RESEARCH ARTICLE

EPIDEMIOLOGICAL VARIANTS IN MENTALLY ILL PATIENTS: A CROSS-SECTIONAL STUDY IN MENTAL HOSPITAL PATIENTS OF AHMEDABAD CITY

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ABSTRACT

Background: Now a day's mental and behavioural disorders are common in the community. Globally, some 450 million persons suffer from a mental or behavioural disorder contributing to 13% of global burden of disease.1TheServices are provided by psychiatric hospitals where assessments are carried out by psychiatrists, clinical psychologists and sometimes psychiatric social workers, using various methods but often relying on observation and questioning. Even this is done in the community. Thus on the basis of these observations we have drawn the conclusion of epidemiological variants among the patients.

Aims & Objective: To assess the frequency of various epidemiological trends in patients in mental hospital and to study associated risk factors in them.

Material and Methods: 118 patients out of 237 in mental hospital were selected on random basis. On predesigned Performa, various details were noted and the data was analyzed in epi info 7.

Results: There were 48.3% females and 51.7% males. There were 87 cases of schizophrenia and 19 case of bipolar disorder in manic phase. The 57.98% of patients present with behaviour abnormality and 43.45% of patients have the abnormal BMI and 24.25% of patients of patients have primary education level. The 81.21% of people were not working.

Conclusion: Resources and service for the mental disorder are comparatively low as compared to the burden of the disease. Thus by studying the various epidemiological correlations we can plan certain preventive measures so that mental disease burden could be decrease. Looking to the etiopathology, found in our study it is recommended that counselling should also be a part of management and importance should be given to environmental or social factors like education living standards etc. for prevention of mental disorders.

KEY-WORDS: Epidemiological Variant; Mentally Ill Patient; Mental Hospital

Introduction

Psychiatric disorders are common in the community. Prevalence rates, ranges from 9.5 to 370 per 1000 population.[1,2] NIMH-Epidemiological Catchment Area study.[3] Of the US reported psychiatric morbidity as follows; one year incidence of 60/1000 population, one month prevalence of 151/1000 population and lifetime prevalence of 322/1000 population. National Co-morbidity Study of the US.[4] Reported 12 months prevalence of 277/1000 population and lifetime prevalence of 487/1000 population. On comparing the Indian epidemiological studies to any international epidemiological studies, it is found that prevalence rates reported in India are very low. They constitute a wide spectrum ranging from sub-clinical states to very severe forms of disorders. Even World Mental Health Day raises public awareness about mental health issues. 2011, the theme was "Investing in mental health". These disorders are divided into mild, moderate and severe among them mild are the most common variety and severe form hold around 1% of all cases. While its epidemiology deals with important components such as disease/disorder, distribution and frequency of disease/disorder, determinants of disease/disorder, human population and methods employed to control the occurrence of illness.[5] Mental health problems can attain the disorder/disease/syndrome level, which are usually considered difficult to recognize, define, diagnose and treat. Thus Psychiatric epidemiology lags behind other branches of epidemiology due to difficulties encountered in conceptualizing, defining a case and diagnosing, sampling technique, lack of trained manpower, poor

knowledge, data collection from a single informant, systematic under - reporting, stigma, lack of adequate funding and low priority of mental health in the health policy.[6,7] Thus Popular approaches to measure the disease frequency in a given population are, (i) hospital catchment population approach and (ii) community survey.[8] The current tool of modern epidemiology study is such as the Indian Psychiatric Survey Schedule (IPSS).[9] Providing accurate data about the prevalence would help in Allocation of scarce resources and Planning of health. The Services are provided by psychiatric hospitals where assessments are carried out by Psychiatrists, Clinical psychologists and Psychiatric social workers. Thus on the basis of these observations we have drawn the conclusion of epidemiological variants among the patients in the study. With this Endeavour to get epidemiological data on mentally ill patients following study has been carried out to assess frequency of various epidemiological trends in patients in mental hospital and to study associated risk factors in mentally ill patient.

Materials and Methods

A Cross-sectional study was carried out from November 2011 to January 2012 in mental hospital, Girdharnagar, Ahmedabad. 118 (49.8%) indoor patients out of 237 in mental hospital were selected on systematic random sampling basis. Every 2nd patient's record of the hospital was taken and on predesigned and preformed performa, various details like demographic profile, family details, mental examination etc. were noted by researcher. The data was compiled in epi info 7 and subsequently analyzed.

Study Analysis: statistical test like computation of frequency and percentage were found and results were subsequently represented.

Results

Total sample size was 118. There were 48.3% females and 51.7 males. Maximum diseased (36.4%) were in the age group 31-40 years. Maximum 28.69%, patients were just having secondary education. 53.4% patients were unmarried. 81.21% were unemployed (Table 1).

31.4% of male were acutely ill (Table 2). Among the entire patients (73.7%) maximum were of schizophrenia (Table 3). Past history of similar illness was positive in 81.69% of the patients. Family history was positive in 9.2% patients. Only 32.3% patients were abusing substance like tobacco, alcohol etc. Sleep was disturbed in 59.3%. Around 43.45% patients were having abnormal BMI aggressive personality (71.86%) was the commonest personality while quick tempered (58.5%) was the commonest personality trait. 21.2% showed aggression as behaviour abnormality. 41.5% showed irritability as mood abnormality. 38.9% showed poor memory. Thought process was abnormal in 57.98% (Table 4).

Table-1: Socio-Demographic Analysis

Characteristics		Frequency	%
Sex	**Male**	**61**	**51.7**
	Female	57	48.3
Age Group	10-20	2	1.6
	21-30	24	20.3
	31-40	43	36.4
	41-50	30	25.4
	51-60	17	14.4
	61-70	2	1.6
Religion	**Hindu**	**97**	**83.04**
	Muslim	20	15.94
	Others	1	0.83
Education	none	22	18.85
	1-7	28	24.25
	8-10	**35**	**28.69**
	11-12	13	10.8
	Graduate	20	17.04
Marital Status	**Unmarried**	**62**	**53.4**
	Married	37	31.71
	Divorce	15	11.85
	Widow	4	2.67
Occupation	**None**	**94**	**81.21**
	Government	21	15.86
	Private	3	1.87
Total		118	100

Table-2: Information Regarding Type of Patient

Cases	Frequency	Percentage
Chronically ill male	16	13.6
Chronically ill female	15	12.7
Acutely ill male	37	31.7
Acutely ill female	22	18.6
General ward	09	7.6
Wandering patient	19	16.1
Total	118	100

Table-3: Diagnosis of Patient

Diagnosis	Frequency	Percentage
Schizophrenia	87	73.7
BMD (Maniac)	19	16.1
Undiagnosed	12	10.2
Total	118	100

Table-4: Epidemiologically Correlated Factors

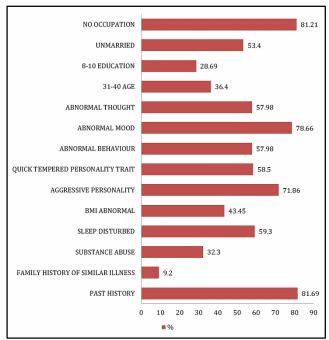| Etiology	Yes (%)	No (%)
Past history	81.69	18.31
Family history of similar illness	9.2	90.8
Substance abuse	32.3	67.7
Sleep disturbed	59.3	40.7
BMI abnormal	43.45	56.55
Aggressive personality	71.86	28.14
Quick tempered personality trait	58.5	41.5
Abnormal behaviour	57.98	42.02
Abnormal mood	78.66	21.34
Abnormal thought	57.98	42.02

Figure-1: Epidemiological Factors Affecting Mental Health

Discussion

This study suggest that maximum diseased (36.4%) were in the age group 31-40 years while another study conducted in two villages of West Bengal speaks about the same relation but in some different format that as the geriatric population, aged 60 years and above, forms nearly 7.5% of the total population of India, study reported that 61% of the geriatric population needed psychiatric help.[10,11] Family history was positive in 9.2% patients and confirmation of these results occurs in the Seymour S. Kety et al.[12] Study speaks for a relation in between genetic factors and mental illness. Around 43.45% patients were having abnormal B.M.I. in our study and similar results were observed in McCrea RL et al study. It states that BMI was strongly associated with the presence of common mental disorders, and there was clear evidence that this association varied with gender and age. In young women the

probability of having a disorder increased as BMI increased, whereas in young men the relationship was U-shaped-probabilities were higher for both underweight and obese men.[13] Many other epidemiological factors were also found to cause mental illness.

Conclusion

It's necessary now to plan certain preventive and control measures so that mental disease burden could be decrease. Looking to the etiopathology, found in our study it is recommended that Primordial Prevention form Abnormal B.M.I while Primary prevention for Substance abuse, Secondary prevention for abnormal behaviour, Mood disturbances, Disturbed sleep, past history positive should be done. While long term measures should be taken like strengthening of education and increasing job opportunities. Importance should be given to environmental factors so that disease burden could be decreased. Counselling should be done for the various precipitating factors like behaviour abnormality, abnormal personality etc. Data should be more precisely filled so that etiopathology can be studied better. More case-control studies should be done so that this hypothesis can be confirmed.

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