



Psychiatric emergencies in a general hospital setting

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ABSTRACT

A psychiatric emergency is any disturbance in thoughts, feelings, or actions for which immediate therapeutic intervention is necessary. For a variety of reasons, such as the growing incidence of violence, the increased appreciation of the role of medical disease in altered mental status, and the epidemic of alcohol dependence and other substance related disorders- the number of emergency patients is on rise. The present work was undertaken with the aim to study socio-demographic and diagnostic profile of patients for whom psychiatric evaluation was sought in the Emergency Room [ER] of Tribhuvan University Teaching Hospital, Kathmandu during a three-month period. It was a prospective, cross-sectional, descriptive study. Majority of the patients were of age 11-30 years (57.7%), more than half of the patients were married (64.4%), and patients coming from Kathmandu valley (62.5%) outnumbered patients coming from outside. Only 46% of the patients attended the ER within 24 hours of onset of current problem. Out of the patients who received the diagnosis of Category F- Mental and Behavioural disorders of the ICD-10 (79.8%), 43.4% were suffering from the Neurotic, stress-related and somatoform disorders and 20% were suffering from Mood disorders. Out of the remaining 20.2% patients, one third each belonged to those who committed intentional self harm, who were suffering from neurological disorders, and who were found to be suffering from systemic diseases. Emergency psychiatry is yet to draw attention of administrators and policy makers, which is reflected by the fact that only TUTH provides 24 hours psychiatric emergency services in the whole country.

Keywords: Emergency; Psychiatric emergencies; TUTH; ICD-10.

INTRODUCTION

A psychiatric emergency is any disturbance in thoughts, feelings, or actions

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for which immediate therapeutic intervention is necessary¹. For a variety of reasons, such as the growing incidence of violence, the increased appreciation of the role of medical disease in altered mental status, and the epidemic of alcohol dependence and other substance related disorders- the number of emergency patients is on rise. The widening scope of emergency psychiatry goes beyond general psychiatric practice to include such specialized problems as the abuse of substances, children, and spouses; the violence of suicide, homicide and rape; and such social issues like homelessness, aging, competence, and acquired immune deficiency syndrome (AIDS).

Acute psychopathologic states requiring emergency medical care are divided into two groups: (i) mental states leading to aggressive and autoaggressive actions, and (ii) critical conditions observed during the most severe period of illness when the body's self-regulatory abilities are exhausted and preservation of life is impossible without resuscitative measures.² Apart from the clinical dimensions, psychiatric emergencies also have legal dimensions. In contrast to objectively demonstrable medical emergencies, psychiatric emergencies are intrinsically subjective, and treatment refusal in such cases is more common and conceptually more complex.³

Studies regarding psychiatric emergencies have focussed on various aspects. Khuri & Wood⁴ analyzed 253 psychiatric emergency patients using eight diagnostic clusters and found 65 patients (mean age 31.7 years) suffering from

schizophrenia, followed by patients suffering from mania (mean age 34 years). Perlmutter⁵ observed the role of the patient's family in emergency intervention at a psychiatric emergency service handling about 4500 visits per year. The visits were related with suicide, violence, and psychosis. One half of all visits were by subjects aged 18-32 years.

Nepal is a small country of about 21 million populations and is situated in the heart of South Asia. There is only one mental hospital. There are five general hospitals as well, which are providing In-patient psychiatric services. Tribhuvan University Teaching Hospital [TUTH] is the only general hospital providing 24-hour emergency services to psychiatric patients. Literature regarding emergency psychiatry in Nepal is scarce. Study of the patients requiring emergency psychiatric evaluation and management in a general hospital emergency setup will be further important in the wake of forthcoming mental health act. The present work was undertaken with the aim to study the socio-demographic and diagnostic profile of patients for whom psychiatric consultation was sought.

MATERIAL AND METHOD

It was a prospective and descriptive study of the patients presenting with psychiatric symptoms in the Emergency room [ER] of TUTH over a period of three months (October 1st 1998 to December 31st 1998). A self-designed proforma was used to record the socio-demographic data and information about the illness (duration since onset, diagnosis, any other co-morbid condition, type of

treatment instituted and decision about the admission). Diagnosis was made according to International Classification of Disease- 10th edition [WHO, 1992].⁶ The information was kept confidential. Data analysis was done in SPSS version 7.5.

RESULTS

A total of 104 patients attending ER were selected out of which 57 (54.8%) were females and remaining were males. Maximum patients were in the age group 21-30 years

(35.5%), followed by the age group 11-20 years (22.1%). Males outnumbered females above age 30 years [M=26 (60.5%), F=17 (39.5%)], whereas females outnumbered males below the age of 30 years [M=21 (34.4%), F=40 (65.6%)]. Mean age of male and female patients were 31.62 ± 9.98 and 27.98 ± 12.95 years respectively (Table I). Sixty-seven (64.4%) patients were married, 36 (34.6%) single and 1 (0.96%) was a widow (Table II).

Table I: Age-Group and Sex Distribution

Age-Group (in years)	Males	Females	Total	
			N	%
1-10	1	0	1	0.96
11-20	5	18	23	22.1
21-30	15	22	37	35.5
31-40	16	7	23	22.1
41-50	8	5	13	12.5
51-60.	2	4	6	5.7
> 60	0	1	1	0.96
Total	47 (45.2%)	57 (54.8%)	104	100
Mean age	31.62 ± 9.98	27.98 ± 12.95	29.97 ± 12.02	

Table II: Marital Status

Marital status	Females	Males	Total	
			N	%
Married	37	30	67	64.4
Single	19	17	36	34.6
Widowed	1	0	1	0.96
Total	55	45	104	100

Forty-eight (46.2%) patients had arrived ER within 24 hours of the onset of the illness, 37 (35.5%) more patients reached ER within a week of the onset of the illness while 19 (18.2%) took more than one week before landing up in the ER (Table III). Sixty-five (62.5%) patients came from the Kathmandu valley, the remaining 39 (37.5%) hailing from outside the valley. The mean duration of illness of the patients from the valley was 4.2 ± 7 days, whereas in the patients' coming from outside the valley was 5.62 ± 7.78 days.

Table III: Duration of illness

<i>Duration of illness on presentation</i>	<i>N</i>	
Within 2 hours	5	Within 24 hours N=48, 46.2%
Within 2 to 6 hours	5	
Within 6 to 12 hours	2	
Within 12 to 24 hours	36	
Within 24 to 48 hours	12	More than 24 hours N=56, 53.8%
Third day to a week	25	
Within one to two weeks	10	
More than two weeks	9	
Total	104	

Eighty-three (79.8%) patients received the diagnosis of Category F- Mental and Behavioural disorders of the ICD-10. Thirty-six (43.4%) were suffering from the Neurotic, stress-related and somatoform disorders, sixteen (20%) were suffering from Mood disorders and 13 (16.25%) were from Mental and Behavioral disorders due to substance use. Twelve (15%) were suffering from Schizophrenia and related disorders while, 6

(7.5%) patients were suffering from delirium (Table IV). Out of the remaining 21 (20.2%) patients, 7 (33.3%) each belonged to those who committed intentional self harm, who were suffering from neurological disorders, and who were found to be suffering from the diseases of cardiovascular system, respiratory system, gastrointestinal system, and genitourinary system (Table V).

Nine (8.65%) patient who were already suffering from severe depressive episode without psychotic symptoms were brought to the Emergency department primarily for Adjustment disorders (F 43.2, N=1), Dissociative stupor (F 44.2, N=1), and Attempted suicide (X, N=7 [77.7%]). There were 12 (11.5%) more patients who were already suffering from Moderate depressive episode but presented to ER due to Conversion (dissociative) disorders (N=5, 41.7%), Autonomic somatoform dysfunction (N=3, 25%), Alcohol related problems (N=2, 16.7%), Seizure disorder (N=1, 8.3%) and General medical disorder (N=1, 8.3%).

Forty (38.5%) patients required admission for psychiatric problem. The criteria of admission being aggression directed to self and others as well as markedly decreased self-care. Eleven (27.5%) of those patients were suffering from alcohol related problems, 7 (17.5%) from manic episodes, and 6 (15%) were from acute and transient psychotic disorders. Remaining patients were suffering from conversion (dissociative) disorder, and patients who had attempted suicide but did not have any significant physical complications. Only 26 (65%) patients

requiring admission could be admitted in Psychiatry ward of TUTH. The remaining 14 (35%) were referred to other centers. Eighteen (17.3%) patients were referred to other departments, as the patients needed

treatment primarily for diseases related to other systems. Forty six (44.23%) patients were discharged from ER itself, as hospitalization was not indicated.

Table IV: Diagnostic distribution of mental and behavioural disorders

<i>Major Diagnostic Categories</i>	<i>ICD Code</i>	<i>N</i>	<i>Total</i>	<i>%</i>
F 0.0-9.9: Organic, including symptomatic, mental disorders	F 5.9	6	6	7.2
F 10-19.9: Mental and behavioural disorders due to psychoactive substance use	F 10.0	2	13	15.66
	F 10.30	1		
	F 10.31	6		
	F 10.40	1		
	F 10.41	1		
	F 10.52	2		
F 20-29.9: Schizophrenia, schizotypal and delusional disorders	F 20.2	1	12	14.45
	F 20.4	1		
	F 23.0	10		
F 30-39.9: Mood [affective] disorders	F 30.1	3	16	19.27
	F 31.1	5		
	F 32.1	4		
	F 32.2	2		
	F 32.3	2		
F 40-49.9: Neurotic, stress-related and somatoform disorders	F 41.0	2	36	43.37
	F 41.2	1		
	F 41.9	3		
	F 43.0	3		
	F 43.2	3		
	F 44.2	14		
	F 44.4	4		

	F 44.9	2		
	F 45.3	4		
Total cases of Mental and behavioural disorders (F)		83 (79.8%)	83	100

Table V: Disorders other than mental and behavioural disorders

<i>Diagnosis</i>	<i>N</i>	<i>Total</i>	<i>%</i>
Diseases of the nervous system (G)	7	33.3	
G 24 (EPS)	1		
G 40 (Seizure disorder)	5		
G 41 (Status epilepticus)	1		
Other diseases	7	33.3	
Diseases of the circulatory system (I)	2		
Diseases of the respiratory system (J)	1		
Diseases of the digestive system (K)	1		
Diseases of the genitourinary system (N)	2		
Disulfiram-alcohol reaction	1		
Intentional self harm (X 60-84)	7	33.3	
Antidepressant overdose (X 61)	2		
Hanging (X 70)	1		
Drowning and submersion (X 71)	1		
Sharp objects (X 78)	1		
Jumping from height (X 80)	2		
Total cases other than Mental & behavioural disorders	21 (20.2%)	21	100

DISCUSSION

Pervious studies have consistently demonstrated that most of the visitors seeking the emergency psychiatric services were younger. The findings of the present study are in keeping with these studies. Present study showed that most of the emergency service seekers were those who were suffering from stress-related and neurotic disorders, which is followed by almost similar percentage of

patients suffering from Schizophrenia and related disorders, Mood disorders and Mental and behavioural disorders due to use of psychoactive substances. This finding is different from the studies done in west in which schizophrenia / psychosis is the most common presentation while the neurotic and stress-related disorders are not so common.^{4,5} Personality disorder was not a primary diagnosis in any of the patients,

though Khuri & Wood⁴ mention patients receiving personality disorders as primary diagnosis in ER in their study.

All of the seven patients who had attempted suicide were suffering from Severe depression. Though it is a significant finding, results cannot be generalized because it did not include those who after attempting suicide developed serious medical complications or who needed intensive medical treatment eg. patients who attempted by ingesting organo-phosphorus compounds and burn cases.

Hopkin⁷ discusses problems related to the differentiation of medical and psychological treatment of patients seen in emergency psychiatry, considering the increasing recognition that organic and functional mental disorders show a high degree of overlap. There were 6.7% patients who were suffering from problems related to other systemic disorders, but as they were displaying psychiatric symptoms, psychiatric evaluation was sought. Eleven (10.6%) more patients were referred to other departments, as although initially regarded as suffering from psychiatric disorders, were on evaluation found to be suffering from general medical conditions.

Only 46.2% patients in the present study came within 24 hours of onset of current problem, whereas another such study showed all patients came within 24 hours of onset of current problem.⁸ More than half the patients taking longer than 24 hours may be partly explained by distance factor, as it is significantly correlated with the use of psychiatric emergency service by the patients.⁹ However, only 37.5% of the patients

came from outside the Kathmandu city as compared to 62.5% from within the city. The patients suffering from Mood disorders had mean duration of 13.15 days and the patients suffering from Neurotic, stress-related and somatoform disorders had mean duration of 3.97 days. The remaining patients had significantly lower mean duration of the current problem at the time of presentation. The cause of the initial two groups of patients landing up in ER days after starting of problem is a matter of further study.

Only 1.9% (N=2) of the patients were repeat visitors, which is less as compared to 7 to 18% of the patients being repeat visitors in a study by Ellison *et al.*¹⁰ Considering the fact that TUTH is the only emergency service provider to the psychiatric patients, the less number of repeat visitors as compared to other studies is interesting. Almost 39% of the patients required admission for psychiatric problem. This is similar to finding that about 40% of all patients seen in psychiatric emergency rooms require hospitalization.¹ The fact that more than 35% of the patients who needed admission had to be referred to other centers reflects the need to increase the number of beds in the psychiatry ward.

Psychiatry as such, and emergency psychiatry in particular have been the neglected areas of Medicine. Recently, though psychiatry is getting some importance, emergency psychiatry is yet to draw attention of administrators and policy makers, which is reflected by the fact that only TUTH provides 24 hours emergency psychiatry services in the whole country. The present study was an attempt to report data of the patients presenting in ER primarily with psychiatric problems which may help in planning and

starting the emergency psychiatric services throughout the country.

REFERENCES

1. Kaplan HI, Sadock BJ. Psychiatric Emergencies. In: Synopsis of Psychiatry, 8th edition. New Delhi: Waverly, 1998.
2. Morkovin VM, Kekelidze ZI. Urgent care in psychiatry. Zhurnal Nevropatologii I Psikhiatrii Imeni S S Korsakova 1987; **87**: 271-274.
3. Swartz MS. What constitutes a psychiatric emergency: Clinical and legal dimensions. Bulletin of the American Academy of Psychiatry and the Law 1987; **15**: 57-68.
4. Khuri R, Wood K. The role of a diagnosis in a psychiatric emergency setting. *Hospital and Community Psychiatry* 1984; **35**: 715-718.
5. Perlmutter RA. Emergency psychiatry and the family: the decision to admit. *Journal of Marital and Family Therapy* 1986; **12**: 153-162.
6. World Health Organization. International Classification of Diseases and Related Health Problems-Tenth Edition. Chapter V- Mental and Behavioral Disorders: Clinical Description and Diagnostic Guidelines. Geneva: World Health Organization 1992.
7. Hopkin JT. Psychiatry and medicine in the emergency room. *New Directions for Mental Health Services* 1985; **28**: 47-53.
8. Fulop G, Strain JJ. Psychiatric emergencies in the general hospital. *General Hospital Psychiatry* 1986; **8**: 425-431.
9. Vaslamatzis G, Kontaxakis V, Markidis M, Katsouyanni K. Social and resource factors related to the utilization of emergency psychiatric services in Athens area. *Acta Psychiatrica Scandinavica* 1987; **75**: 95-98.
10. Ellison JM, Blum N, Barsky AJ. Repeat visitors in the psychiatric emergency service: A critical review of the data. *Hospital and Community Psychiatry* 1986; **37**: 37-41.