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Service utilization in a tertiary psychiatric care setting in South India

Prabhat Chand *, Pratima Murthy, Vikram Arunachalam, C. Naveen Kumar, Mohan Isaac

Department of Psychiatry, National Institute of Mental Health and Neurosciences (NIMHANS), Hosur Road, Bangalore 560029, India

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ABSTRACT

Objective: To carry out an audit reviewing the utilization of psychiatric services and types of disorders presenting to a tertiary care psychiatry hospital in a developing Asian country.
Method: Consecutive adult patients who came for detailed consultation in 1 year were included in this study. A senior consultant psychiatrist reconfirmed the diagnosis in each patient who underwent detailed psychiatric evaluation. Psychiatric evaluation consists of clinical history from the patients and the relatives and a mental state examination. Data was obtained from the detailed work up evaluation psychiatry records of these patients.
Results: Mood disorder was the most common diagnosis followed by substance use disorders and psychotic disorders (ICD 10). There is a substantial delay of more than 2–5 years for seeking treatment in most disorders including schizophrenia. More than 80% of the population directly seeks treatment at this tertiary hospital. Sixty-four percent of the patients came for at least one follow up.
Conclusion: The result suggests the urgent need for strengthening community care in India and similar low and middle-income countries for early and optimal treatment.

1. Introduction

Psychiatric disorders are among the top causes of disease burden and disability. By 2020, the projected burden of psychiatric disorders will increase to 15% of the total Disability Adjusted Life Years (DALY) lost due to all diseases and injuries (WHO, 2004). The increased burden of psychiatric illness will be more marked in developing countries where scant resources, poor services, ignorance and stigma regarding mental illness are significantly high. The treatment gap across all psychiatric disorders is wide. Even for the most severe mental disorder, schizophrenia, at least one-third of individuals remain untreated (Kohn et al., 2004). A study has shown that mental disorders in low-income countries like India can be treated without much financial burden and cost are comparable to the treatment cost of other chronic physical illnesses (Girish et al., 1999). Yet patients with diabetes or hypertension seek treatment but those with depression do not (Isaac et al., 2007).

Information about patterns of service use among people with psychiatric disorders is important for planning mental health services and allocating resources. There is no data about the service utilization pattern among psychiatric patients in different settings from India and other developing countries from Asia.

Service utilization studies are currently gaining importance as these are real world studies and provide data which is important for a country to determine fund allocation, prioritize the standard of care and optimal utilization of man power. The current study is done at a tertiary care psychiatry center in a metropolitan city in South India.

2. Method

2.1. Data collection

NIMHANS (National Institute of Mental Health and Neurosciences) is situated in the heart of the Southern Indian city of Bangalore. It is a state run tertiary care neuropsychiatric hospital. On an average, 120 new patients seek help for psychiatric problems every day throughout the year except Sundays and on four yearly national holidays when the hospital remains closed. At the first visit, a brief evaluation is done by the general duty medical officer and the case is referred to the psychiatrist. A brief evaluation is done by the psychiatrist and appropriate treatment is initiated. In subsequent visits, the patient is called for a detailed evaluation where a postgraduate trainee evaluates the case over at least 1 h, corroborates information from all sources like siblings, spouses in case of married persons, parents, etc. He/she then discusses the case with the consultant psychiatrist who in turn verifies the history and clinical findings to formulate a final diagnosis and treatment plan. This detailed evaluation is carried out through an outpatient clinic run by six adult psychiatric units on each day respectively and a

* Corresponding author.
E-mail addresses: prabhat.chand@yahoo.com, prabhatkumarchand@gmail.com (P. Chand).

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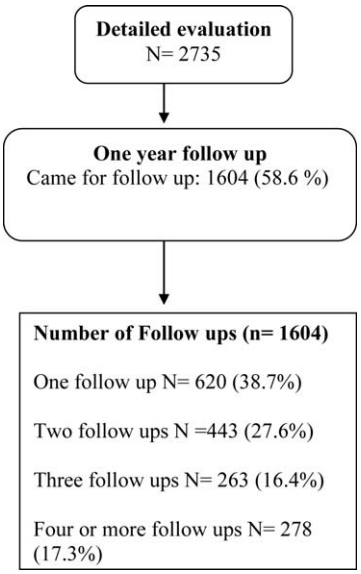

Table 1
Sociodemographic profile.

	Total $N = 2735$	
	Male (%) $N = 1723$	Female (%) $N = 1012$
Source of referral		
Direct	83.0	81.4
General practitioner	7.5	9.5
Psychiatrist	2.1	2.9
Specialists	2.0	3.5
Others	5.4	2.8
Marital status		
Married	53.6	69.3
Single	45.2	24.7
Separated/divorced/widowed	0.76	6.0
Age (years)		
Mean age at consultation	33.88 (SD 11.85)	34.44 (SD 12.87)
Age groups		
16–30	48.2	47.1
31–45	35.8	34.9
46–60	13.5	14.4
>61	2.5	3.6

specialized de-addiction unit, which runs two outpatient clinics each week. All the psychiatric diagnoses were made clinically using ICD-10 Classification of Mental and Behavioural Disorders clinical descriptions and diagnostic guidelines.

On an average around 10–15 patients are evaluated in detail per day at the outpatient clinic. Once evaluated, patients are advised to come for follow up regularly and are seen again by the respective units. Any changes in symptoms and change in diagnosis is documented in an individual case file, which is maintained in the medical records section. The records are retrieved at each visit. On an average one patient is expected to attend follow up four to six times in a year.

For this study, we used cross-sectional data collected by the above mentioned detailed evaluation process at the psychiatric outpatient clinic. Patients attending emergency services were excluded from the current study. This study was carried out in the year 2006. The study data used here were collected for patients who underwent a detailed outpatient evaluation between 1st January and 31st December 2004. At the time of data collection each patient had already finished a minimum 1 year of follow-up since the detailed evaluation. In general a patient was expected to come six times in an year's follow up. The number of follow ups, i.e. the detailed evaluations, was calculated in the year following enrollment. The study was carried out after formal clearance from the institutional ethics committee.

Patients who were admitted directly without outpatient detailed evaluation were excluded in the current study sample. The data was from adult psychiatry care and excluded patients attending the child and adolescent psychiatric (age below 16 years) services. A total of 2735 patient records were included for the study. The statistical analysis was done using SPSS for Windows v. 13.0.

3. Results

3.1. Sociodemographic characteristics

As shown in Table 1, of 2735 patients seeking treatment, males constituted about 63% of the consultations during the 1-year period in contrast to 37% females. Majority were married (59.4%). More than 45% of adult patients seeking treatment were between 16 and 30 years of age and the geriatric population was small i.e. 2.5% in male and 3.6% in females. The mean age of presentation was 34.09 (SD 12.24) years. More than half the patients had studied till high school i.e. 12th standard. The economic status of people was very poor, as shown in the table. Around 70% of families had a declared income of less than 60 USD per month. In spite of being a tertiary hospital, more than 80% were self-referrals to the hospital. Less than 15% of patients from the cases had been referred by a general practitioner and other specialists. More than 60% of patients had come for at least one follow up after the initial diagnostic work in the next 1 year.

3.2. Clinical characteristics

3.2.1. Diagnosis (ICD 10)

The most common diagnostic category was mood disorder (29.6% of all patients) (Table 2). Female patients were found more

Table 2
Diagnostic break up and gender distribution.

Diagnostic Categories (ICD 10)	Gender		Total patients (%) $N = 2735$
	Male	Female	
F30-39 Mood [affective] disorders	393	417	29.6%
F10-19 Mental and behavioural disorders due to psychoactive substance use	626	18	23.8%
F20-29 Schizophrenia, schizotypal and delusional disorders	310	259	21%
F40-48 Neurotic, stress-related and somatoform disorders	207	186	14.5%
F00-09 Organic, including symptomatic, mental disorders	58	52	4.1%
F60-69 Disorders of adult personality and behaviour	23	13	1.3%
F70-79 Mental retardation	38	27	2.4%
F50-59 Behavioural syndromes associated with physiological disturbances and physical factors	16	3	0.7%
F80-89 Developmental and emotional disorders	16	2	0.6%