RESEARCH

# Psychiatric consultation in out-of-hours casualty/emergency department

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### Abstract

**Background:** Psychiatric emergencies are acute situations of sufficient gravity to warrant immediate assessment and treatment. In addition to major mental disorders, various life threatening illnesses, unpredictable psychophysiological stressors along with various other clinical variables like side-effects of drugs may be responsible for bringing the patients to psychiatric emergency.

**Method:** This is a descriptive study with sampling in a tertiary centre where the diagnoses were made based on the text revision of the fourth edition of Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) and were evaluated for sociodemographic as well as immediate clinical variables. **Results:** Most of the patients belonged to age group 20-40 years (62%), were from rural area (74%), nuclear families (74%), married (62%), education from class V to X (40%), homemakers (40%) and from lower socioeconomic status (58%). Dramatic presentation, sudden onset and adolescent age group made conversion disorder the commonest emergency psychiatry problem (46%) and schizophrenia ranked second (26%). Fourteen per cent patients had personality disorder and ten per cent had mental retardation. Forty six per cent of patients had coexistent medical illness out of which ten per cent were anaemic; in addition peptic ulcer, diabetes mellitus, tuberculosis, hypertension etc. were also associated. Regarding immediate clinical variables, seizure/pseudoseizure (26%), refusal of food (24%) and loss of consciousness (22%) are the commonest factors.

**Conclusion:** Within the limitations of difficulty in using rating scales, sampling problems, time and resource constraints, creative approaches may enable us to move the field of emergency psychiatric intervention forward.

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#### Introduction

The general model for delivery of psychiatric services in a medical emergency room is the consultant relationship. The patient is first seen by the medical doctors in the emergency department (ED). After assessment and treatment are rendered, the psychiatric consultant is called to respond and evaluate. If the patient is to be admitted medically, this evaluation may be centred on management recommendations to the medical staff. Sometimes arrangements need to be made for ongoing psychiatric care and special observation on the medical unit. If the patient is medically "cleared," the consultation frequently revolves around transactions related to the need for psychiatric admission or out-patient referral. In either case, the psychiatrist, who usually has general coverage duties elsewhere, comes to the ED to see the patient, make an assessment, propose treatment, and recommend a disposition.[1,2] These consultations are most commonly sought for substance use, mood or anxiety disorders.[3]

Psychiatric emergency services (PESs) are designed to respond to psychiatric emergencies as they arise.[4] Psychi-

atric emergencies are acute situations of sufficient gravity to warrant immediate assessment and treatment. In psychiatry the common emergencies are suicide, acute psychosis, other mental status change, substance abuse and behavioural disturbance.[1]

Emergency psychiatry is an important area and is evolving rapidly throughout the world in the modern concept of psychiatry care. Immediate evaluation and management of patients attending emergency psychiatry is quite different from that of outpatients' department (OPD). In addition to major mental disorders, various life threatening illnesses, unpredictable psychophysiological stressors along with various other clinical variables like side effects of drugs may be responsible for bringing the patients to psychiatric emergency.

Keeping these facts in mind we conducted the study in a tertiary care centre with the following aims and objectives:

1. To see the clinical diagnosis of the patients (psychiatric and physical).

2. To find out the immediate reason (clinical variables) for attending emergency psychiatry.

3. To study the sociodemographic variables of the patients attending emergency psychiatry.

### Methods and materials

The study was carried out at Silchar Medical College Hospital, Silchar, Assam, India. Fifty consecutive patients attending emergency psychiatry through Casualty Department/ED from 03/10/2008 to 20/11/2008 were included in the study. Sociodemographic variables were recorded in the semistructured performa developed in the Psychiatry Department. The patients were included irrespective of the diagnosis of organicity, age, mental retardation and sex. Psychiatric diagnoses for axis I and II were made according to the text revision of the fourth edition of Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR).[5] Patients having physical illness were diagnosed accordingly. In this regard faculty of Medicine and other departments were consulted as required. A check list was constructed to record the immediate clinical variables of the patients attending emergency psychiatry.

# Results

Sociodemographic variables: Most of the patients belonged to the age group of 20-40 years (62%). Only 16% of the patients belonged to the age group of less than 20 years. Patients with age of more than 40 years constituted the intermediate group (22%). Most of the patients attending emergency psychiatry were females (62% females, 38% males). Among the 31 Hindu (62%) and 19 Islam (38%) patients, much more were reported in Islam females in comparison to Islam males (almost three times, 28% F: 10% M). In Hindu, it was quite comparable (34% F: 28% M). Most of the patients hailed from rural background (74%) in comparison to 26% from urban background. Seventy four per cent of the patients belonged to nuclear family, in comparison to 24% from joint family and two per cent from extended family. We also found more number of patients from the married group (62% married, 36% unmarried). But more patients were detected among unmarried males and married females. Most of the patients had received education in the category from class V to X (40%) and the least among the postgraduates (four per cent). From occupational point of view most of them were from homemakers group (40%) and from low socioeconomic status (58%) with the least from upper middle (two per cent). [Table]

Axis I and II psychiatric diagnoses: On Axis I diagnosis we found maximum number of patients with conversion disorder whereas on Axis II diagnosis 14% had personality disorder and ten per cent had mental retardation. Patients presenting in emergency psychiatry mainly belonged to five categories. They were conversion disorder (46%), schizophrenia and other psychotic disorder (26%), mood disorder (14%), substance related disorder (ten per cent) and anxiety disorder (four per cent). Patients presenting with suicidal/ homicidal attempts/ thoughts (four per cent) belonged to mainly two categories - (i) schizophrenia and other psychotic disorder (two per cent) and (ii) mood disorder (two per cent). [Table]

Table. Sociodemographic variables and clinical diagnoses (n=50)

### Sociodemographic variables Gender, n (%) Male: 19 (38) Female: 31 (62) Age, n (%) Below 20 years: 8 (16) 20-40 years: 31 (62) Above 40 years: 11 (22) Religion, n (%) Hindu: 31 (62) Islam: 19 (38) Locality, n (%) Urban: 13 (26) Rural: 37 (74) Family, n (%) Nuclear: 37 (74) Joint: 12 (24) Extended: 1 (2) Marital status, n (%) Unmarried: 18 (36) Married: 31 (62) Other: 1 (2) Education, n (%) Illiterate: 11 (22) Primary: 4(8) Class V-X: 20 (40) Matriculation-Graduate: 13 (26) Postgraduate/Professional: 2 (4) Occupation, n (%) Unemployed: 6 (12) Student: 6 (12) Homemaker: 20 (40) Farmer/Daily wage earner: 7 (14) Government employee/Professional: 7 (14) Retired/Others: 4 (8) Socioeconomic status, n (%) Low: 29 (58) Lower middle: 13 (26) Middle: 4 (8) Upper middle: 1 (2) High: 3 (6) **Clinical diagnoses**

Axis I, n(%)Conversion disorder: 23 (46) Schizophrenia and other psychotic disorders: 13 (26) Mood disorder: 7 (14) Substance related disorders: 5 (10) Anxiety disorders: 2 (4) Axis II, n (%) Personality disorder: 7 (14) Mental retardation: 5 (10) Axis III, n (%) Anaemia: 5 (10) Peptic ulcer: 3 (6) Diabetes mellitus: 2 (4) Hypertension: 2 (4) Tuberculosis: 2 (4) Injury and poisoning: 2 (4) Menstrual complaints: 2 (4) Others: 5 (10)

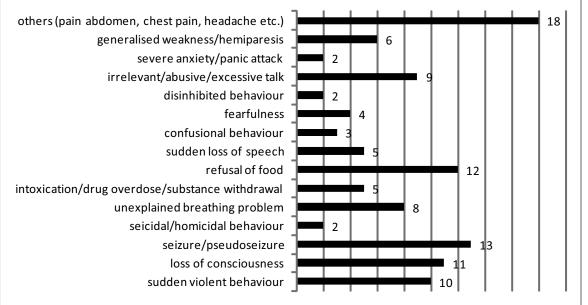


Figure: Immediate clinical variables.

Fourteen percent of the patients attending emergency psychiatry had personality disorder; out of these ten per cent were males and four per cent females. Ten per cent of the patients had associated mental retardation; out of which four per cent was among males and six per cent among females. [Table]

Axis III diagnosis (general medical condition): Forty six percent patients presented in psychiatry emergency with coexistent medical illness. Out of these 32% were females and 14% were males. Among these the commonly associated medical illnesses were anaemia (ten per cent), peptic ulcer (six per cent), diabetes mellitus (four per cent), hypertension (four per cent), tuberculosis (four per cent), injury and poisoning (four per cent) and menstrual complaints (four per cent). [Table]

Immediate clinical variables: Regarding immediate clinical variables we had lots of factors responsible out of which seizure/pseudoseizure (26%), refusal of food (24%) and loss of consciousness (22%) were the commonest factors. [Figure]

#### Discussion

It is observed that most of the emergency occurs in the age group of 20-40 years (62%) and interestingly most of them are females (62%). Kropp et al.[6] assessed 2632 patients and found 48.4% were female. The mean age was 43.5 (SD 16.0) years. Female patients were significantly older than male patients. According to Shakya et al.,[3] the M:F ratio was 1.3:1. The service users were predominantly young adults.

Religion seemed to have no direct influence on psychiatric emergency considering similar population distribution as the result in the neighbouring hospital area. In our study we found that most of the patients were from rural area (74%) and from nuclear families (74%). It's almost reflective of population distribution in rural and urban areas in this region. Though in our society still today number of joint families is more than nuclear families but it reflects the trend in the increasing number of nuclear families. It also reflects the vulnerability of nuclear families towards psychiatric emergency.

We observed that 62% of the cases attending emergency psychiatry were married whereas 36% were unmarried. Various psychosocial factors including stress and strain of married life as well as lack of attendant in the unmarried patients may be the reason behind this type of finding. It was also seen that patients who had education from class V to X were more vulnerable to develop emergency psychiatric problem. Stress with education, financial problem and other psychosocial factors may be responsible for this. But as a whole, type of occupation did not seem to have much influence on psychiatric emergency illness. People with low socioeconomic status were more affected, which may be because of poor health, poor living conditions, more stressful life, lack of education and drug addiction.

Axis I and II diagnoses: According to Kropp et al.,[6] substance-related problems (the tenth edition of the International Statistical Classification of Diseases and Related Health Problems, ICD-10 F1X, 672 patients) and psychotic disorders including schizophrenia (ICD-10 F2X, 391 patients) were the most common diagnoses, followed by somatoform, anxiety and neurotic disorders (ICD-10 F4X, 332 patients). Data collected by Dhossche[7] indicated that 38% of psychiatric emergencies involve suicidal ideation or suicidal behaviour. Breslow et al.[8] reported that 32% of patients presenting to a PES were acutely intoxicated with alcohol or other substances of abuse; 17% of the overall population who presented had a primary diagnosis of substance abuse or dependence. Wingerson et al.[9] studied 2,419 consecutive patients who visited a crisis triage unit and found that 30% had unipolar depression, 26% psychosis, 20% substance use disorder, 14% bipolar disorder, four per cent adjustment disorder, three per cent anxiety disorder, and two per cent dementia. Allen et al.[10] got diagnostic estimates from survey data in compiling his expert consensus guideline work on treatment of behavioural emergencies and reported the following averages of the expert's survey answers: 23% unipolar depression, 28% psychosis, 25% substance use disorder, 13% bipolar, and five per cent dementia. Shakya et al.[3] found that the most common causes for the consultation were behavioural problems (39%), altered consciousness (32%) and somatic complaints (17%). Approximately 83% received the diagnosis of Category F of the ICD-10. Mental and behavioural disorder due to substance use (F10-19) was the most common disorder (30%), followed by mood/affective disorders (23%) and neurotic, stress-related anxiety disorders (16%). About 20% had attempted suicide using different means, poisoning being the most common.

We found conversion disorder in 46%, schizophrenia and other psychotic disorder in 26%, mood disorder in 14%, substance related disorder in ten per cent and anxiety disorder in four per cent of patients. Patients presenting with suicidal/homicidal attempts/ thoughts (four per cent) belonged to schizophrenia and other psychotic disorder (two per cent) and mood disorder (two per cent).

Many psychiatric emergencies are a function of a transient crisis confronted by patients with problems related to a personality disorder or substance abuse. Underserved populations, such as children, the mentally retarded, and the elderly, will present in increasing numbers.[1] In the present study, 14% of the patients attending emergency psychiatry had personality disorder and ten per cent had associated mental retardation.

One reason that physician direction of crisis services is so important is the frequency and severity of medical syndromes that mimic, complicate or accompany mental illness.[1] In the study by Shakya et al.,[3] roughly 46% had co-morbid physical illnesses and eight per cent received only a physical diagnosis. We had also found that 46% of our patients were having coexistent medical illness out of which ten per cent were anaemic. In addition peptic ulcer, diabetes mellitus, tuberculosis, hypertension etc. were also associated.

It is difficult to use rating scales in the PES setting because of high patient acquity, sampling problems, time constraints (i.e. the urgency with which patients must be seen) and resource constraints (e.g. not enough staff to be able to apply the required instruments). There is a great need for creative approaches to using the strengths of the emergency service as a research setting while compensating for the obvious weaknesses. This may enable us to move the field forward in finding what does and does not work in emergency psychiatric intervention.[1]

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