

Study of First Episode Psychiatric Morbidity During the Period of Lockdown at a Tertiary Care Centre, Hyderabad

Rama SubbaReddy¹, Sreenivasa Rao Sireesha², Ravikishore Sadula³

¹ Professor

² Prof & HOD

³ Junior Resident

Department of Psychiatry
Institute of Mental Health
Osmania Medical College
Hyderabad.
Telangana, India.

CORRESPONDENCE:

Dr. Ravikishore Sadula, MBBS
Junior Resident
Department of Psychiatry
Institute of Mental Health
Osmania Medical College
Hyderabad.
Telangana, India.
Email: ravikishore959@gmail.com

ABSTRACT

Background: Covid-19 pandemic has caused havoc worldwide. India is also going through a challenging situation as the number of infected/positive cases is increasing day by day with strict preventive measures and restrictions by the Indian government in the form of nationwide lockdown, the citizens are going through a range of psychological and emotional reactions, fear and uncertainty being one of them.

Aim: To determine incidence, diagnosis of first episode psychiatric morbidity and its association with socio-demographic factors, psychosocial factors during lockdown period.

Materials and Methods: A retrospective study conducted using case sheets of the patients attended Institute of mental health, Hyderabad from 23rd March to 31st May 2020.

Results: Out of 1571 registered cases, 833 presented with first episode psychiatric morbidity (53.02%). ICD-10 diagnostic criteria were applied. Majority were diagnosed under mental and behavioral disorders due to psychoactive substance use (89.3%), followed by Neurotic stress related and somatoform disorder (7.1%), Mood (Affective) disorders (2.4%), Schizophrenia, schizotypal and delusional disorders (1.2%). Psychiatric morbidity was more in middle aged group from 46-60 years (68.8%) ($p=0.00$), male gender (71.40%) (lower and upper lower socioeconomic group (46%) ($p=0.000$). Possible psychosocial stressors that might have precipitated psychiatric illness were lockdown related stressors like unavailability of substance (59.4%) and financial stress (26.3%) than fear of infection (7.6%).

Conclusion: Incidence of psychiatric morbidity was more because of the lockdown rather than the fear of infection. Those who suffered more were middle aged males belonging to upper-lower socioeconomic class. Patients presented more with psychoactive substance related disorders predominant reason being sudden unavailability of alcohol due to lockdown.

Keywords: Psychiatric morbidity, covid19, prevalence, psychoactive substance related disorders

INTRODUCTION

COVID-19 pandemic is a public health emergency of international concern and poses a challenge to psychological resilience. With the increasing number of infected cases and deaths, many patients experience physical suffering and great psychological distress.

As a preventive measure to avoid an exponential increase in number of covid 19 cases, government of India declared a complete lockdown from march 23rd 2020 which led to unavailability of psychoactive substance,

loss of employment, social isolation and separation from loved ones.

Furthermore, during this pandemic, general medical complications have received the most attention, whereas only few studies addressed the potential direct effect on mental health of SARS-CoV-2.^[1,2,3,4,5] Another impact of pandemic may have its role on increasing the suicide rate.^[6,7]

Lockdown can be a significant and effective strategy of social distancing to tackle the increasing spread of the

highly infectious COVID-19 virus, at the same time, it can have some degree of psychological impact on the public.^[8] It is well known that quarantine/isolation for any cause and in the context of a pandemic (Severe Acute Respiratory distress Syndrome, 2003^[9,10] has been associated with significant mental health problems ranging from anxiety, fear, depressive symptoms, sense of loneliness, sleep disturbances, anger, etc.

Lockdown and the ongoing pandemic also have led to an increase in the prevalence of psychological morbidity which was supported by online surveys conducted in India^[3,4,5,11], China^[1], Denmark and USA^[12] ($P < 0.005$, IES- R > 24, $P < 0.001$).

However, in contrast, some rapid review and meta-analysis of longitudinal studies to identify the relationship between COVID-19 lockdowns and mental health conducted in India found that lockdowns had small effects on mental health symptoms, ($g = 0.17$, $s.e. = 0.05$, 95% CI(0.06–0.24), $p = 0.001$).^[13]

Also few online surveys found that individuals between 18 and 30 years of age or above 60 were suffered more during the period of lockdown with predominant conditions being anxiety, depression^[1,4,5,11,13,14,15] ($P < 0.001$, $P < 0.005$, 1/3rd of the population).

Additionally, there are multiple reports of people indulging in self-harming behavior, either due to fear of COVID-19^[7], substance withdrawal^[16], or worsening of primary psychiatric disorder or emergence of new psychiatric ailments.^[17]

During the lockdown period, there was shrinkage of almost all kind of services, except for Tele-psychiatry services, which saw expansion during this period.^[18] Accordingly, there is a need to understand the impact of the pandemic on the utilization of mental health services, which has not been studied more in the Indian context.

Thus, this study aimed to assess the patients attending tertiary psychiatric care center, their diagnosis, possible stressors and associated sociodemographic factors after the imposition of lockdown.

Also, studies addressed psychological impact of lockdown and covid 19 on the general population through online surveys, our study was done in a patient population visiting the hospital because of the lockdown.

The purpose of study was to study the incidence, type of first episode psychiatric morbidity during lockdown and its association with socio demographic factors.

Objectives

- To study the incidence of first onset psychiatric morbidity during lockdown.

- To study the association between psychiatric morbidity and sociodemographic factors.
- To study the temporal association between psychiatric morbidity and stress of lockdown.

MATERIALS AND METHODS

The study design was a retrospective study conducted at Institute of mental health, Erragadda, Hyderabad. Data was collected from case sheets of newly registered patients during the period of lockdown (23rd March to 31st May 2020).

Sociodemographic details, psychiatric diagnosis (ICD-10 criteria), psychosocial stressors as per the history given by patients and attendants at the time of assessment that is entered in the case-sheets were noted in the intake proforma.

Sampling Technique:

Convenient sampling.

Inclusion Criteria

- All newly registered first episode cases
- Male and female subjects

Exclusion Criteria

- Past psychiatric illness
- Patients with family history of psychiatric illness
- Patients with medical comorbidities

Ethics Approval

Ethics committee approval was obtained from Osmania Medical College Institutional Ethics Committee before conducting the study (Ref.No.IEC/OMC/M.NO.48 (Acad)/73).

STATISTICAL ANALYSIS

Data was analysed using SPSS version 22, Descriptive statistics used were percentages, mean, median and mode. For Analytical statistics chi square test was used 'p'-value less than 0.05 was considered statistically significant.

RESULTS

Out of 1571 newly registered cases in our institute at the time of lockdown, total of 833 cases were enrolled into the study. Registration data from the previous year (1871 newly registered cases in March-May 2019) shows that there was no major change in the new registrations at our institute even though government's strict instructions.

However, old cases which came for review had a significant reduction because of lockdown (almost 50% from 25453 to 12790).

Table 1: Diagnosis Profile

Diagnosis	Frequency	Percentage
Mental and Behavioural disorders due to psychoactive substance use	744	89.3
Schizophrenia, Schizotypal and Delusional disorders	10	1.2
Mood {Affective} Disorders	20	2.4
Neurotic, Stress-related and somatoform disorders	59	7.1
Total	833	100

Majority suffered with mental and behavioral disorders due to psychoactive substance use reason might be sudden unavailability of alcohol.

Followed by neurotic, stress-related disorders, mood disorders and schizophrenia, schizotypal and delusional disorders.

Table 2 shows that people between 46-60 (573/68.8%) years of age group, male gender (595/71.4%) and upper lower socioeconomic (382/45.9%) group suffered more during the period of lockdown.

Patients suffered majorly with mental and behavioural disorders due to psychoactive substance use disorders with p value of 0.000 and chi square of 119.27, majority of the sufferers were men with P- value of 0.005 and upper lower socioeconomic status people (P value 0.000/ chi square 88.197).

Unavailability of alcohol was the predominant reason for the excessive cases of psychoactive substance related disorders with the P value of 0.000 and chi square of 410.71. Followed by financial stress due to lockdown (232), fear of infection and homesick due to unavailability of transport due to lockdown. Fear of infection was associated more with neurotic, stress-related disorders (35) and mood disorders (10) in the study sample.

DISCUSSION

Lockdown and the related containment measures like quarantine, social distancing, and self-isolation can have a detrimental impact on mental health [6,8] This study focused mainly on the detrimental effects of the lockdown on mental health in 833 newly registered cases. Like other specialties, Psychiatry services have also been affected worldwide.^[19]

In India too, mental health services, both at the institutional level and in the private sector have been affected significantly.^[18] Lockdown did decrease patients visiting review OP in our institute by 50% (from 25453 to 12790) but did not the new registrations (1871-1571) when compared to previous year data.

Study revealed that psychiatric disorders such as, Mental

Table 2: Sociodemographic Profile

	Frequency	Percentage
Age(in years)		
15-30	28	3.4
31-45	204	24.5
46-60	573	68.8
>60	28	3.4
Gender		
Male	595	71.4
Female	238	28.6
Socio-economic Status		
Upper middle	14	1.7
Lower middle	91	10.9
Upper lower	382	45.9
Lower	346	41.5

and behavioral disorders due to psychoactive substance use(744), Neurotic, Stress-Related disorders(59), Mood (Affective) Disorders(20), Schizophrenia, Schizotypal and delusional disorders(10) were documented more during the period of lockdown (Table 1) at our institute. Lockdown created chaos in the daily life and stress among the people in various ways such as, unavailability of psychoactive substance, financial stress due to job loss, Homesickness due to lack of transport which led to majority of psychiatric complications rather than the fear of infection as per patients' perspective.

Studies done so far addressed either depression or anxiety [12,20,21,22] because of fear associated with pandemic, but our study focused predominantly on the documented psychiatric diagnoses and stressors, temporal relationship associated with lockdown.

In our study, out of 833 patient's Mental and behavioral disorders due to psychoactive substance use were noticed in 89.3% (744) (Table 1) reason being unavailability of psychoactive substance because of the lockdown, majority sufferers being males (544) (Table 2 & 3) but studies done in China, Italy, Turkey [1,15,21,22] and in India [3,4,1115] during COVID-19 reported higher rates of

Table 3: Study revealed that psycho active disorders

	Mental and Behavioral disorders due to psychoactive substance use	Schizophrenia, Schizotypal and Delusional disorders	Mood {Affective} Disorders	Neurotic, Stress- related and somatoform disorders		P- value
Age(in years)						
15-30	10 (1.344%)	0	5 (25%)	13 (22.03%)		
31-45	172 (23.11%)	5 (50%)	8 (40%)	19 (32.20%)		
46-60	535 (71.90%)	4 (40%)	7 (35%)	27 (45.16%)		
>60	27 (3.62%)	1 (10%)	0	0		
Gender						
Male	544 (73.11%)	4 (40%)	14 (70%)	33 (56.89%)	12.843	0.005
Female	200 (26.99%)	6 (60%)	6 (30%)	26 (44.82%)		
Socio-economic Status						
Upper middle	8 (1.07%)	0	1 (5%)	5 (8.47%)	88.197	0.000
Lower middle	67 (9%)	1 (10%)	8 (40%)	15 (25.42%)		
Upper lower	327 (43.95%)	8 (80%)	11 (55%)	36 (61.01%)		
Lower	342 (45.96%)	1 (10%)	0	3 (5.08%)		
Psychosocial Stressors						
Unavailability of psychoactive substance due to lockdown	540 (72.58%)	0	0	0		
Financial stress due to lockdown	188 (25.26%)	5 (50%)	9 (45%)	20 (33.89%)	410.71	0.000
Homesick	1 (0.13%)	0	1 (5%)	4 (6.77%)		
Fear of infection	15 (2.01%)	5 (50%)	10 (50%)	35 (59.32%)		
Total	744	10	20	59		

Depression and anxiety among female gender. Among socio-demographic predictors, our study found that Middle aged adults (46-60 years) (Table 2&3) had higher rates of Psychoactive related disorders followed by young adults (31- 45 Years).

Neurotic, Stress-related disorders, Mood(Affective) disorders and schizophrenia spectrum disorders were noticed less as our study predominantly had patients with Psychoactive substance related complications, which is in contrast with other studies.^[1,3,12,14,20] Lack of substance during lockdown, financial stress, uncertainty about the future and staying far away from family members as well as inherent restlessness induced by being housebound are the significant stressors. Most of the patients belonged

to the lower and upper lower socioeconomic class (Table 3). Also, studies^[15,21,22,23] reported higher rates of psychiatric morbidity in female gender, in contrary our study found it was more among male gender. Moreover, those studies were done based on the online surveys^[15,24] rather than on the patients visiting the hospital.

Generally, people in India are not open about their psychiatric problems due to social stigma prevailing over mental illness, but the panic created by COVID-19 and the lockdown might have broken the walls of stigma related to social psychiatry.

Many studies reported that, uncertain situations like pandemics and disasters, can aggravate symptoms in

individuals with mental illnesses. [17,24,25]

However, in our study, healthy subjects without previous psychiatric problems were enrolled to show the burden of lockdown. We noticed that more people visited facility in the initial days of lockdown with substance related disorders because of sudden unavailability of substance. Followed by financial stress related to the future and fear of infection led to psychiatric disorders. Also, we noticed that many patients perceived and suffered more due to lockdown (744) which was in line with few studies done in China, Bangladesh and in India, [2,3,8,20] than the fear of covid 19 infection (65).

CONCLUSION

The incidence of psychiatric morbidity during lockdown in tertiary care hospital as per records was found to be 53.02%. Sociodemographic factors associated with psychiatric morbidity was found to be more in middle aged males (46 to 60 years) belonged to upper-lower socioeconomic status. We observed that people suffered more with substance related problems immediately post lockdown and later by other psychiatric disorders. Possible precipitating factor as per records being unavailability of substance.

Highlights of the Study

This is the first study that is conducted on patient population (visiting a hospital) to address the impact of lockdown and associated psychiatric sequelae in Telangana. This study proved the statistical correlation between the stressors and associated sociodemographic variables that led to majority of the psychiatric illnesses there by giving an insight into the influence of lockdown on mental health.

Limitations

1. This is a retrospective study, hence we had to rely on the information provided in the case sheets.
2. Causal association between psychiatric morbidity and lockdown/ fear of infection could not be established clearly as it is a cross sectional retrospective study.

Implications of our study

Many of the above mentioned psychosocial and mental health consequences of the pandemic would be addressed by the psychiatrists and mental health professionals in the months to come. We might face an increase of mental health problems, behavioural disturbances, and substance-use disorders as extreme stressors may exacerbate or induce psychiatric problems.

Psychiatric disorders arising either because of direct consequences of infection or restrictive measures

imposed to curtail the spread of infection or socioeconomic impact of the pandemic needs to be addressed. There is an urgent need for sensitising general practitioners and General physicians about the impact of Covid-19 on mental health, how to screen for psychological illness, how to manage them and when to refer such cases.

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CONFLICT OF INTEREST:

The authors declared no conflict of interest.

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