

**SOCIODEMOGRAPHIC AND DIAGNOSTIC CHARACTERISTICS OF PSYCHIATRIC PATIENTS IN A GENERAL HOSPITAL**

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**Abstract:**

The sociodemographic, clinical characteristics and referral status of psychiatric patients in the out-patient department of a private teaching hospital over a period of 6 months were studied. The paper also compares the data with that of some other Indian studies and an Ethiopian study.

**Aim:** To analyze the sociodemographic, diagnostic & referral status of patients attending psychiatric outpatient department.

**Results:** The findings suggest that psychiatric morbidity is almost same in different centers and across in different times. The problems of mental illness are same all over the world has been highlighted in this study.

**Key words:** Psychiatry morbidity, referral status, general hospital.

**Introduction:**

The spectrum of psychiatric case material seen in general hospital psychiatric units is much wider than seen in mental hospitals.<sup>[1]</sup> A 1984 study found that it was not simply the presence of abnormal behavior that prompted psychiatric consultation but other reasons like organic illnesses, insufficient reason to explain symptoms are the reasons for psychiatric referrals<sup>[2]</sup>. What a given society understands by psychiatric illness is effectively defined by the characteristics of referral pathways to the psychiatric offices

<sup>[3]</sup>. The establishment of General Hospital Psychiatric Units (GHPU) provided an impetus for Indian studies on psychiatric morbidity in medical, surgical in-patients<sup>[4]</sup><sup>[5]</sup><sup>[6]</sup>. Consultation Liaison (CL) interaction whereby the psychiatrist becomes an integral part of general hospital team helps in the recognition of psychological morbidity at an earlier stage and in the comprehensive management of the patients on the site<sup>[7]</sup>

**Aim:** To analyze the sociodemographic, diagnostic, comorbid data and referral characteristics of patients attending

psychiatric OPD. To compare these data with other studies in different centers.

### Material and Methods:

Meenakshi Medical College and Research Institute is an established medical college in the private sector aiming to give comprehensive health care to mainly rural population. The College is situated 60 km. from Chennai on the Bangalore – Chennai National High Way.

For the present study all the patients seen in the psychiatric OPD of Meenakshi Medical College & RI, Enathur, Kanchipuram seen over a period of 6 months from Jan. 2009 to June 2009 were included. The case sheets of the patients

were reviewed to get the diagnosis and socio demographic features like age, sex, domicile (rural / urban) marital status, religion etc., Our data was compared with data from a study conducted at St. Pauls hospital at Addis Ababa, Ethiopia<sup>[8]</sup> and a study conducted in two coalfield hospitals in Bihar<sup>[9]</sup>. (Central coal fields CCL a public sector organization and the Tata Bokaro (TWB) coal fields, a private organization into the year 1988-89<sup>[9]</sup> and a study conducted at PGIMER Chandigarh<sup>[7]</sup>. Such a study is hoped will lead to a better understanding and will help us in improving our existing general hospital mental health care delivery process.

**Table: 1** Sociodemographic Distribution

Total no of Cases – 219		
Age	IN NO's	IN PERCENTAGE
Upto 15	30	13.70%
16 – 45	150	68.49%
46– 60	24	10.96%
Above – 60	15	6.85%
Total no of Cases – 219		
SEX	IN NO's	IN PERCENTAGE
MALE	123	56.16%
FEMALE	96	43.84%
Total no. of Cases – 219		
RELIGION	IN NO'S	IN PERCENTAGE
HINDU	202	92.24%
CHRISTIAN	9	4.11%
MUSLIM	8	3.65%
Total no. of Cases – 219		
MARITAL STATUS	IN NO'S	IN PERCENTAGE
MARRIED	132	60.27%
SINGLE	87	39.73%
Total no. of Cases – 219		
URBAN	IN NO'S	IN PERCENTAGE
URBAN	121	55.25%
RURAL	98	44.75%

**Table: 2 a**

DIAGNOSIS	IN NO's	IN %
Depressive Disorder	35	15.98%
Anxiety Disorder	34	15.52%
Alcohol Dependence Syndrome	30	13.69%
Reaction to Stress and Adjustment Disorder	15	6.84%
Somatoform Disorder	11	5.02%
Dissociative conversion Disorder	9	4.10%
Psycho sexual Disorder	9	4.10%
Schizophrenia	9	4.10%
OCD	7	3.19%
Bipolar Affective Disorder	6	2.73%
Delusional Disorder	6	2.73%
Mental Retardation	5	2.28%
Seizure Disorder	5	2.28%
ADHD	4	1.82%
Personality Disorder	4	1.82%

**Table: 2 b**

DIAGNOSIS	IN NO's	IN %
Simple Tics	4	1.82%
Schizoaffective Disorder	3	1.36%
Non Organic Sleep Disorder	2	0.91%
EPS	2	0.91%
Persistent Mood Disorder	2	0.91%
Nocturnal Enuresis	2	0.91%
Separation Anxiety Disorders	2	0.91%
Organic Psychosis	1	0.45%
In appropriate Diet & Eating Habits	1	0.45%
Learning Disorder	1	0.45%
Emotionally Unstable Disorder	1	0.45%
Mixed Disorder of scholastic skill	1	0.45%
Unspecified Organic or Symptomatic Mental Disorder	1	0.45%
Receptive Language Disorder	1	0.45%
Nil Psychiatry	6	2.73%

**Table: 3**

MODE OF REFERRAL	IN NO's	IN %
General Medicine	77	45.03%
General surgery	17	9.94%
Paediatrics	17	9.94%
Casualty	14	8.19%
ENT	14	8.19%
Chest	10	5.85%
Skin	8	4.68%
Ortho	8	4.68%
Obstetrics & Gynaecology	4	2.34%
Ophthalmology	2	1.17%

**Table: 4 Age Break Up**

AGE BOKARO (N=127)		MMCH & RI N=219 CCL(N=160)		PGI CHANDIGARH N=1245
Upto 15	20.46%	13.70%	12.49%	8.59%
16-45	59.89%	68.49%	73.11%	63.94%
46-60		10.96%		18.88%
Above – 60	7.8%	6.85%	14.37%	8.59%

**Table: 4 Marital Status & Gender Break Up**

N O		BOKARO (N=127)		MMC & RI (N=219)		PGI (N=1245)		CCL (N=160)		ADDIS ABABA (N=1840)	
		Married	Single	Married	Single	Married	Single	Married	Single	Married	Single
1	MALE	40.9%		56.16%		52.23%		70%		63%	
2	FEMALE	59.1%		43.84%		41.77%		30%		37%	
3	MARITAL STATUS	70.8%	29.20%	60.27%	39.73%	65%	35%	75%	25%	32%	68%

**Table: 5 \*Psychiatric Diagnostic Break Up**

No.	Category	Tata West (Bokaro) 1988-89 N-127	MMCH & RI- Enathur- 2009 N=219	Chandigarh (PGI)1998 N-1245	Coal field (CCL) 1988-89 N=160	Addis Ababa (Ethiopia) 1983 N=1840
1	Depression	21.2%	15.98%	14.8%	18.75%	22.41%
2	Anxiety Neurosis	12.6%	15.52%	17.11%	6.87%	14.71%
3	Alcohol dependence	-	13.69%	6.7%	-	0.80%
4	Adjustment disorder	8.65%	6.84%	5.8%	2.50%	-
5	Somatoform & conversion disorder	0.78%	9.12%	9.09%	2.5%	9.88%
6	Schizophrenia	2.36%	4.10%	22.01%	6.2%	8.1%
7	Mental Retardation	3.36%	2.28%	1.59%	3.12%	1.15%

8	Affective Disorder	15.7%	2.73%	17.30%	16.25%	8.84%
9	Epilepsy	6.29%	2.28%	-	3.12%	4.55%
10	Nil psychiatry	15.7%	2.73%	16.97%	5%	7.88%
11	Organic Psychosis	1.6%	0.45%	4.63%	9.9%	1.11%
12	Personality Disorder	6.29%	1.82%	2.39%	1.25%	0.92%

\* Table courtesy L. N. Sharma. (With addition by the author)

**Table: 6 Physical Illness Break Up**

N o:	PHYSICAL ILLNESS	MMCH & RI (N=219)	PGI (N=1245)
1	Systemic diseases	57.99%	58.0%
2	Infections	10.84%	11.50%
3	Metabolic & endocrine disorders	7.08%	6.02%
4	Neoplasm	2.7%	5.38%
5	Obstetric & gynecological conditions	0.8%	5.46%
6	Nil physical illness	39.28%	4.09%

## Results:

### Sociodemographic characteristics:

From table – 1 it is clear that the majority of the patients fall in the age group of 16 to 45 years (68.49%). Male patients were greater than female patients. Married persons (60.27%) were higher than single persons. Majority of patients were Hindus (92.24%). Urban population is little higher than rural population. Significance of the findings will be discussed a little later in the light of other studies. Distribution of referrals: 55.56% were from medical specialties (general medicine, dermatology, chest diseases) and 23.98% were from surgical specialties (General surgery, ENT, Ophthalmology, Orthopedics). 9.94% were from pediatrics, 2.34% were from O & G, 8.19% from casualty.

### Psychiatric Diagnosis:

Here we have listed the most common psychiatric diagnosis. 15.98% patients were suffering from depression. 15.52% with anxiety disorder. 13.69% were with alcohol dependence, 6.84% were with adjustment disorder. 9.12% were with somatoform and conversion disorder. 4.10% with schizophrenia. Mental retardation and epilepsy were with 2.28% each and 2.73%

were of nil psychiatry. Bipolar affective disorder 2.73%. Personality disorder 1.82%

Among the 219 patients 113 were associated with physical illness. Among the 113 patients 57.99% were with systemic illness. Endocrine and metabolic disorder, orthopedic and neurological complications each constituting 7.08%. Infectious and skin diseases constitute 11.50% each and 2.7% were with benign and malignant neoplasm.

The rate of referrals in the present study is 0.6% which is in the mid-range of referral rate reported from India.

### Discussion:

In the age break up most of the cases were of 16-45 year range in our hospital (68.49%) as well as in PGI Chandigarh (63.93%). In Addis Ababa (20 to 40 year age group) it was around 67%. Utilization of services by the same age population (16-45 age groups) is uniformly high in all centers. It is a significant finding. A lower proportion of organic psychosis unlike in other Indian studies <sup>[7]</sup> <sup>[2]</sup> may be due to physicians in this centers were more comfortable with the management of delirium. The least were of geriatric age group in both our hospital (6.85%) and PGI (8.59%), But the second most common age group varies from our hospital to PGI, i.e.

46-60 age group in PGI(18.89%) and 0-15 age group in our hospital (13.70%).

In gender break up except Tata Bokaro hospital most patients referred were males. In Bokaro hospital the male, female referral ratio was 4:6. As far as higher no. of male patients in our sample may be due to they are more likely to be the bread winner of the family and can more readily circumvent the barriers of distance to reach to mental health team. Thus the filters to the referral pathway may be relatively more permeable to them.<sup>[9]</sup>

In marital status break up except Addis Ababa Hospital (Ethiopia) most of the patients were married, whereas in Addis Ababa hospital 68% of cases were single. This may be due the socio cultural background and other factors in that country. The marital status in other centers was almost the same.

In associated physical illnesses, systemic illnesses peaked in both our hospital and in PGI Chandigarh 52.03% and 57.99% respectively.

Among the referrals from specialties medical specialties takes first place in our hospital (55.56%), and in PGI (45.14%). In PGI pediatrics were the least one to be referred where as in our hospital O&G was the least. This may probably be that women in this area are very reluctant to attend psychiatry OPD due to stigma.

The rate of referrals in the present study is 0.6% which is in the mid-range of referral rate reported from India. This is in line with a study done at PGIMER Chandigarh<sup>[7]</sup>. The reason for the lower rates as suggested by the above authors<sup>[7]</sup> is probably due to exclusive reliance on a consultation centered approach. When medical surgical inpatients were screened for psychiatric disorders in a hospital in North Western India, the detection rate of psychiatric disorders jumped from 2% to 31%<sup>[10][7] [11]</sup>. A 1977 study reported a referral rate of 2.64%

among the out patients<sup>[11]</sup> as compared to 0.06% by another study<sup>[12]</sup>. Most studies quote about 60% of referrals from general medicine and 14% from surgery and surgical superspecialities<sup>[12] [5]</sup>. Several researchers have found a lower referral rate in the Indian counterparts as compared to the western figures. Another 1980 study found a poor referral rate in their study as compared to other studies conducted in India.<sup>[12]</sup>

In the psychiatric diagnosis break up depression is the most common diagnosis in our hospital (15.58%). In Tata bokaro it is (21.2%) and Central Coal Field it is (18.75%) and in Addis Ababa it is (22.41%). Thus the proportions of cases with depressive disorder in all studies are comparable. The proportions of cases with affective disorder were also comparable except in our centre. The reason may be the later day diagnostic practice in our centre is different from other centers.

Neurotic illnesses formed the single largest category in our sample and also in other studies (PGI etc). It is consistent with the finding that a large number of patients attending outpatient services of a general hospital are suffering from psychoneurosis<sup>[13]</sup>. Anxiety neurosis was the second most common in all the hospitals which included the diagnostic break up as criteria. (Tata Bokaro 12.6%; MMCH & RI 15.52%; PGI 17.11%; Coal field 6.87%; Addis Ababa 14.71%)

Our hospital had maximum percentage of alcohol dependence (13.69%) when compared to PGI (6.7%) and Addis Ababa (0.80%). In Addis Ababa this small percentage may be due to religious & cultural reasons. The high percentage in our hospital may be due to its rural location where alcoholism is commonly more.

Adjustment disorder had more or less similar number in all the hospitals wherever it is included in the diagnosis. A higher proportion of organic psychosis in the

CCL group is probably due to a larger ageing population as suggested by some authors<sup>[9]</sup>.

Somatoform conversion disorder is comparatively more in our hospital (9.12%) and in Addis Ababa (9.88%). This high percentage in our hospital may be due to our rural location where illiteracy rate is high and their lower socio economical status. Rural people tend to express their mental illness as bodily complaints. In Addis Ababa it may be due to their cultural background. Since in the industrial hospitals female attendance were less in number may be the reason for lower number of this disease. Over the years the diagnosis of hysterical neurosis appears to have decreased in industrial settings<sup>[9]</sup>. In PGI Chandigarh and in our hospital the conversion disorder is the most common diagnosis among pediatric age group.

As far as schizophrenia is concerned except PGI Chandigarh (22.01%) all other centers the values are the same. However, the figures in the present study are closer to the expected prevalence of the disorder<sup>[9]</sup>. The reason for higher number of cases in PGI Chandigarh may be due to better facility available for admission of acute and difficult cases.

There were more than 15% of nil psychiatric cases in Bokaro, which may be due to over enthusiastic referral from their parental departments and the training background of the individual psychiatrists.<sup>[9]</sup> Majority of cases were referred for the exclusion of psychiatric illness followed by those in whom no physical illness could be detected. This indicates increased awareness of other specialists about psychiatry and their desire to associate psychiatrists in the general management of patients.<sup>[9]</sup> In the industrial hospitals patients are often seen not for purposes of treatment but to serve other organizational needs like fitness referrals which are usually made for employees

reporting for duty after prolonged absence<sup>[9]</sup>. Mental retardation cases were almost same in all the centers.

#### **Conclusion:**

It is clear from the above findings that psychiatric morbidity in our centre is not very different from other centers. (Both inside India and outside India). This is in line with the findings of other studies too<sup>[14]</sup><sup>[15]</sup>. Another finding emerged from this study is 16-45 age group were utilizing the services most. We believe that this kind of comparative study will improve our existing general hospital mental health care delivery system.

#### **Limitations:**

Unfortunately the data regarding income and education were not available. Hence our retrospective study has its own pitfalls. Since the groups were not coming from same sociocultural, economical geographical backgrounds and hence it reflects the disparity between the diagnostic practices in these centers.

**Conflict of Interest:** nil

**Acknowledgement:** nil

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