Pattern of patients attending psychiatric OPD of a tertiary health care centre during the period of nationwide lockdown

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Abstract

Background: The Covid-19 pandemic has emerged as health concern including the mental health of the society.

Aim of the Study: The study aims to evaluate the patient pattern seeking help during this pandemic.

Setting and Design: Cross sectional study with a purposive sampling.

Materials and Methods: Forty-seven patients attending Psychiatry facility were assessed with ICD10, GAD-7 scale.

Statistical analysis: SPSS-20 software was use. Categorical variables were described using frequency/percentage. Continuous variables are described using mean, SD, range. P value of 0.05 was considered significant.

Results: Out of the total 47 patients, 27(57.4%) came with a first episode of psychiatric manifestation, whereas 20(42.6%) patients had previous episodes of psychiatric disease. 22(46.8%) patients presented with anxiety, 4(8.5%) with anxiety with predominant insomnia, 2(4.3%) presented with ATP, 1(2.1%) patient manifested with depression and 2(4.3%) patients came with dissociation disorder.

Conclusion: The present study suggests that patients with both previous psychiatric illness or without any psychiatric are equally vulnerable for psychological reactions during this pandemic.

Keywords: COVID-19, anxiety, mental illness

Introduction

The Covid-19 pandemic has emerged as a major concern worldwide and will be one of the greatest challenge the human race will face in the time to come. It was first documented in Wuhan, China on December 2019 and was declared a pandemic by WHO on March 2020. By the time it was declareda pandemic, it had already spread to different continents affecting millions of people. According to WHO, over 59 lakhs cases have been reported worldwide with over 3 lakhs deaths, whereas in India173763 cases has been reported and over 5thousand people have died due to this disease till date (31stMay, 2020) [1]. As this strain of corona virus was affecting human race for the first time, the nature of infection and knowledge of how to tackle the disease was limited. In order to limit the spread of infection, various countries decided to enter into a state of total halt or lockdown. A lockdown is defined as an emergency protocol that prevents people from leaving a given area. As the cases covid-19 started to rise in India, a nationwide lockdown was declared with effect from 25/3/2020.

As the illness started to progress, it came into notice that it was not only affecting the physical health but was also causing a huge impact on the psychological health of individuals. Different factors related to theCovid-19disease such as limited information, no specific treatment, forced new pattern of lifestyle due to lockdown, feeling of helplessness, financial uncertainty due to loss of job or loss in business, uncontrolled information about the virus in social media etc. played asa precursor for different psychological reactions in the society [2, 3, 4]. Psychological reactions started to appear in different spectrum such as anxiety, fear, depression, OC symptoms, dissociation, psychosis, depression, substance use, suicide etc [4, 5, 6, 7, 8].

Previously diagnosed psychiatric patients are also at a higher risk of worsening of disease during the pandemic. This was again due to the stressful environment, difficulty in reaching a health care facility when the symptoms exacerbated or difficulty in procuring their medications [9].

The study aims to evaluate the impact of COVID-19 pandemic on the mental health of the help seeking population of the society.

Materials and Methods
Design and participants

This cross-sectional study was conducted ina tertiary care centre of north-eastern part of India from 25-3-2020 to 31-05-2020. The study was approved by the ethical committee of the institute. During this study patients were approached by purposive sampling. A total of 47 patients attending the psychiatric care facility of the institute during the period of lockdown amid concerns due to COVID-19 pandemic were included in the study after getting informed consent. Any patient with mental retardation, organic brain disorder were excluded from the study. All the cases were assessed with thorough history and diagnosis was made based on ICD-10 criteria. The assessments were carried out over one session. In this study worsening was defined as symptoms worsening after an initial response to treatment but before complete recovery. Relapse was defined as reappearing of symptoms following recovery from the illness, whereas

recurrence was reappearance following remission of an episode.

Measurements
Tools used
1. **Generalised Anxiety Disorder 7 (GAD-7) scale [10]:** Anxiety was evaluated with GAD-7 scale which is a short 7 item scale. Each item is scored on a four-point Likert scale (0–3) with total scores ranging from 0 to 21 with higher scores reflecting greater degree of anxiety.
2. International Classification of Diseases10

Statistical analyses
Data were analysed using Statistical Package for the Social Sciences (SPSS) version 20.0 (IBM, Chicago, IL, USA). Categorical variables were described using frequency/percentage. Continuous variables are described using mean and standard deviation along with range. Comparisons were done using Chi-square test and T-test. The results were evaluated in a 95% confidence interval and a p <0.05 was considered significant.

Results
Socio-demographic profile
The mean age of the patients was 34.85 years. More than half of the patients included in the study were male (61.7%). Of the total number of patients, 55.3% were employed, 74.5% belonged to nuclear families, 66% belonged to a lower middle socio-economic status and 57.4% were educated beyond secondary school. When the demographic profiles of male and female patients were compared, significantly higher proportions of male patients were employed (Chi-square test value 0.003; P < 0.001). [Table 1]

Clinical profile
A total of 47 number of patients attended the psychiatric care facility of our institute. 27(57.4%) of these patients had come with a first episode of psychiatric illness whereas 20(42.6%) patients had previous episodes of psychiatric disease. Among the new patients approximately half of patients presented with anxiety symptoms 22(46.8%) whereas anxiety with predominant insomnia was seen in 4(8.5%) patients. 2(4.3%) patients presented acute transient psychosis (ATP). 1(2.1%) patient was diagnosed as depression and 2(4.3%) patients presented with dissociation.

On taking a detailed history of patients with a previous history of psychiatric illness, we found that 2(4.3%) patients had a past history of ATP, 3(6.4%) patients had a previous history of Schizophrenia, 1(2.1%) patient of bipolar disorder (BPD), 4(8.5%) patients with a past history of anxiety disorder, 7(14.9%) patients of alcohol dependence syndrome (ADA), 2(4.3%)patients of previous opioid dependence syndrome (ODS) and 1(2.1%) patient had a previous history of dissociative disorder. The patients who had a previous history of psychiatric disease, 15 (31.9%) of them came with a relapse of symptoms, 3(6.4%) patients manifested with worsening of symptoms and 2(3.4) patients came with recurrence of symptoms.10 of the 47 (21.3%) patients were on psychiatric medications. The majority of patients i.e. 89.4% did not have any previous family history of psychiatric illness. When evaluating the impact the disease,

according to the gender of the patients, new cases were significantly higher in females, whereas males had a higher proportion of previous history of psychiatric illness. [Table 2]

Anxiety severity assessment with GAD-7
Anxiety was assessed by GAD-7 scale. The mean score for GAD-7 for the whole study population was 8.3. When the mean score was compared between various groups' i.e. male v/s female, new patients v/s old patients, it was found that the mean value was consistently higher in females as compared to males.

On further assessment, we tried to assess the severity of anxiety in these patients. A cut-off value of ≥10 on the GAD-7 scale was considered as severe anxiety. It was found that, more than half of the study population (55%) had a score of greater than 10. Moreover those patients who came to the facility for the first time also presented with a higher severity score of >10(12.94(0.000) ***). However no significant association was found between gender of patient and the severity of anxiety. [Table 3].

Discussion
The present study includes patients who were attending our psychiatric care facility during the period of nation-wide lockdown as a result of rapid progression of covid-19 cases. Patients of all age groups were included in this study. The study sample consisted of patient aged between 13 years to 65years old. Most of them belonged to lower middle socio economic status, studied more than class 10th and were employed. The socio-demographic profile of the patient attending the centre isin accordance with a previous study done in China [5].

Our data revealed that more than half of the patients (57.4%) presented for the first time with female being significantly at higher risk for developing psychological reaction. Apart from anxiety, patients also presented with various psychiatric disorders like acute transient psychosis (ATP), depression, dissociation, insomnia. The depressive and dissociative presentation was mostly related to financial loss and specific pattern of lifestyle as a result of the pandemic. The group of patients who presented with ATP came with a sense of marked paranoia of contracting the virus or contaminating their loved ones with the infection. But due to scant number of patients in our study and with limited studies, available, it is difficult to comment upon the exact pathway of genesis of psychotic symptoms. In a recent case series from Spain similar presentations have been reported in patients attending psychiatric facility, a study done by Valdés-Florido MJ *et al*. [12]

Anxiety was assessed with GAD-7 scale. Our data showed a mean score of8.32 which indicates that the population was suffering from moderate to severe degree of anxiety. This is in line with a previous study done in Iran [13]. We tried to find the reason behind the anxiety among this set of patients. It was found that various factors like apprehension of contracting the illness, lack of treatment, forced lifestyle leading to disruption of normal daily life, worry of when a vaccine or definitive treatment will arise, exposure to disturbing news on social media etc. played a role in developing the anxiety among them. Similar findings were observed in studies done by various authors in China [4, 14, 15, 16]

When comparing the level of anxiety based on the gender of the patient, no significant difference was notedunlike in previous studies [17, 18]. In this study we noticed a few cases of anxiety

presenting predominantly as insomnia. This is again in agreement with a previous studies from India and China [19, 20].

Pre-existing psychiatric illness

Patients with psychiatric illness have been considered as a vulnerable group during this pandemic [23, 24]. In this study it was seen that patients with pre-existing mental disorders are at higher risk of relapse due to the stress associated with the COVID-19 outbreak.42.6% of total study population consist of patients with pre-existing psychiatric illness. Among these group of 20 patients, 15(75%) came with relapse of symptoms, which is a reason for concern during this pandemic. The reason for relapse might be multifactorial such as difficulty in reaching health care facility, discontinuation of medication due to difficulty in procuring them and poor adherence to treatment [9, 23, 25]. Other

Reasons maybe new pattern of lifestyle jeopardizing normal daily routine and social rhythm and thereby increasing stress levels. This may further escalate the cortisol level resulting in a vicious exacerbation of depressive symptoms, generalized anxiety disorder and chronic [26]. Substance use disorder mainly presented as alcohol withdrawal delirium and opioid withdrawal. Both the presentations were due to difficulty in procuring the substance amid lockdown, which is why it is necessary to remain vigilant for psychiatric emergencies and to treat them adequately [27].

Limitation

Due to the small sample size and evaluation of only help seeking population data might not be generalized to the whole population. This study was for a short period of time hence a study for a longer duration with a sample sizeis required.

Table 1: Socio-demographic profile

Variables	Patient (N=47) Mean (SD) (range)/	Male Patients (N=29) Mean (SD) (range)	Female Patients (N=18) Mean (SD) (range)	t-test/ Chi-square test (p value)
Age (in years)	34.85(12.25) (13-65)	47.1(5.9) (38-57)	42.7(7.09) (29-56)	23.4(0.494)
	Patient (N=47) frequency (%)	Male Patients (N=29) Frequency (%)	Female Patients (N=18) frequency (%)	t-test/ Chi-square test (p value)
Education				0.662(0.416)
≤10th	20(42.6)	11(23.40)	9(19.15)	
>10th	27(57.4)	18(38.30)	9(19.15)	
Occupation status				8.953(0.003)***
Unemployed	21(44.7)	8(17)	13(27.65)	
Employed	26(55.3)	21(44.68)	5(10.64)	
Socio-economic status				6.83(0.009)***
Lower middle & below	31(66)	15(31.9)	16(34.04)	
Upper middle & Above	16(34)	14(29.79)	2(4.26)	
Type of family				0.168(0.682)
Nuclear	35(74.5)	21(44.68)	14(29.79)	
Extended/ Joint	12(25.5)	8(17.02)	4(8.51)	
Locality				2.82(0.092)
Urban	23(48.9)	17(36.18)	6(12.77)	
Rural	24(51.1)	12(25.53)	12(25.53)	

Table 2: Clinical profile

Variables	Patient (N=47) Frequency (%)	Male Patient (N=29) Frequency (%)	Female Patient (N=18) Frequency (%)	t-test/ Chi-square test (p value)
Current episode				12.07(0.007)***
Independent	27(57.4)	12(25.53)	15(31.91)	
Worsening of previous episode	3(6.4)	1(2.13)	2(4.26)	
Relapse of previous episode	15(31.9)	14(29.78)	1(2.13)	
Recurrence	2(4.3)	2(4.26)	0(0)	
Past history of psychiatric episode				7.997(0.005)***
Yes	20(42.6)	17(36.17)	3(6.4)	
No	27(57.4)	12(25.53)	15(31.91)	
Diagnosis of previous episode				12.793(0.077)
ATP	2(4.3)	2(4.3)	0(0)	
Schizophrenia	3(6.4)	2(4.3)	1(2.13)	
BPD	1(2.1)	1(2.13)	0(0)	
Anxiety disorder	4(8.5)	3(6.4)	1(2.13)	
Alcohol dependence	7(14.9)	7(14.9)	0(0)	
Opioid dependence	2(4.3)	2(4.3)	0(0)	
Dissociation	1(2.1)	0(0)	1(2.13)	
None	27(57.45)	12(25.53)	15(31.91)	
Ongoing psychiatric medication				0.370(0.543)
Yes	10(21.3)	7(14.9)	3(6.4)	

No	37(78.7)	22(46.81)	15(31.91)	
Family history				3.473(0.062)
Yes	5(10.6)	5(10.64)	0(0)	
No	42(89.4)	24(51.06)	18()	
Current episode				12.633(0.125)
ATP	4(8.5)	2(4.3)	2(4.3)	
Schizophrenia	3(6.4)	2(4.3)	1(2.1)	
Depression	1(2.1)	1(2.1)	0(0)	
BPD	1(2.1)	1(2.1)	0(0)	
Anxiety symptoms	22(46.8)	12(25.53)	10(21.28)	
Anxiety symptoms with predominant insomnia	4(8.5)	2(4.3)	2(4.3)	
Alcohol dependence	7(14.9)	7(14.9)	0(0)	
Opioid dependence	2(4.3)	2(4.3)	0(0)	
Dissociation	3(6.4)	0(0)	3(6.4)	

Table 3: Assessement of severity of anxiety (GAD 7 scale)

Variables	Patients (n=47) Mean (SD) (range)	Male patient (n=29) Mean (SD) (range)	Female patient (n=18) Mean (SD) (range)	Old patient (n=20) Mean(SD) (range)/	New patient (n=27) Mean(SD) (range)/
GAD-7	8.3(3.64)(1-13)	7.72(3.66)(2-11)	9.28(3.34)(1-13)	6.25(3.21)(2-11)	9.85(3.08)(1-13)
t-test/ Chi-square test (p value)	14.88(0.188)			29.01(0.002)**	
GAD-7 score	Patients (n=47 Frequency (%)	Male patient (n=29) Frequency (%)	Female patient (n=18) Frequency (%)	Old patient (n=20) Frequency (%)	New patient (n=27) Frequency (%)
<10	21(44.7)	13(27.6)	08(17.02)	15(31.9)	06(12.76)
>10	26(55.3)	16(34.04)	10(21.27)	5(10.6)	21(44.68)
t-test/ Chi-square test (p value)	3.37(0.066)			12.94(0.000)***	

Conclusion

Novel corona virus is causing marked psychological impact on the population. With the small number of patients attending the health care facility, the lack of adequate psychological care to the general population can be catastrophic. By the time this study was done, different governments have taken up measures to address this emerging problem. Different measures like consultation with the help of telemedicine or telepsychiatry is being in various centres. Healthy as well as people with pre-existing psychiatric illness are at equal risk of experiencing mental health issues during this time. Anxiety remains one of the major psychological reactions around the globe. To reduce the anxiety, proper information and general awareness regarding the disease and the different ways to tackle it should be provided to the people. As the number of cases are increasing daily, this infection is going to have a huge impact in all aspects including the mental health of the people. Hence, efforts should be made to devise comprehensive measures to empower the society with different healthy coping and close monitoring and necessary care of high risk group of the society is the need of the hour.

References
1. https://www.who.int/emergencies/diseases/novel-coronavirus-2019
2. Zandifar A, Badrfam R. Iranian mental health during the COVID-19 epidemic [published online ahead of print, 2020 Mar 4]. Asian J Psychiatr. 2020.51.101990. doi:10.1016/j.ajp.2020.101990
3. Shigemura J, Ursano RJ, Morganstein JC, Kurosawa M, Benedek DM. Public responses to the novel 2019 coronavirus (2019-nCoV) in Japan: Mental health consequences and target populations. Psychiatry Clin Neurosci. 2020; 74(4).281-2. doi:10.1111/pcn.12988
4. Banerjee D. The COVID-19 outbreak: crucial role the psychiatrists can play. Asian J Psychiatr, 2020.
5. Zhang Y, FeeiZ M. Impact of the COVID-19 Pandemic on Mental Health and Quality of Life among Local Resident in Liaoning Province, China: A Cross-Sectional Study. Int J Environ Res Public Health. 2020; 17(7):2381. doi: 10.3390/ijerph17072381
6. Ahmed MZ, Ahmed O, Aibao Z, Hanbin S, Siyu L, Ahmad A, et al. Epidemic of COVID-19 in China and associated Psychological Problems. Asian J Psychiat. 2020.51.102092. doi:10.1016/j.ajp.2020.102092
7. World Health Organization. Novel Coronavirus (2019-nCoV) Situation Reportsm Retrieved from https://www.who.int/emergencies/diseases/novel-coronavirus2019/situation-reports.
8. Qiu J, Shen B, Zhao M, Wang Z, Xie B, Xu Y. A Nationwide Survey of Psychological Distress among Chinese People in the COVID-19 Epidemic: Implications and Policy Recommendations. Gpsych.bmj.com, 2020.
9. Yao H, ChenJH, Xu YF. Patients with Mental Health Disorders in the COVID-19 Epidemic. Lancet Psychiatry. 2020; 7(4):e21.
10. Spitzer RL, Kroenke K, Williams JB, Löwe B. A brief measure for assessing generalized anxiety disorder: the GAD-7. Arch Intern Med. 2006; 166(10):1092-7. doi:10.1001/archinte.166.10.1092
11. Loranger AM. International Personality Disorder Examination (IPDE) In: Loranger AM, Janca A, Sartorius N, editors. Assessment and diagnosis of personality disorders. The ICD-10 International Personality Disorder Examination (IPDE) Cambridge: Cambridge University Press, 1997, 43-51
12. Valdés-Florido MJ, López-Díaz Á, Palermo-Zeballos FJ, et al. Reactive psychoses in the context of the COVID-19 pandemic: Clinical perspectives from a case series

[published online ahead of print, 2020 Apr 27]. Rev PsiquiatrSaludMent. 2020; 13(2):90-4. doi:10.1016/j.rpsm.2020.04.009

13. Mansourieha AM. Assessing the anxiety level of Iranian general population during COVID-19 outbreak. Asian J Psychiatr, 2020, 51:102076.

14. Lunn PD, Belton CA, Lavin C, McGowan FP, Timmons S, Robertson DA, *et al*. Using Behavioral Science to help fight the Coronavirus. JBPA [Internet], 2020, 3(1).

15. GaoID J, Zheng P, Jia Y, Chen H *et al*., Mental health problems and social media exposure during COVID-19 outbreak. PLoS One. 2020; 15(4):e0231924. Doi: 10.1371/journal.pone.0231924.

16. Li Z, Ge J, Yang M, Feng J, Qiao M, Jiang R, *et al*. Vicarious traumatization in the general public, members, and non-members of medical teams aiding in COVID-19 control [Internet]. Brain, behavior, and immunity. Elsevier Inc, 2020. https://www.ncbi.nlm.nih.gov/pubmed/32169498

17. Lima CKT, Carvalho PMM, Lima IAAS, *et al*. The emotional impact of Coronavirus 2019-nCoV (new Coronavirus disease). Psychiatry Res, 2020, 287:112915. doi:10.1016/j.psychres.2020.112915

18. Wang C, Pan R, Wan X, *et al*. A longitudinal study on the mental health of general population during the COVID-19 epidemic in China. Brain Behav Immun. 2020; 87:40-8. doi:10.1016/j.bbi.2020.04.028

19. Roy D, Tripathya S, Kara SK *et al*., Study of knowledge, attitude, anxiety & perceived mental healthcare need in Indian population during COVID-19 pandemic. Asian J Psychiatr, 2020, 51:102083.

20. Xiao H, Zhang Y, Kong D, Li S, Yang N. Social capital and sleep quality in individuals who self-isolated for 14 days during the coronavirus disease 2019 (COVID-19) outbreak in January 2020 in China. Med. Sci. Monit, 2020, 26:e923921.

21. Sommaa A, Gialdia G, Kruegerb RF, Markonc KF, Fraud C, *et al*., Dysfunctional personality features, non-scientifically supported causal beliefs, and emotional problems during the first month of the COVID-19 pandemic in Italy. PersIndivid Dif, 2020, 165:110139.

22. Orrù G, Ciacchini R, Gemignani A, Conversano C. Psychological intervention measures during the COVID-19 pandemic. Clinical Neuropsychiatry. 2020; 17:76-9

23. Yang Y, Li W, Zhang Q, Zhang L, Cheung T, Xiang YT. Mental health services for older adults in China during the COVID-19 outbreak. Lancet Psychiatry. 2020; 7(4):e19. doi:10.1016/S2215-0366(20)30079-1

24. Zhu S, Wu Y, Zhu CY, *et al*. The immediate mental health impacts of the COVID-19 pandemic among people with or without quarantine managements. Brain Behav Immun, 2020. S0889-1591(20)30601-2. doi:10.1016/j.bbi.2020.04.045

25. Chatterjee SS, Barikar CM, Mukherjee A. Impact of COVID-19 pandemic on pre-existing mental health problems. Asian J Psychiatr, 2020, 51:102071. doi:10.1016/j.ajp.2020.102071

26. Dong L, Bouey J. Public Mental Health Crisis during COVID-19 Pandemic, China. Emerg Infect Dis. 2020; 26(7):10.

3201/eid2607.200407. doi:10.3201/eid2607.200407

27. Xiang YT, Yang Y, Li W, Zhang L, Zhang Q, Cheung T, *et al*., Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. Lancet Psychiatry. 2020; 7:228-9.