychological distress like stress, insomnia, depressive symptoms, anxiety, denial, fear and anger POST COVID -19 infection [15]. World Health Organisation has urged to take necessary precautions to address the negative impact of COVID 19 on psychological health and well-being [16]. In collaboration with many national institutes of importance, Government of India has launched helpline for counselling and guidance [17]. Regardless of exposure to COVID-19, many people have experienced anxiety and fear regarding falling ill or dying or blaming people who are ill and leading to trigger to psychological breakdown [18].

Our study showed that prevalence of depression, anxiety and PTSD was 20.3%, 21.1% and 7.6 % respectively. A recent study by Cai et al [19] in China reported high prevalence of anxiety, depression, and clinically significant stress among COVID-19 patients as 22.2%, 38.1% and 31% respectively.

In our study we tried to asses' various factors such as demographic details, pre-existing chronic medical condition along with psychological distress. Participants in the age group of 40-49 years had higher prevalence of psychological distress compared to other age groups, but

other study by Imran et al [20] showed that younger age group were more involved and study by Janiri et al [21] showed that older age groups were more affected psychologically. This study showed that females were more vulnerable than their male counterparts. This was in accordance with study by Imran et al [20] and Janiri et al [21]. It was observed in our study that among socio-economic strata, lower middle class had more psychological distress.

CONCLUSION

There is a high prevalence of depression, clinically significant anxiety, and posttraumatic stress among the survivors of COVID-19. We recommend formal evaluation by psychiatrists and long-term psychological rehabilitation for survivors of COVID-19.

Limitations of this study are that participants couldn't be interviewed in person; only online questionnaire were used and person who couldn't fill the questionnaire were interviewed through phone.

CONFLICT OF INTEREST

No conflict of interest.

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Nil.

ETHICAL CLEARANCE

Ethical clearance obtained from ethical committee.

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