

## PATTERN OF ADMISSION IN A PSYCHIATRIC WARD

M. S. I Mullick FCPS<sup>1</sup>, M. E. Karim FCPS<sup>2</sup>

### Abstract :

*A retrospective study was performed by analyzing the medical records of admitted psychiatric patients in a joint inpatients department of Institute of Mental Health and Research and Psychiatric Department of Mitford Hospital, Dhaka during the period of calendar year 1992 to assess the pattern of psychiatric morbidity among the admitted patients. Of the total 287 admitted patients, 184 (64%) were males and 103 (36%) were females. Their mean age was 27 years and about 50% of the cases fall into 18-25 years age group. Most of the cases came from urban background, even then 47.73% cases came from rural areas. Most frequent cause of admission was schizophrenia (42.16%) and other common causes were bipolar affective disorder (25.09%), major depressive disorder (9.76%), conversion disorder (8.01%) and drug dependence (8.01%). Average duration of stay was 20 days and 11.04 patients was treated per bed which indicates maximum bed utilization. A considerable amount of patients absconded due to unsuitable treatment environment and lack of required facilities. Expansion of existing mental health service is an urgent need to improve the situation.*

### Introduction :

Psychiatric disorder is common in Bangladesh as in any other country. From the surveys in the developing countries it was brought out that serious psychiatric disorder is at least 1 per 100 of population, is as common in developing countries as in the affluent Western countries. The prevalence of minor psychiatric disorder is 5 to 6 times more<sup>1</sup>. Though a large countrywide survey of psychiatric morbidity has not yet been attempted in our country, from a rural community survey it was found that 29/1000 people suffered from psychiatric disorder while additional 36/1000 had both psychiatric and physical disorder together. Out of these, 28.78/1000

were cases of depressive state and 2.54/1000 were the cases of schizophrenia.<sup>2</sup> From a one years survey of medical general practice in Dhaka it was found that 29% of all cases was suffered from purely functional disorders and another 6% there were both physical and psychological symptoms.<sup>3</sup> In a study of medical outpatients department of postgraduate teaching hospital, Dhaka, it was found that 31% had purely psychogenic condition while additional 15% had both organic and psychogenic features.<sup>4</sup> In another study in a psychiatric clinic of Chittagong, schizophrenia and affective disorder were found 30% and 25% respectively.<sup>5</sup> In a recent study on outpatients department of Institute of Mental Health and Research, Dhaka, schizophrenia and affective disorder were found 32.76% and 30.17% respectively. Neurotic disorder was found 14.87%, drug dependence was found 5.82% and mental retardation was found 1.4% in this study.<sup>6</sup>

The present study was designed to find out the pattern of psychiatric morbidity of patients admitted to the Institute of Mental Health and Research and Mitford Hospital, Dhaka for the year 1992. This study reflects the pattern of admission in teaching hospitals in our country. The relevant information of this study may ultimately be useful in planning of mental health service in Bangladesh.

### Materials and Methods :

Medical records of all admissions with psychiatric disorders treated in the Institute of Mental Health and Research (IMHAR) and Psychiatric Department of Sir Salimullah Medical College Mitford Hospital, Dhaka, admitted between 1st January, 1992 and 31st December, 1992 were reviewed. Both the institutions have a combined inpatients department. It consists of 26 beds. Of them, 16 beds for male patients and 10 beds for female patients.

After admission, both mental status and physical examination of the patients were performed

1. Assistant Registrar Institute of Mental Health and Research, Dhaka.

2. Assistant Professor, Department of Psychiatry, SSMC, Mitford Hospital Dhaka.

in details. Necessary laboratory investigations were done. The final diagnosis were made by any of the working psychiatrists on the basis of ICD-10.<sup>7</sup> Usually the patients were discharged after sufficient improvement. A patient was considered to have improved when he was free of all or most symptoms of disorder.

### Results :

In total 287 patients were admitted. Of these, 184 (64.11%) were males and 103 (35.89%) were females. The male to female ratio here was 1.79:1. Their age ranged between 12-70 years with a mean of 26.99 years (SD =9.88). The highest number of cases were found in the age group of 21 to 25 years, both for males and females with 23.91% and 28.15% respectively. The next highest incidence was in the age group of 16-20 years with 22.83% males and 28.15% females. The age and sex distribution of the patients were shown in Table-I. The urban rural distributions of the patients were 150 (52.27%) cases and 137 (47.73%) cases respectively.

Table-II shows diagnostic distribution of the patients. Schizophrenia formed the largest group with 121 (42.16%) cases. Second largest group was bipolar affective disorder with 72 (25.09%) cases of which 67 (23.34%) were currently manic and only 5 (1.74%) cases were currently depressed. Third largest group in the present series was major depressive disorder with 28 (9.76%) cases. Of the other functional disorders, only 4 (1.39%) cases were diagnosed as acute & transient psychotic disorder and 2 (0.7%) cases were of delusional disorder. Of the organic psychiatric conditions, drug dependence was found with 23 (8.01%) cases and all of them were males. Major organic psychiatric disorders, delirium and dementia were found only 2 (0.7%) cases for each. Main bulk of the admitted neurotic disorders was the conversion disorder with 23 (8.01%) cases. Of these, 19 were females and only 4 cases were males. Obsessive-Compulsive disorders were found with 2 (0.7%) cases and only 1 (0.35%) case was of anxiety disorder. Among the child and adolescence disorders, mental retardation was found 6 (2.09%) cases. Only 1 (0.35%) case was of autistic disorder.

The mean duration of stay in the hospital was 20 days and the majority of patients (55.14%) were discharged within 14 days after admission. Analysis of results of treatment at the time of discharge revealed that 225 (78.4%) patients were improved and they were discharged with advice. Though there was a lot of improvement, 14 (4.88%) were discharged on risk bond and 4 (1.39%) cases were discharged on request. Forty two (14.63%) cases were absconded. Only 2 (0.7%) cases were expired, of which 1 was schizophrenic and 1 was manic. They died due to associated physical illness. The patients treatment per bed was 11.04. The patients treated in 16 male beds and 10 female beds were 11.5 per bed and 10.3 per bed respectively and male female bed utilization ratio here was 1.12:1.

### Discussion :

This retrospective study covers the period of admission from 1st January, 1982 to the 31st December, 1992 in the Institute of Mental Health and Research and Psychiatric Department of Mitford Hospital, Dhaka. The study shows that 16-25 years age group contributed about a half of the total number of patients. Similar age distribution was reported in a study among the patients admitted to the mental hospital, Pabna, where 52% of cases was in the age group of 15 to 29 years.<sup>8</sup> In our study, 64.11% were males and 35.89% were females. This less attendance of female inpatients is mainly due to pattern of allocation of beds which were 61.54% for males and 38.46% for females and partly due to the fact that females are less frequently brought for treatment than their male counterpart because of the conservative nature of our society and because our women play subordinate role in the family as well as in the society and as they are economically dependent.

In the present study, patients from urban areas were higher than from the rural areas. This finding is dissimilar with urban rural distribution of the population reported in the 1991 population census.<sup>9</sup> Selective factors like widely applying definition of town, location of hospital in urban area, economic factor, urban people's better health consciousness, and better information

about the mental health service may explain the preponderance of urban patients rather than any specific vulnerability between urban and rural people in our study. However, a significant proportion, 47.73% came from rural areas in this city center.

In this study, the two commonest cause of admission were schizophrenia and affective disorder with 42.16% and 34.85% respectively which indicate that these two are most frequent psychiatric disorders we encounter. The findings are consistent with the previous report of the mental hospital, Pabna, where these two disorders formed the main bulk of admission.<sup>8</sup> Even the result is consistent with the studies among outpatients population in different hospitals and clinics of our country where schizophrenia and affective disorder were found two main group of psychiatric disorders.<sup>4,5,6</sup> Of the neurotic disorders, conversion disorder was the largest cause of admission and most of them were younger females. This indicates that still this disorder of non-Western societies shares a considerable proportion of hospital admission among the female patients and reflects that prejudice against the psychiatric treatment of this disorder is improving. Drug dependence was another leading cause of admission which reveals a burning problem in our society needs to be controlled.

Majority of the patients (55.14%) were discharged within 2 weeks after admission in our study. In the previous report of the mental hospital in the year 1974, 51.9% were discharged within 6 weeks after hospitalization. This wide range of difference is due to more active treatment & discharge, better stimulating environment and lack of undersirable effects of institutionalization in our center. Rate of improvement of illness at the time of discharge was found about 85% of our patients which is comparable to improvement achieved in other centers of both home and abroad.<sup>8,9,10</sup> It is unfortunate that a considerable amount (14.63%) of patients absconded after admission. This is partly due to the presenting illness in themselves but also due to unhygienic, insecure milieu of the inpatients

department and lack of adequate facilities for the patients.

In our study, the average bed utilization rate was found 10.04 patients per bed. The patients treated per bed in the other teaching hospitals of the country in the same year were reported more or less similar with our finding but dissimilar with the report of mental hospital where 2.57 patients treated per bed in that year.<sup>12</sup> These findings clearly indicate a higher rate of bed utilization in general hospital than mental hospital.

This inpatients department serves better with maximum utilization of its resources which indicates increase awareness and good motivation of people through affective psychiatric intervention and treatment. It also can be concluded that the acceptance of the psychiatric treatment among general population is gradually improving comparing with earlier studies. The improvement of the existing service with adequate physical space, staff and necessary facilities is an urgent need to meet the present and future demands.

**Table - I : Age and sex distribution**

Age group in year	Male		Female		Total	
	Number (N=184)	%	Number (N=103)	%	Number (N=287)	%
11 - 15	6	3.26	5	4.85	11	3.83
16 - 20	42	22.83	29	28.15	71	24.74
21 - 25	44	23.91	29	28.15	73	25.43
26 - 30	35	10.02	13	12.62	48	16.72
31 - 35	28	15.22	11	10.68	39	13.59
36 - 40	14	7.61	6	5.82	20	6.97
41 - 45	6	3.26	3	2.91	9	3.14
46 - 50	5	2.72	3	2.91	8	2.79
51 - 55	1	0.54	1	0.97	2	0.70
56 - 60	1	0.54	1	0.97	2	0.70
61 - 65	1	0.54	1	0.97	2	0.70
66 - 70	1	0.54	1	0.97	2	0.70
Mean age:	27.29 (SD=9.43)		26.45 (SD=10.61)		26.99 (SD=9.88)	
Range:	12-70 years		M/F ratio=1.79:1			

**Table - II : Diagnostic categories**

Diagnosis	No. of Patient ( N = 287)	%
Schizophrenia	121	42.16
Bipolar affective disorder	72	25.09
Major depressive disorder	28	9.76
Delusional disorder	2	0.70
Autistic disorder	1	0.35
Acute and transient psychotic disorder	4	1.39
Drug dependence	23	8.01
Mental Retardation	6	2.09
Delirium	2	0.70
Dementia	2	0.70
Conversion disorder	23	8.01
Anxiety disorder	1	0.35
Obsessive-Compulsive disorder	2	0.70

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