

## Analytical Cross Sectional Study to Evaluate the Pattern of Patients Attending Psychiatric OPD of A Tertiary Care Hospital

Shravan Kumar<sup>1</sup>, Rakesh Kumar Gaur<sup>2</sup>, Suhail Ahmed Azmi<sup>3</sup>, Deoshree Akhouri<sup>4</sup>, Hamza<sup>5</sup>

<sup>1</sup>Senior Resident, Department of Psychiatry, Jawaharlal Nehru Medical College, Aligarh Muslim University, Aligarh, UP, India

<sup>2</sup>Professor, Department of Psychiatry, Jawaharlal Nehru Medical College, Aligarh Muslim University, Aligarh, UP, India

<sup>3</sup>Professor, Department of Psychiatry, Jawaharlal Nehru Medical College, Aligarh Muslim University, Aligarh, UP, India

<sup>4</sup>Assistant Professor, Department of Psychiatry, Jawaharlal Nehru Medical College, Aligarh Muslim University, Aligarh, UP, India

<sup>5</sup>Ph.D. Scholar, Department of Psychiatry, Jawaharlal Nehru Medical College, Aligarh Muslim University, Aligarh, UP, India

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Corresponding author: Dr. Shravan Kumar

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### Abstract

**Aim:** Pattern of patients attending psychiatric OPD of a tertiary health care centre.

**Material and methods:** This cross-sectional study was carried out in the Department of Psychiatry, Jawaharlal Nehru Medical College, Aligarh Muslim University, Aligarh, UP, India, for 10 months, A total of 50 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. 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.

**Results:** The mean age of the patients was 35.85 years. More than half of the patients included in the study were male (60%). Of the total number of patients, 56% were employed, 72% belonged to nuclear families, 64% belonged to a lower middle socio- economic status and 58% were educated beyond secondary school. A total of 50 patients attended the psychiatric care facility of our institute. 28(56%) of these patients had come with a first episode of psychiatric illness whereas 23(46%) patients had previous episodes of psychiatric disease. Among the new patients approximately half of patients presented with anxiety symptoms 23(46%) whereas anxiety with predominant insomnia was seen in 5(10%) patients. 2(4%) patients presented acute transient psychotic disorder (ATPD). 1(2%) patient was diagnosed as depression and 3(6%) patients presented with dissociation.

**Conclusion:** we concluded that the patients with both previous psychiatric illness or without any psychiatric are equally vulnerable for psychological reactions during this pandemic.

**Keywords:** Acute Transient Psychosis, Depression, Anxiety.

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## Introduction

Mental health policy makers in India from time to time estimated the prevalence of psychiatric disorders in the country. The data helps in understanding the status of mental health in the country and in planning for prevention and treatment of disorders [1]. WHO data on global burden of diseases says that mental illnesses account for over 15 percent of the total burden of disease [2].

National all-India prevalence rates for 'all mental disorders' is 70.5 (rural), 73 (urban) and 73 (rural + urban) per 1000 persons [1]. Urban morbidity is 3.5 % higher than the rural area. Surveys in developed as well as developing countries reported more than 25% of individuals with one or more mental or behavioral disorders, during their lifetime [3]. A study from Nepal, (2011) reported Schizophrenia as one of the most common psychiatric illnesses in Psychiatry ward of the tertiary care hospital and psychotic disorders being the second [4]. A study from South Africa reported lifetime prevalence of common mental health disorders about 30% [5]. The Ministry of Health and Family welfare of India suggested the lifetime prevalence of mental disorders nearly 12 % which is likely to increase to almost 15% by the year 2020.<sup>6</sup> This study was planned to describe the common psychiatric disorders and various sociodemographic variables associated among patients attending psychiatry Outpatient Department (OPD) at this center.

### Material and methods:

This cross-sectional study was carried out in the Department of Psychiatry, Jawaharlal Nehru Medical College, Aligarh Muslim University, Aligarh, UP, India, for 10 months

### Methodology:

A total of 50 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 was 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.

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.

### Statistical analyses:

Data were analyzed using Statistical Package for the Social Sciences (SPSS) version 25.0 (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:

The mean age of the patients was 35.85 years. More than half of the patients included in the study were male (60%). Of the total number of patients, 56% were employed, 72% belonged to nuclear families, 64% belonged to a lower middle socio- economic status and 58% 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 0.004;  $P < 0.001$ ). [Table 1]

### Clinical profile

A total of 50 patients attended the psychiatric care facility of our institute. 28(56%) of these patients had come with a first episode of psychiatric illness whereas 23(46%) patients had previous episodes of psychiatric disease. Among the new patients approximately half of patients presented with anxiety symptoms 23(46%) whereas anxiety with predominant insomnia was seen in 5(10%) patients. 2(4%) patients presented acute transient psychosis (ATP). 1(2%) patient was diagnosed as depression and 3(6%) patients presented with dissociation.

On taking a detailed history of patients with a previous history of psychiatric illness, we found that 2(4%) patients had a past history of ATP, 3(6%) patients had a previous history of Schizophrenia, 1(2%) patient of bipolar disorder (BPD), 5(10%) patients with a past history of anxiety disorder, 8(16%) patients of alcohol dependence syndrome (ADA), 2(4%) patients of previous opioid dependence syndrome (ODS) and 3(6%) patient had a previous history of dissociative disorder. The patients who had a previous history of psychiatric disease, 16 (32%) of them came with a relapse of symptoms, 4(8%) patients manifested with worsening of symptoms and 2(4) patients came with recurrence of symptoms. 13 of the 50 (26%) patients were on psychiatric medications. The majority of patients i.e., 88% 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 8.4. When the mean score was compared between various groups' i.e., male v/s female, new patient's 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  $\geq 10$  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  $>10$  (12.95(0.000) \*\*\*). However, no significant association was found between gender of patient and the severity of anxiety. [Table 3].

#### **Discussion:**

Our data revealed that more than half of the patients (56%) 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 [8].

Anxiety was assessed with GAD-7 scale. Our data showed a mean score of 8.32 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 [9]. 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 [10,13]. When comparing the level of anxiety based on the gender of the patient, no significant difference was noted like in previous studies [14,15]. In this study we noticed a few cases of anxiety presenting predominantly as insomnia. This is again in agreement with a previous study from India and China [16,17].

Patients with psychiatric illness have been considered as a vulnerable group during this pandemic [18,19]. 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 [20,22] 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 [23]. 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 [24].

**Table 1: Socio-demographic profile**

Variables	Total N=50	Male N=30	Female N=20	t-test/ Chi-square test (p value)
Age (in years) Mean (SD)	35.85(12.25)	48.1(5.9)	43.7(7.09)	24.4(0.494)
Education				
≤10th	21(42)	11(22)	10(20)	0.663(0.417)
>10th	29(58)	19(38)	10(20)	
Occupation status				
Unemployed	22 (44)	10(20)	12(24)	8.954(0.004) ***
Employed	28 (56)	20(40)	8(16)	
Socio-economic status				
Lower middle & below	32(64)	16(32)	16(32)	6.84(0.010) ***
Upper middle & above	18(36)	14(28)	4(8)	
Type of family				
Nuclear	36(72)	21(42)	15(30)	0.169(0.683)
Extended/ Joint	14(28)	9(18)	5(12)	
Locality				
Urban	23(46)	17(34)	6(12)	2.83(0.093)
Rural	27(54)	13(26)	14(28)	

**Table 2: Clinical profile**

Variables	Total N=50	Male Patient N=30	Female Patient N=20	t-test/ Chi-square test (p value)
<b>Current episode</b>				
Independent	28(56)	12(24)	16(32)	12.08(0.008) ***
Worsening of previous episode	4(8)	1(2)	3(6)	
Relapse of previous episode	16(32)	15(30)	1(2)	
Recurrence	2(4)	2(4)	0(0)	
<b>Past history of psychiatric episode</b>				
Yes	23(46)	20(40)	3(6)	7.998(0.006) ***
No	27(54)	10(20)	17(34)	
<b>Diagnosis of previous episode</b>				
ATP	2(4)	2(4)	0(0)	12.794(0.078)
Schizophrenia	3(6)	2(4)	1(2)	
BPD	1(2)	1(2)	0(0)	
Anxiety disorder	5(10)	4(8)	1(2)	
Alcohol dependence	8(16)	8(16)	0(0)	
Opioid dependence	2(4)	2(4)	0(0)	
Dissociation	1(2)	0(0)	1(2)	
None	28(56)	12(24)	16(32)	
<b>Ongoing psychiatric medication</b>				
Yes	13(26)	7(14)	6(12)	0.371(0.544)
No	37(74)	23(46)	14(28)	
<b>Family history</b>				
Yes	6(12)	6(12)	0(0)	3.475(0.064)
No	44(88)	24(50)	20(40)	
<b>Diagnosis of current episode</b>				
ATP	5(10)	2(4)	3(6)	
Schizophrenia	3(6)	2(4)	1(2)	
Depression	1(2)	1(2)	0(0)	
BPD	1(2)	1(2)	0(0)	
Anxiety symptoms	23(46)	13(26)	10(20)	
Anxiety symptoms with predominant insomnia	4(8)	2(4)	2(4)	
Alcohol dependence	8(16)	8(16)	0(0)	
Opioid dependence	2(4)	1(2)	1(2)	
Dissociation	3(6)	0(0)	3(6)	

**Table 3: Assessment of severity of anxiety (GAD 7 scale)**

Variables	Patients (n=50) Mean (SD) (range)	Male patient (n=30) Mean (SD) (range)	Female patient (n=20) Mean (SD) (range)	Old patient (n=20) Mean (SD) (range)/	New patient (n=30) Mean (SD) (range)/
GAD-7	8.4(3.65) (1-13)	7.73(3.67) (2-11)	9.29(3.35) (1-13)	6.26(3.22) (2-11)	9.86(3.09) (1-13)
t-test/ Chi-square test (p value)		14.89(0.189)		29.02(0.003) **	

GAD-7 score	Patients (n=50) Frequency (%)	Male patient (n=30) Frequency (%)	Female patient (n=20) Frequency (%)	Old patient (n=20) Frequency (%)	New patient (n=30) Frequency (%)
<10	21(42)	13(26)	08(16)	15(30)	06(12)
>10	29(58)	17(34)	12(24)	5(10)	24(48)
t-test/ Chi-square test (p value)	3.38(0.067)			12.95(0.000) ***	

### Conclusion:

We concluded that the patients with both previous psychiatric illness and without any psychiatric are equally vulnerable for psychological reactions during this pandemic.

### References:

- H.C. Ganguli et al., Epidemiological findings on prevalence of mental disorders in India. *Indian J Psychiatry* 2000; 42 (1): 14- 20.6.
- Ustun TB, Sartorius N, eds. *Mental illness in general health care: an international study*. Chichester, 1995, John Wiley & Sons behalf of WHO: 323-34
- Almeid-Filho N et al. Brazilian multicentric study of psychiatric morbidity. Methodological features and prevalence estimates. *Br J Psychiatry* 1997; 171: 524-9.
- Shrestha MR, Sherchan S, Shakya R, Joshi D. Monthly pattern of psychiatric morbidity and duration of stay among the patients admitted in Mental Hospital, a central level tertiary care hospital. *Nepal Med Coll J* 2011;13(2):133-39.
- Herman AA, Stein DJ, Seedat S, Heeringa SG, Moomal H, Williams DR. The South African Stress and Health (SASH) study: 12- month and lifetime prevalence of common mental disorders. *SAMJ: South Afri Med J* 2009;9(5):339-44.
- World Health Organization 2015. *International public health hazards: Indian legislative provisions*. Available at URL: [http://www.who.org.indian/legis/pub.healthha z/en].
- 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.
- 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.
- Mansourieha AM. Assessing the anxiety level of Iranian general population during COVID-19 outbreak. *Asian J Psychiatr*, 2020, 51:102076.
- Banerjee D. The COVID-19 outbreak crucial role the psychiatrists can play. *Asian J Psychiatr*, 2020.
- 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).
- 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.
- 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.
- Lima CKT, Carvalho PMM, Lima IAAS, et al. The emotional impact of Coronavirus 2019-nCoV (new

- Coronavirus disease). *Psychiatry Res*, 2020, 287:112915.
15. 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.
  16. 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.
  17. 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.
  18. 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.
  19. 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.
  20. Yao H, Chen JH, Xu YF. Patients with Mental Health Disorders in the COVID-19 Epidemic. *Lancet Psychiatry*. 2020; 7(4): e21
  21. 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.
  22. Chatterjee SS, Barikar CM, Mukherjee A. Impact of COVID-19 pandemic on pre-existing mental health problems. *Asian J Psychiatr*, 2020, 51:102071.
  23. Dong L, Bouey J. Public Mental Health Crisis during COVID-19 Pandemic, China. *Emerg Infect Dis*. 2020; 26(7):10.
  24. 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.