

Original Research Article

Impact of lockdown due to COVID-19 pandemic on psychiatric patients

R. Bhuvaneshwari^{1*}, Chandini Raj S. N.¹, Neethu Raj¹,
Sakthivel Vaiyapuri¹, K. C. Muraleedharan²

¹Department of Psychiatry, National Homoeopathy Research Institute in Mental Health, Kottayam, Kerala, India

²Department of Medicine, National Homoeopathy Research Institute in Mental Health, Kottayam, Kerala, India

Received: 24 June 2021

Accepted: 02 July 2021

*Correspondence:

Dr. R. Bhuvaneshwari,

E-mail: dr.bhuvaneshwarir@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: There was sudden reorganization of services during lockdown due to COVID-19. Care of psychiatric patients was in threat due to closure of inpatient department and conversion of hospitals into COVID treatment centres.

Methods: List of follow-up patients not attending our outpatient department during lockdown was obtained. They were contacted through telephone. Evaluation was done with Brief psychiatry rating scales (BPRS) and WHODAS2 scales. Statistical analysis of obtained data was done.

Results: Comparison of BPRS total score, WHODAS domain scores and total score between outpatients and inpatients was done using independent samples 't' test. It was found to be statistically significant ($p < 0.05$). Anxiety and distractibility are the more prominent symptoms in majority of psychiatry patients.

Conclusions: Psychiatric patients needs safe place, with people to talk and to take care of daily activities. It is highly recommended urgent need of creating awareness program on COVID-19 pandemic which targets this vulnerable population. It is essential to provide continued psychiatric intervention using tele-psychiatric platform and ensure their social support using community mental health services during the pandemic. A standard protocol on the management of patients with serious mental illness during an infectious disaster should be developed.

Keywords: Psychiatric patients, Lockdown, COVID-19, BPRS, WHODAS

INTRODUCTION

The new virus, a global threat caused by a novel corona virus is by far the largest outbreak of atypical pneumonia since the severe acute respiratory syndrome (SARS) outbreak in 2003. COVID-19 was announced as a pandemic on 11 March 2020, and within 2 weeks, the Government of India placed a nationwide lockdown. COVID-19 pandemic and the lockdown affected different service sectors badly, with health-care services being one of the same. Outpatient facilities were closed in several areas immediately after the lockdown, and health-care services were restricted to emergency services those devoted to patients infected with COVID-19 some wards were converted to COVID-19 wards in several locations,

and new COVID-19 hospitals were commissioned in others. Quarantine centres were also made operational. Many health-care practitioners were interested in the management of the people as well as the case touch tracing.¹

The multidisciplinary teams are in charge of the COVID-19 wards and clinics, with people from various departments looking after the various issues. Administrative problems, issues relating to the procurement of personal protective equipment, contact tracing, increasing public and health-care professional knowledge of the COVID-19 infection, and health-care professional preparation are among them.² The creation of multidisciplinary teams and the sudden reorganization of

services are both presenting challenges to the working and smooth operation of the services. Mental health facilities, like other specialties, have been severely impacted by the global lockdown and pandemic, and India is no exception. According to data from across the world, inpatient care has been severely impacted in many countries, with a decrease in the number of patients in the inpatient environment, restrictions on new patient admissions, and existing inpatient care reorganization.¹

The pandemic has also resulted in a rise in the number of patients attending emergency rooms, the requirement that patients take the rapid COVID-19 examination before being admitted to a psychiatric facility, and the reorganization of inpatient treatment and facilities. As a protective measure against the spread of infection, many consultant liaison psychiatry services have adapted to telecommunication rather than continuing with face-to-face interaction.³ This high degree of disruption in outpatient and other mental health facilities around the country is understandable, given the restrictions on movement imposed by lockout, the fear of infection, and mental health practitioners' concerns about seeing patients without adequate Personal protective equipment. In the wake of the COVID-19 pandemic, it is difficult to control the movement of patients, caregivers, and other visitors.⁴

According to some emerging evidence from China, people with serious mental illnesses are more likely to contract COVID-19 infection.⁴ Over 40 inpatients at Wuhan Mental Health Centre were diagnosed with the COVID-19 in early February 2020. As of the 18th of February, 2020, 323 serious mental illness patients had been contaminated.⁵

In-patients, especially those who need long-term care in closed wards, may be concerned about the high risk of cluster contagion. Outpatients with serious mental illness are having difficulty receiving maintenance care due to traffic constraints and exclusion steps, and may experience mental relapse and uncontrollable behaviours as a result (e.g., hyperactivity, agitation, and self-harm).⁶

Increased agitation, abuse, and suicidal behaviour due to a lack of proper and effective care as the general level of psychological distress in the general population has likely increased.⁷ Suicide attempts by people going through drug withdrawal have been recorded.⁸ Suicide rates are rising in tandem with the impending enactment of a strict curfew. As a result, there is concern that the strain on psychiatric facilities could worsen at a time when they are still struggling due to COVID-19-related staff shortages. Emergency preparation for the reconstruction of current psychiatric provision should be prioritised to resolve certain issues. Patients may be triaged for inpatient or outpatient treatment, and day care clinics may be suspended. As a result, inpatient and outpatient facilities are becoming increasingly important and should be expanded to meet increased demand. Specific strategies must be implemented at the national and regional levels in

the context of each area's specific service structure to address the many challenges.

In this moment of unprecedented crisis, psychiatric facilities are at risk of being neglected and overburdened. Psychiatrists have the responsibility of defending their patients' immediate and critical needs, and by doing so, they can help to overcome the pandemic by assisting other medical professions and reducing the psychological effect of the emergency.⁹

Number of psychiatry patients attending outpatient reduced during lockdown and most of the psychiatry patients attending outpatient were emergency cases which required Inpatient admission. Due to conversion of hospitals to COVID treatment centres, care of violent psychiatric patients are in threat. There is an imminent need to address this issue and find the remedial measures. The aim of the study was to find the status of psychiatric patients during lockdown and the impact of closure of inpatient on them.

METHODS

This cross-sectional study was conducted at National Homoeopathy Research Institute in Mental Health, Kottayam which is equipped with 50 bedded psychiatric in-patients. List of follow-up patients attending the psychiatry outpatient from January 2019 to march 2020 was taken, from which patients not attending during National lock down from 22 March to June 30 was obtained which included 408 cases. The data was collected as separate Inpatient department and outpatient department data. Brief psychiatry rating scales and WHODAS2 scales were used for assessment. So only those cases which could be analysed with these scales were only taken for the study. Of total 408 cases, Inpatient cases were 305, and Outpatient cases were 103. Out of 408 cases, 126 cases belonged to substance abuse disorder and 51 cases to child psychiatry disorders which were excluded for convenience of uniform assessment. 63 cases not attended call. Full details were obtained from 168 cases, out of which 46 were Outpatient cases and 122 were in-patient cases. The 168 cases were contacted through telephone and their conditions were noted down. Also, Brief psychiatry rating scales and WHODAS. 2 scores were also evaluated. The scores are analysed with descriptive statistical method.

RESULTS

A total of 168 cases were obtained, out of which 46 were outpatient cases and 122 were in-patient cases. Socio-demographic characteristics of the sample are reported in Table 1. Comparison of BPRS total score, WHODAS domain scores and total score between OP and IP patients was calculated. There was statistically significant difference in the scores of BPRS and WHODAS between IP and OP patients except in the domain of 'getting around' represented in Table 2.

The participants of the study were having different disease conditions. The average scores of the participants under each diagnosis for the two different rating scales are expressed in the Table. BPRS score was higher for patients with acute psychosis followed by mood disorder, organic mood disorder and schizophrenia. WHO DAS score was higher for acute psychotic disorder followed by organic mood disorder and mood disorder and BPAD as represented in Table 3. The BPRS symptoms displayed by majority of OP patients were anxiety and distractibility. The symptoms displayed with highest intensity by

maximum number of patients were distractibility, tension and excitement as represented in Table 4.

The BPRS symptoms displayed by majority of IP patients were anxiety and distractibility. The symptoms displayed with highest intensity by maximum number of patients were distractibility and tension as represented in Table 5. In WHODAS 2.0 scale under domain 6. 110 inpatients participants reported their family suffers a lot because of their health problems. Maximum scores in each domain is represented in Table 6 and 7.

Table 1: Demographic variables.

Variables	OP (N=46)	IP (N=122)	Total (N=168)
Age (years)	31.83±17.38	35.27±13.17	
Gender			
M	22 (47.83)	88 (72.13)	110 (65.48)
F	16 (34.78)	34 (27.87)	50 (29.76)
MC	5 (10.87)	0 (0.0)	5 (2.98)
FC	3 (6.52)	0 (0.0)	3 (1.79)
Occupation			
Employed irregularly	8 (17.39)	44 (36.07)	52 (30.95)
Employed regularly	9 (19.57)	15 (12.30)	24 (14.29)
Retired	1 (2.17)	0 (0.00)	1 (0.59)
Unemployed	28 (60.87)	63 (51.64)	91 (54.17)
BPRS total	20.11±16.99	29.41±17.85	26.86±18.06
Understanding and communicating	7.28±8.20	11.02±7.82	9.99±8.08
Getting around	5.09±5.78	6.50±5.48	6.11±5.58
Self-care	3.70±4.78	5.85±4.69	5.26±4.79
Getting along with people	6.0±7.10	9.37±6.89	8.45±7.09
Life activities	9.28±10.54	14.70±10.18	13.21±10.53
Participation in society	11.63±10.43	17.25±8.42	15.71±9.33
WHODAS total	42.98±44.56	64.69±40.88	58.74±42.90

Table 2: Comparison of BPRS total score, WHODAS domain scores and total score between OP and IP patients.

Variables	MD±SE	95% CI for mean difference	T value	P value
BPRS total	-9.30±3.05	(-15.32, -3.28)	-3.05	0.003
Understanding and communicating	-3.73±1.37	(-6.44, -1.03)	-2.72	0.007
Getting around	-1.41±0.96	(-3.31, 0.49)	-1.47	0.144
Self-care	-2.16±0.82	(-3.38, 0.55)	-2.65	0.009
Getting along with people	-3.37±1.20	(-5.74, -0.99)	-2.80	0.006
Life activities	-5.41±1.78	(-8.93, -1.90)	-3.05	0.003
Participation in society	-5.62±1.72	(-9.05, -2.2)	-3.28	0.002
WHODAS total	-21.71±7.54	(-36.73, -6.69)	-2.88	0.005

Note: Independent samples T test was used, p<0.05, statistically significant.

Table 3: The average scores of the participants under each diagnosis for the two different rating scales.

Diagnosis	No. of cases	BPRS	WHODAS					Total	
			Understanding and communicating	Getting around	Self-care	Getting along with people	Life activities		Participation in society
Schizophrenia	40	33.0±13.67	13.73±6.59	6.5±4.22	7.02±3.89	11.7±5.81	18.75±8.77	20.0±7.72	77.7±33.89

Continued.

Diagnosis	No. of cases	BPRS	WHODAS						Total
			Understanding and communicating	Getting around	Self-care	Getting along with people	Life activities	Participation in society	
Substance induced psychotic disorder	39	9.82±9.27	1.62±4.39	0.59±2.15	0.54±1.88	1.13±3.50	2.26±5.53	8.28±7.57	14.41±21.77
BPAD	39	41.38±14.06	15.56±4.90	10.49±4.35	8.46±3.35	12.74±4.55	18.82±7.68	20.56±6.27	86.64±28.01
Depression	16	28.94±12.41	10.44±6.56	7.38±5.63	5.94±4.51	10.25±7.14	15.13±10.35	16.56±9.39	65.69±41.35
Psychosis nos	14	31.29±15.79	12.86±6.85	9.64±4.51	7.50±4.95	11.57±6.02	17.71±8.33	18.36±8.00	77.64±36.10
Conduct disorder with depression	11	8.64±9.64	3.82±7.05	3.36±5.68	0.82±2.71	2.18±4.62	6.91±6.99	6.82±7.76	23.91±31.28
Anxiety disorder	5	2.8±2.77	0.20±0.45	0	0	0.40±0.55	0.20±0.45	5.60±6.54	6.40±6.11
Acute psychotic disorder	2	51±0.0	17±1.41	11±1.41	12±0.0	15±0.0	20.5±4.95	24±0.0	99.5±4.95
Persistent mood disorder	1	42	18	13	9	15	20	18	93
Organic mood disorder	1	42	18	10	10	13	20	24	95

Table 4: Symptoms in Brief psychiatric rating scale in op cases.

S. code	Symptoms	No. of cases with the symptoms	Intensity of the symptoms						
			1	2	3	4	5	6	7
B2	Anxiety	30	5	10	9	5	1	0	0
B22	Distractibility	29	8	14	0	2	5	0	0
B19	Tension	24	8	5	4	2	5	0	0
B21	Excitement	21	10	4	0	2	5	0	0
B23	Motor hyperactivity	21	8	2	5	3	3	0	0
B1	Somatic concern	20	7	1	1	10	1	0	0
B3	Depression	20	6	3	4	3	4	0	0
B13	Self-neglect	19	12	0	1	6	0	0	0
B14	Disorientation	19	13	2	4	0	0	0	0
B17	Emotional withdrawal	19	0	0	3	12	4	0	0
B20	Uncooperativeness	16	5	2	3	3	3	0	0
B9	Suspiciousness	15	2	1	4	7	1	0	0
B11	Unusual thought content	14	2	3	4	5	0	0	0
B5	Guilt	10	0	1	8	1	0	0	0
B18	Motor retardation	10	2	0	4	4	0	0	0
B24	Mannerisms and posturing	10	3	4	3	0	0	0	0
B4	Suicidality	8	1	3	3	1	0	0	0
B10	Hallucinations	8	0	1	4	3	0	0	0
B7	Elated mood	7	1	1	0	2	3	0	0
B8	Grandiosity	6	0	0	1	4	1	0	0
B12	Bizarre behaviour	4	1	0	3	0	0	0	0
B16	Blunted affect	4	1	0	2	1	0	0	0

Continued.

S. code	Symptoms	No. of cases with the symptoms	Intensity of the symptoms						
			1	2	3	4	5	6	7
B6	Hostility	2	0	0	0	2	0	0	0
B15	Conceptual disorganisation	2	1	0	1	0	0	0	0

Table 5: Symptoms in Brief psychiatric rating scale in inpatient cases.

S. code	Symptoms	No. of cases with the symptoms	Intensity of the symptoms						
			1	2	3	4	5	6	7
B2	Anxiety	99	24	36	32	7	0	0	0
B22	Distractibility	95	22	31	7	17	18	0	0
B19	Tension	91	27	27	11	16	10	0	0
B20	Uncooperativeness	91	36	12	15	24	4	0	0
B1	Somatic concern	89	13	39	12	23	2	0	0
B21	Excitement	80	30	9	8	17	15	1	0
B9	Suspiciousness	77	11	4	29	31	2	0	0
B13	Self-neglect	77	38	21	11	7	0	0	0
B14	Disorientation	63	46	14	2	1	0	0	0
B23	Motor hyperactivity	61	16	5	12	18	9	1	0
B7	Elated Mood	60	16	9	6	19	10	0	0
B11	Unusual thought content	60	24	22	7	7	0	0	0
B17	Emotional withdrawal	60	13	4	11	29	3	0	0
B18	Motor retardation	54	8	3	22	17	4	0	0
B12	Bizarre behavior	53	26	10	14	3	0	0	0
B10	Hallucinations	50	9	6	24	11	0	0	0
B24	Mannerisms and posturing	48	6	29	12	1	0	0	0
B3	Depression	47	22	5	10	10	0	0	0
B8	Grandiosity	47	8	2	12	23	2	0	0
B6	Hostility	34	7	4	11	12	0	0	0
B15	Conceptual disorganization	31	22	6	2	1	0	0	0
B16	Blunted affect	31	25	1	3	2	0	0	0
B5	Guilt	20	2	2	13	2	1	0	0
B4	Suicidality	15	10	2	2	0	1	0	0

Table 6: Top questions in each domain WHODAS 2.0 (outpatient’s cases).

Domains	Questions	No. of cases
Domain 1. Understanding and communicating	D1.1- Concentrating on doing something for ten minutes?	25
Domain 2. Getting around	D2.3- Moving around inside your home?	23
Domain 3. Self-care	D3.1- Washing your whole body?	19
Domain 4. Getting along with people	D4.1- Dealing with people you do not know?	21
Domain 5. Life activities	D5.6- Doing your most important work/school tasks well?	23
Domain 6. Participation in society	D6.7- How much of a problem did your family have because of your health problems?	32

Table 7: Top questions in each domain WHODAS 2.0 (inpatient).

Domains	Questions	No. of cases
Domain 1. Understanding and communicating	D1.1- Concentrating on doing something for ten minutes?	86
Domain 2. Getting around	D2.2- Standing up from sitting down?	79
Domain 3. Self-care	D3.3- Eating?	80
Domain 4. Getting along with people	D4.1- Dealing with people you do not know?	82
Domain 5. Life activities	D5.8- Getting your work done as quickly as needed?	91
Domain 6. Participation in society	D6.7- How much of a problem did your family have because of your health problems?	110

DISCUSSION

The closure of regular outpatient and inpatient services due to COVID-19 pandemic has left the patients in a helpless situation, where they have nowhere to go. Patients experiencing new-onset severe symptoms, experiencing a relapse, or experiencing suicidal behaviour, have no other option, other than consulting the emergency services. When the number of patients attending the emergency services was evaluated, there was a significant reduction in the number of patients attending per day. This is understandable, considering the travel restrictions.¹⁰

Present study evaluated the status of psychiatric patients during lockdown due to COVID 19 pandemic. Brief psychiatry rating scales score was higher for acute psychotic disorder cases. Our study also shows significant worsening symptoms of Mood disorder, BPAD and schizophrenia cases during lock down period. The scales used were not specific to focus their positive and negative symptoms.

Further, the present study suggests that there was an increase in the proportion of patients with a diagnosis of schizophrenia, having difficulty during the lockdown period. This finding suggests that, many patients with schizophrenia experienced a relapse of symptoms in the absence of routine regular services. There could be many reasons for the relapse, such as difficulty in procuring the medication, an increase in the level of stress, and an adverse household environment. Mean age for the psychiatric cases in this survey was 31.83 ± 17.38 (OPD) and 35.27 ± 13.17 (IPD) which shows most patients were in the middle age group. It also shows skewing towards male gender (65.48%). Majority of patients were unemployed (54.17%). Also 30.95% of patients were employed irregularly.

Previous studies suggest that patients with mental illness were four times more likely to perceive high COVID-19 pandemic related stress.¹¹ Patients with severe mental illness (SMI) who were experiencing inadequate social support during lockdown showed low awareness of COVID-19. Caregiver's burden was found to be significantly high in this group which manifests in the form of poor social support, increased negative expressed emotions, and domestic violence towards patients. These may further increase the risk of relapse.¹²

Around 129 patients experienced anxiety during lock down. The reason could be high susceptibility to stress in closed confinement, major life events, and poor access to mental health care and poor treatment compliance, disturbed biological rhythm. In our study major proportion of the sample was schizophrenia cases. A previous study showed that bipolar disorder was the most common disorder during the study. Also, anxiety was higher for the patients during that time.¹³ This was found to be similar to our study. A number of measures that are advocated to prevent the spread of COVID-19, like home confinement,

social distancing, lockdown and quarantine, can potentially disrupt both habitual patterns of sleep and wakefulness in addition the number and quality of social contacts and activities. This might have a deleterious influence on the danger of both manic and depressive relapses.¹⁴ There is a detailed relationship between bipolar disorders and substance use, particularly alcohol use. During the COVID-19 pandemic, some nations have opted to continue sales of alcohol for home consumption, resulting in a possible increase in use in vulnerable individuals. Others have opted to shut down such sales, potentially triggering symptoms of alcohol withdrawal. In patients with manic depressive illness, this might cause increased symptom severity, furthermore adverse outcomes like suicide.¹⁵

There was evidence of an association between seropositivity for corona viruses and the risk of mood disorders and suicide. Though the importance of this association is unclear, it should be associated with the neurotropic potential of respiratory coronaviruses, or to their ability to electrify a systemic inflammatory reaction, both of which can be related to mood dysregulation.¹⁶ Social distancing practices could have a negative impact on individuals with schizophrenia. Typically, individuals with schizophrenia on average have smaller and poorer-quality social networks than the general population.¹⁷

CONCLUSION

Psychiatric patients need safe place, with people to talk and to take care of daily activities. It is highly recommended urgent need of creating awareness program on COVID-19 pandemic which targets this vulnerable population. It is essential to provide continued psychiatric intervention using tele-psychiatric platform and ensure their social support using community mental health services during the pandemic. A standard protocol on the management of patients with serious mental illness during an infectious disaster should be developed.

ACKNOWLEDGEMENTS

The authors would like to acknowledge Dr. Anil Khurana and Mrs. Reshmi for helping in the study. The authors are also thankful to the respondents for their active participation.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Grover S, Mehra A, Sahoo S, Avasthi A, Tripathi A, Souza A, et al. State of mental health services in various training centers in India during the lockdown and COVID-19 pandemic. *Indian J Psychiatry*. 2020;62(4):363-9.

2. Grover S, Dua D, Sahoo S, Mehra A, Nehra R, Chakrabarti S. Why all COVID-19 hospitals should have mental health professionals: The importance of mental health in a worldwide crisis! *Asian J Psychiatr*. 2020;51:102147.
3. Bojdani E, Rajagopalan A, Chen A, Gearin P, Olcott W, Shankar V, et al. COVID-19 Pandemic: Impact on psychiatric care in the United States. *Psychiatry Res*. 2020;289:113069.
4. Li W, Yang Y, Liu ZH, Zhao YJ, Zhang Q, Zhang L, et al. Progression of Mental Health Services during the COVID-19 Outbreak in China. *Int J Biol Sci*. 2020;16(10):1732-8.
5. Xiang YT, Zhao YJ, Liu ZH, Li XH, Zhao N, Cheung T, et al. The COVID-19 outbreak and psychiatric hospitals in China: managing challenges through mental health service reform. *Int J Biol Sci*. 2020;16(10):1741-4.
6. Chinese Society of Psychiatry. Expert Consensus on Managing Pathway and Coping Strategies For Patients with Mental Disorders during Prevention and Control of Infectious Disease Outbreak (Novel Coronavirus Pneumonia) (in Chinese) In press. 2020.
7. Grover S, Sahoo S, Mehra A, Avasthi A, Tripathi A, Subramanyan A, Pattojoshi A, et al. Psychological impact of COVID-19 lockdown: An online survey from India. *Indian J Psychiatry*. 2020;62(4):354-62.
8. Sahoo S, Rani S, Parveen S, Pal SA, Mehra A, Chakrabarti S, Grover S, et al. Self-harm and COVID-19 Pandemic: An emerging concern - A report of 2 cases from India. *Asian J Psychiatr*. 2020;51:102104.
9. Thome J, Coogan AN, Fischer M, Tucha O, Faltraco F. Challenges for mental health services during the 2020 COVID-19 outbreak in Germany. *Psychiatry Clin Neurosci*. 2020;74(7):407.
10. Grover S, Dua D, Sahoo S, Chakrabarti S. Profile of patients availing psychiatry emergency services pre and post lockdown at a tertiary care center of North India. *Asian J Psychiatr*. 2020;54:102448.
11. Davidson JR, Crawford C, Ives JA, Jonas WB. Homeopathic treatments in psychiatry: a systematic review of randomized placebo-controlled studies. *J Clin Psychiatry*. 2011;72(6):795-805.
12. Muruganandam P, Neelamegam S, Menon V, Alexander J, Chaturvedi SK. COVID-19 and Severe Mental Illness: Impact on patients and its relation with their awareness about COVID-19. *Psychiatry Res*. 2020;291:113265.
13. Shakya DR. Problems shared in psychiatry help-line of a teaching hospital in eastern Nepal during COVID-19 pandemic lockdown. *Insign Depress Anxiety*. 2020;4:37-9.
14. Rajkumar RP. Bipolar disorder, COVID-19, and the risk of relapse. *Bipolar Disord*. 2020;22(6):640.
15. Frye MA, Salloum IM. Bipolar disorder and comorbid alcoholism: prevalence rate and treatment considerations. *Bipolar Disord*. 2006;8(6):677-85.
16. Okusaga O, Yolken RH, Langenberg P, Lapidus M, Arling TA, Dickerson FB, et al. Association of seropositivity for influenza and coronaviruses with history of mood disorders and suicide attempts. *J Affect Disord*. 2011;130(1):220-5.
17. Kozloff N, Mulsant BH, Stergiopoulos V, Voineskos AN. The COVID-19 Global Pandemic: Implications for People With Schizophrenia and Related Disorders. *Schizophr Bull*. 2020;46(4):752-7.

Cite this article as: Bhuvanewari R, Chandini RSN, Raj N, Vaiyapuri S, Muraleedharan KC. Impact of lockdown due to COVID-19 pandemic on psychiatric patients. *Int J Community Med Public Health* 2021;8:4378-84.