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Profile pattern of Psychiatric emergencies during COVID 19 pandemic from an Indian tertiary healthcare center

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Abstract

Background: Little data is available on service utilization, pattern and profile of psychiatric emergencies in India more so during the pandemic times. We explored the pattern and clinical profile in psychiatric emergencies at a tertiary healthcare centre in north India during the unlock phase.

Methods: We assessed consecutive patients for two months in immediate unlock phase post lockdown in the Emergency Department of Psychiatry, Pt. B.D. Sharma, PGIMS, Rohtak. Sociodemographic variables and clinical details were noted in a semistructured proforma.

Results: Over a 2 month period, 200 patients were assessed; of whom 158 (79 %) had no prior/known psychiatric history and 42(21%) had a past history of

psychiatric illness The common reasons for which patients presented to the emergency were attempt at self-harm (14%), followed by aggression/agitation(13%), psychoactive substance use-related problems(12%) and dissociation. Schizophrenia and other psychotic disorders (13 %) and mood disorders (24.5%) formed the two most common diagnostic groups.

Conclusion: Our findings suggest that there is an urgent need to optimize emergency mental healthcare and develop service delivery models for common psychiatric emergencies.

Keywords: psychiatric emergency, psychiatric disorders, substance use disorders

Introduction

Medical emergencies are always a forefront in a health care system but off late pandemic has magnified its importance multifolds. It is even speculated that this pandemic has impacted health system like any other illness previously encountered, more so when mental health is under consideration. Psychiatric emergencies during the lockdown and unlock phases in the pandemic formed the support needed for all including medical and non medical personnel. Psychiatric or behavioural emergencies present as an acute disturbance of thought, behaviour or mood of a patient.[1] There are various models of care which include mental health consultations in medical emergency departments (EDs), dedicated mental health wings, crisis stabilization units, psychiatric emergency services (PES), crisis centres and mobile teams.[2] In a developing nation like India, where health sector has its limitations, mental health has been largely ignored. While psychiatric emergency services in western countries are quite developed, service utilization for mental and behavioural emergencies in India needs reevaluation. Studies have suggested an increasing trend of number of patients visiting mental health services[3,4] which possibly signifies the change in attitude and behavior of people along with need of improvement and development of adequate psychiatric services. There is shortage of trained mental health specialist as well as satisfactory mental health establishments to care for those in need .Limited resources, stigmatic attitude, lack of awareness about mental illness make it all the more difficult to provide best services . In current situation where COVID 19 pandemic has forced people to stay indoors, venturing out specially for health care is considered only in emergency. In India, acute psychiatric emergencies constitute about 9% of all emergencies.[5] Studies report higher prevalence of psychiatric disorders among children and youth.[6] As per WHO estimates, mental and substance-use disorders are the leading cause of disease burden worldwide as measured by years lived with disability (YLDs) and account for 22.9 % of all the YLDs.[7] Psychiatric disorders include a major bulk of behavioral emergencies which, if untreated, may lead to harm, either to the affected individual or to others.[8] Psychiatric emergencies does not hold true just for abnormal behavior or aggression only but a holistic approach with a biopsychosocial frame of mind is the key phenomenon. 24 hour emergency services in psychiatry is still not considered priority and is available mainly at tertiary level government hospitals. With a paradigm shift from mental picture of a person running crazily or muttering to self, awareness into different aspects mental health relates to has brought psychiatry to forefront and the need for an upgradation of its emergency services. Psychiatric emergencies facilities are often the only source of treatment and support for many of the chronically disabled people

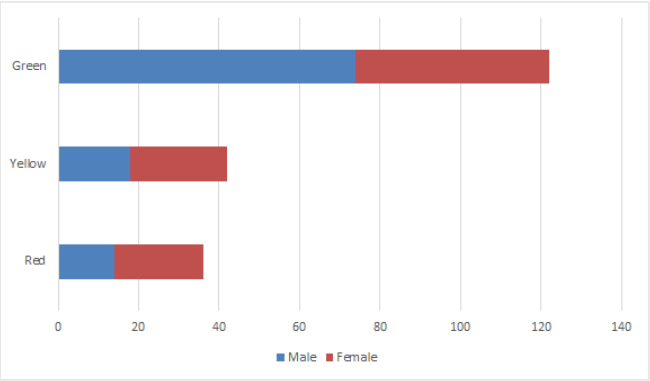
living in the community. The psychiatric emergency service is now the main entry point into the network of mental health service for people in need of help. [9] This study was planned to assess service utilization of psychiatric emergency services from a tertiary centre amidst a pandemic situation.

Materials and Method

For the purpose of study, two hundred participants visiting the Emergency Department of Psychiatry, Pt. B.D. Sharma, PGIMS, Rohtak were assessed for a period of two months in unlock phase and constituted study sample. Department of Psychiatry, Pt. B.D. Sharma, PGIMS, Rohtak is a tertiary care centre catering to the needs of not only the residents of Haryana but to those residing specially on the bordering districts of Punjab, Delhi, Rajasthan and Uttar Pradesh. It runs a 24 walk in psychiatry emergency services which is comprised of a team of Psychiatrist , Clinical psychologist and Psychiatric social worker. Written informed consent from all the patients to participate in study was taken. Risk assessment was done through triage for the purpose of study. Three categories red, yellow and green were identified as follows:

Red: Danger to life (self or others). The patient may exhibit violent or self-destructive behavior. Needs immediate psychiatric attention.

Fig 1: Triage distribution in study population (n=200)



Yellow: Agitated/ abusive. bizarre/disordered behavior, withdrawn/uncommunicative, May exhibit symptoms of psychosis or severe depression. Needs psychiatric attention within few hours.

Green: Moderate distress, cooperative, may be irritable without aggression, and has anxiety or depression without suicidal ideation. May be a known patient with chronic psychotic symptoms or chronic unexplained somatic symptoms. May have Psychosocial problems. Not an emergency and psychiatric attention can occur in sometime.

The socio-demographic data was collected on a self-designed performa for the study. Brief history and mental state examination was done and diagnosis was made as per ICD-10.[10]

Results

200 participants were recruited for the study out of which 106(53%) participants were male and remaining 94(47%) participants were female.

On the basis of triage patients were classified into three categories about 18 % of subject population needed immediate attention due to fear to harm to self or others. Majority (79%) though were categorised in green area (Fig 1)

Table 1: Sociodemographic factors of subjects in the study population (N=200)

Variable		Total (n=200)	Males (n=106)	Females (n=94)
Age (in years)	<18– 21	31	16	15
	22– 29	80	43	37
	30 – 39	68	36	32
	Above 40	21	11	10
Education	Illiterate	27	7	20
	Primary	36	11	25
	Matriculation	56	25	31
	Higher secondary	54	41	13
	Graduation	24	20	04
	Post-graduation	03	02	01
Occupation	Students	10	04	06
	Housewife	58	00	58
	Employed	42	36	06
	Unemployed(including those who left the job)	90	66	24
Marital Status	Single	79	46	33
	Married	121	60	61
Residence	Rural	144	76	68
	Urban	56	30	26
Type of Family	Nuclear	116	65	51
	Joint	80	38	42
	Extended	04	03	01

Among the study population, majority (74%) belonged to young adult population aging between 20 to 40 years. (Table 1). Almost half (45%) of the study population was unemployed.121 (61%) participants were married and 69% of population was educated atleast upto matriculation. Three quarter of population resided in rural area and 58% of study population belonged to nuclear family

Table 2: Illness variables of subjects in the study population (N=200)

Variable		Total	Male	Female
Past History of Psychiatric Illness	No	158	92	66
	Yes	42	14	28
Comorbid History of Medical Illness	No	174	92	82
	Yes	26	12	14

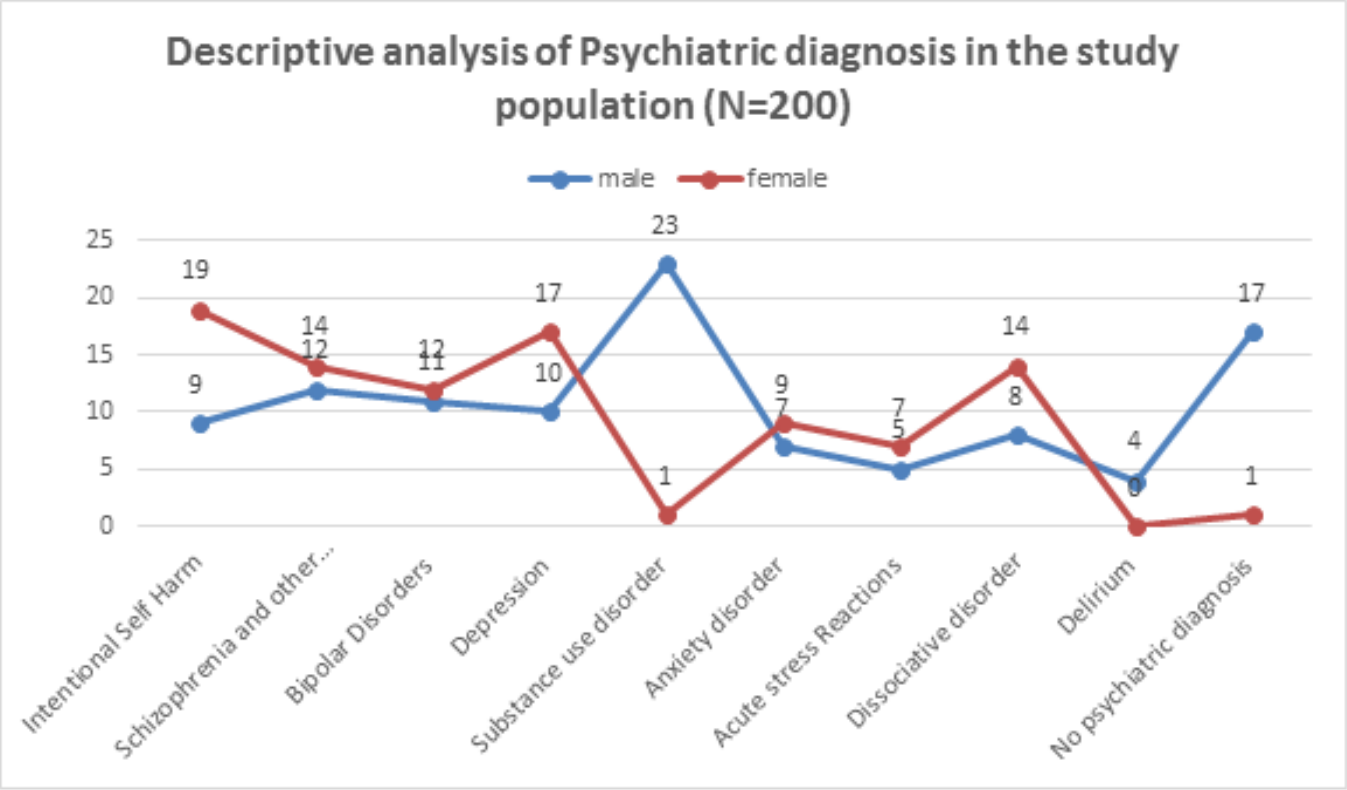
Among the study population 158(79%) participants had no previous past history of any psychiatric illness. 26(13%) patients had a known comorbid medical condition and nearly 8% presented to the ED primarily with a medical symptom and/or physical conditions.(Table 2)

Table 3: Descriptive analysis of source of referral (brought by) in the study population (N=200)

Source of referral	Total	Male	Female
Referred by Family members	174	90	84
Self referral	12	07	05
Referred By Police/NGOs	14	09	05

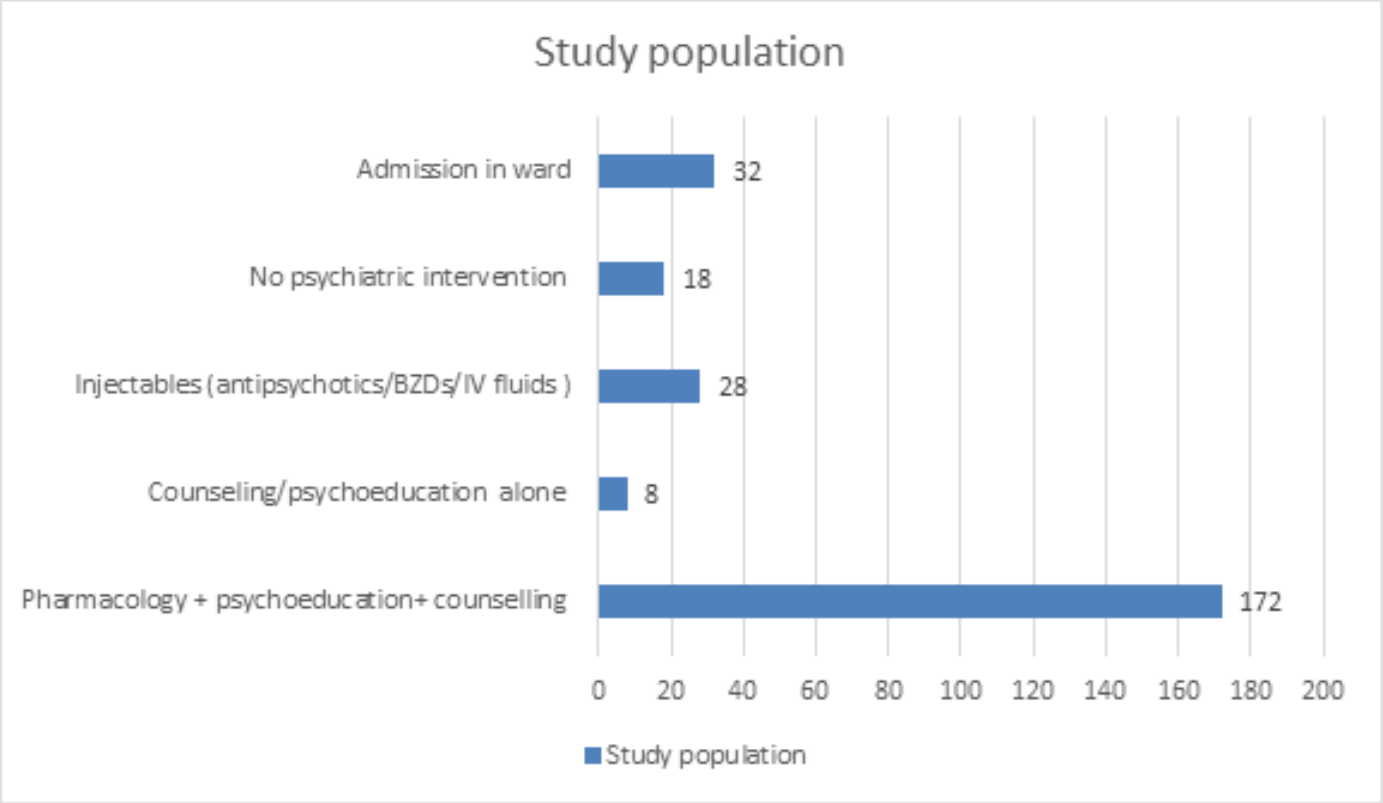
Among the study population 174(87%) participants were brought by family members/friends and remaining 26(13%) participants were brought by Police/NGOs and by self. (Table 3)

Fig 2: Descriptive analysis of Psychiatric diagnosis in the study population (N=200)



The common reasons for which patients presented to the ED were attempt at self-harm, followed by aggression/agitation, psychoactive substance use-related problems and dissociation. Schizophrenia and other psychotic disorders (13.00%) and mood disorders (24.5%) formed the two most common diagnostic groups.(Fig 3)

Fig 3: Descriptive analysis of Management of psychiatric condition in the study population (N=200)



Among the study population the commonest treatment provided includes benzodiazepines followed by anti-psychotics. 16% percent of patients required admission for further treatment. About 4% patients needed only counseling as treatment.

Discussion: We aimed to find the profile and pattern of service use for psychiatric emergencies visiting psychiatry department of a tertiary hospital in northern India in a pandemic situation. Almost an equal distribution in gender was noticed in our study. Varying data from different studies have reported varying representation with a probable role of socio cultural influences.[11-13] More than three-fourth of the patients belonged to the age range of 22–39 years which is consistent with the findings of other studies. This age is considered to be the most economically productive age group and also one which may be more psychologically aware and concerned with self health.[13-15]

Almost half of the participants were unemployed which is consistent with previous studies.[13] But in our study role of pandemic needs to be factored in. Due to COVID 19 it has been speculated that lot of people lost jobs or suffered grave financial loss. Majority of cases were brought by family members or friends (87%), and a significant subset (7%) was also brought by the police (which included the homeless mentally ill, those found

wandering in public places or involved in some illegal activity). These patients have poor social support systems and in a pandemic situation make them even more at risk of getting infected as well as being the source of infection. They required the involvement of a psychiatric/medical social welfare worker at the earliest, preferably working in the emergency setting itself.

A proportion (13%) of patients had a known comorbid medical condition and nearly 8% presented to the ED primarily with a medical symptom and/or physical conditions similar to previous study by Kumar etal.[16] Many a times, patient in emergency presentation with predominant physical complaints masking a psychiatric disorder is seen but a vice versa situation is also true where those having psychiatric symptoms are primarily due to an underlying medical disorder, Hence, failure to suspect and recognize them early might delay the urgent treatment and can impact adversely to the health of an individual[17,18]. It also reinforces the need for thorough medical evaluation of all patients before and during the psychiatric consultation.

Attempt to self-harm (14%) was the most common reason for presentation followed by aggressive/agitated behaviour in schizophrenia and other psychotic disorder (13%) and psychoactive substance use-related problems (12%). These conditions contribute to half of the psychiatric emergency burden and merit special attention. There has been a change in trend noticed over the last decade in the type of presentation in ED constituting more of schizophrenia, substance use disorders, mania, and dissociative symptoms as the common presenting illnesses at the emergency department in comparison to somatoform disorders which was seen earlier.[19] A recent study by Grover et al on comparison with pre lockdown and lockdown profile of patients visiting emergency psychiatry services a higher number of patients with schizophrenia were reported. It was hypothesized that due to absence of routine services, people already under care and treatment lacked the means to access hospital services (travel restrictions, lack of public transport) or to continue with their medications (most of the patient depends on government supply) resulting in relapse of illness.[20] Our study also has higher number of these presentations but we also had equally high number of patients with intentional self harm. Also over the years, there is growing concern over low frustration tolerance and increased peer pressure specially among the youth and increased disregard towards social and legal consequences of their behavior it is hypothesized that there is a shift in psychosocial variables of suicidal behavior.[21]

Regarding emergency mental health interventions, most of our patients needed some intervention in form of psychotropic drugs or counselling or both. 32 patients were admitted through emergency in our study which is almost double to that reported by Naskar et al in their study.[22] Probably geographical distribution and study sample could have been the reason for this variation. But nonetheless both the studies impress upon the urgency and seriousness of the emergency necessitating admission for patients with mental illness in these situations. On the other hand we also received a subset of patients who had no psychiatric illness and needed no intervention.

Establishing psychiatric diagnosis sometimes requires longitudinal follow-up, whereas in emergency, only limited information may be available. There are additional constraints such as lack of privacy and, at times, a clinician is forced to take only a brief focused history due to the distressing nature of symptoms or

risk of imminent threat posed to the patient or other people around the patient.[23] In our study we tried to use triage to assist the treating team to identify and cater to the one with most priority. Usually system of triage is seen in other specialities and is rarely used in psychiatry. Triage in our setting had helped identifying not only those who needed immediate attention along with clearing up space and maintaining social distancing in these difficult times with ease and efficiency. But, it also gave us an useful, simple tool which can be used even by the physicians in swift decision making & early referral to psychiatry leading to a timely intervention. The WHO's mhGAP(mental health gap action programme) intervention guide for mental, neurological and substance use disorders constitute the high-quality guidelines for managing different phenotypic presentations of psychiatric emergencies related to these disorders, especially in non-specialist settings in LMICs(lower to middle income countries).[24] These guidelines should be adapted and would come in force according to the resources available to cater to the needs of the target population.There are 3 models for delivery of psychiatric emergency services: (i) the mental health professional consulting on patients in the ED itself; (ii) a dedicated mental health wing in the ED providing separate and often more calming environment with specially trained and dedicated staff; and (iii) stand-alone psychiatric emergency services—a facility separate from the ED that is solely for treatment of patients with acute mental health issues.[25] In India, with our limited resources and keeping in mind the profile and pattern of patients seeking PES(Psychiatry emergency services), a hybrid of the first 2 models may be considered. This may be achieved by providing mental health professional services in the ED round-the-clock, on-call basis and, additionally, earmarking a designated area near the nursing/doctors' counter for psychiatric emergencies for better observation and/or management of patients such as those presenting with an attempt to self-harm or agitated/aggressive behaviour.

The findings have several important implications for organization of PES in general hospital settings. This study emphasizes the need to optimize emergency mental healthcare and develop better service delivery models. There is a need to strengthen resources and workforce training (including emergency medical officers, nursing staff, resident doctors and ancillary workers) on how to handle some of the commonly presenting mental health conditions. The present study has limitations. This a hospital based study and it is possible that some cases of anxiety, depressive or somatic complaints may have been missed or may have been managed by physicians in medicine casualty or even at community level, not requiring a psychiatric referral in the ED. This was a cross sectional study and any relevant investigations or other relevant specialty opinions were not followed up and a prospective study can give further insights into the study. Use of terminology intentional self harm which though not a diagnostic entity but was kept as provisional diagnosis and keeping emergency setting in consideration.

Conclusion:

Mental health services need to revolutionized and keep up with the evolving trends. Our population faced a pandemic where lockdown and emergency measures made accessibility to services even more difficult. Only the emergency services functioning helped them tide over their crisis. It becomes imperative that these services be instituted at primary care level also. Need for trained manpower and adequate resources along

with increasing awareness among medical and non-medical personnel equally can go a long way in improving mental health of all.

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