ORIGINAL ARTICLE
SOCIO-DEMOGRAPHIC DETERMINANTS OF MENTAL DISORDERS

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Background: Having a sound mind in a sound body is vital to make a stable society. Even more vital is to find, diagnose, and treat mental disorders before they lead society to suffer. About 10 to 17% of general population in Pakistan suffers from mental disorders and it spends only 0.4% of the meagre health budget on mental health. This study aimed to describe the socio-demographic factors of mental illnesses in local population. **Methods:** This was a cross-sectional descriptive study conducted in Ayub Teaching Hospital, Abbottabad in 6 months from March to August 2016. Data were collected from 104 patients who were selected randomly by convenient non-probability technique and analysed using SPSS-23. **Results:** Out of total 104 patients, 56 were males and 48 were females; 40.83% were from urban while 59.62% were from rural areas. Singles were 43.3%, married were 48.1%, while 4.8% were divorced and 3.8% were widowed. Regarding socioeconomic status, 90.4% patients were of low socioeconomic class, 7.7% were of middle, while 21.9% were of high socioeconomic class. All patients were Muslims, 59.6% were living in joint family, 28.8% in nuclear family, 9.6% in extended, 0.9% in commune, and 0.9% in non-family system. Twenty-seven (26%) patients gave a positive family history of mental disorders. Behaviour of community with 85.6% patients was caring, 8.7% patients were kept in isolation, while 5.8% patients said that they had been neglected by the community. Depression (45.2%) followed by anxiety (11.5%), dissociative disorder (5.8%), and schizophrenia (5.8%) were the main findings. **Conclusion:** Mental disorders were more prevalent in females, young age, married people, living in urban areas with poor hygienic measure, low socioeconomic class and those with significant family history.

Keywords: Mental disorders, socio-demographic factors, mental health

INTRODUCTION

Mental disorders encompass wide range of psychiatric and mood disorders. These disorders influence behaviour, interactions and thinking of a human being and results in dysfunction. These dysfunctions are clearly other than social norms, like grief in its time and religious or cultural beliefs like deviant behavior.[1–3] They include anxiety disorders, schizophrenia, addictions, depression, panic disorders, phobias and eatingdisorders.[4–6] Mental disorders are divided by the WHO and by American Psychiatric Association for diagnostic purposes and for clear separation from neurological illnesses and learning or intellectual disabilities. The classification by the WHO is given in International Classification of Diseases and that of American Psychiatric Association is given in the Diagnostic and Statistical Manual of Mental Disorders. Some people regard the classification of mental disorders to be subjective while others regard it as completely objective.[7]

A healthy body is useful only with a healthy mind. Mental diseases made patient miserable enough and even made them unable to perform daily activities.[2]

Mental disorders are highly prevalent throughout the world and in most countries even every third person has suffered at some point in his life. Mental disorders generally have early onset mostly in early twenties. USA had 48.6%, Netherlands 40.9%, Germany 38.4%, Canada 37.5%, and Brazil 36.3% prevalence of mental disorders, with lower prevalence in Turkey (12.2%) and Mexico (20.2%). USA is the only country to have more co-morbidity (56.3%) than having a single disorder affecting a person.[8]

Prevention of mental disorders is of course one of the most effective ways to reduce the burden of the disease. Regarding that vast epidemiological studies was seen specially after the end of second world war.[9,10] Through effective evidence based interventions different psychiatric conditions can be prevented[11] and these interventions become self-financing over time proving to be economical for general public by saving public expenditure.[12] Primary prevention of mental disorder by providing good care to children is an effective way to decrease the burden of mental disorders.[13,14] Other ways are targeting high incidence groups and running very large trials and using their cumulative meta-analysis are approaches which have also been found to be effective for better dealing with mental disorders.[15,16]

Medications, invasive therapies like electro-convulsive therapy and psychosurgery to non-invasive techniques like music therapy, art therapy, drama therapy, support groups and meetings while some people also advocate dietary supplements.[17–21] Genetics accounts for 28% variance in generalised anxiety disorder.[21]

This study was conducted to describe the socio-demographic factors of mental illnesses in these patients and inferring a view about general population; to determine the frequency of different mental disorders in patients in our set up; and to observe mentally ill patients in relation with disease occurrence and association with age, gender, and area.

SUBJECTS AND METHODS

It was a descriptive cross-sectional study conducted at Psychiatry Outpatient Department (OPD) and Psychiatry Unit of Ayub Teaching Hospital (ATH), Abbottabad, from March to August 2016. One-hundred and four (104) patients of both genders were included in sample population by using non-probability convenient sampling technique. Data were collected by filling preformed questionnaire including several variables of interest, through asking the questions given in questionnaire by interviewers. Informed consent was taken from all the subjects keeping ethical considerations and privacy of data in view.

Mentally ill patients of either gender or of any age admitted in Psychiatry Unit and those visiting Psychiatry OPD of ATH, Abbottabad were included in the study. Sensitive, non-cooperative and aggressive patients and those who were not diagnosed as mentally disordered patients were excluded from the study as a care for their condition.

Those with monthly income of less than Rupees 50,000 were included in lower socioeconomic class, with monthly income ranging from Rupees 50,000 to 100,000 middle, while those with monthly income of more than Rupees 100,000 were included in upper socioeconomic class.

Data was analysed using SPSS-23. Frequencies and percentages were calculated for qualitative variables, and Mean±SD were calculated for quantitative variables.

RESULTS

A total of 104 patients were interviewed in data collection. Out of them, females were 56 (53.8%) while males were 48 (46.2%). Age of the subjects ranged from 2 to 73 years. The mean age of sample population was 31.76±14.42 years. The mean age of males was 33.45±14.07 years while that of females was 30.27±14.10 years.

Fifty (48.1%) patients were married, 45 (43.3%) were single, 5 (4.8%) were divorced while 4 (3.8%) were widowed. Sixty-two (59.62%) patients were from urban areas while 42 (40.38%) were from rural areas; 34 (32.7%) subjects were uneducated, 26 (25%) studied up to primary level, 24 (23.1%) up to secondary, 9 (8.7%) up to higher secondary, 8 (7.7%) were graduates while 3 (2.9%) had postgraduate level of education. All of our sample patients were Muslims.

Fifty-seven (54.8%) patients had poor, 27 (25.9%) had satisfactory while 20 (19.2%) has good hygiene status.

Ninety-four (90.4%) patients were in lower class, 8 (7.7%) in middle class and only 2 (1.9%) patients were in upper socioeconomic class. The prevalence of mental disorders was higher in the patients of lower socio-economic class when compared to other categories.

About half of the subjects 54 (51.9%) came to hospital without any referral, 19 (18.3%) patients were referred by general physicians, 19 (18.3%) by government hospitals while 12 (11.5%) patients were referred from private hospitals. Twenty-seven (26%) patients gave positive history of mental disorders in their families, 24 (23%) of the patients had three months or less duration of illness.

Forty-eight (46.2%) patients received no treatment other than allopathic, 46 (44.2%) patients received treatment from *Molvi* (spiritual healer), 6 (5.8%) patients received treatment from *Mazar* (tombs of saints), 2 (1.9%) patients received some form of treatment from a *Hakeem* (traditional medicines prescriber), 1 (1%) patient used homeopathy and 1 (1%) patient used multiple treatments of both spiritual healer and *Hakeem*.

Regarding behaviour of the community towards the patients, 89 (85.58%) were treated with due care and affectionately, 9 (8.65%) subjects were kept in isolation from people normal life, while 6 (5.77%) were neglected by the living with them. Detailed data of the patients is tabulated in Table-1–5 below.

Table-1: Vocation of patients

Employment status	Frequency	Percentage
Unemployed	23	22.1
Government Employee	10	9.6
Private Employee	17	16.3
Self employed/Business	6	5.8
Housewife	31	29.8
Student	17	16.3

Table-2: Family system of study population

Type of family	Frequency	Percentage
Joint	62	59.6
Nuclear	30	28.8
Extended	10	9.6
Commune	1	1
Non Family	1	1

Table-3: Suspected causes

Suspected cause of mental disorder	Frequency	Percentage
Parental	7	6.7
Spouse	15	14.4
at work	9	8.7
Social	37	35.6
Religious	1	1.0
not any suspicion	26	25.0
multiple suspicions	2	1.9
head injury	1	1.0
Studies	2	1.9
Fall injury at home	1	1.0
Iatrogenic	1	1.0
financial problems	1	1.0
in-laws and head injury	1	1.0

Table-4: Gender and residence-wise distribution of patients

Disease	Gender	No.	%	Residence	No.	%
Anxiety	Male	4	3.8	Urban	5	4.8
	Female	8	7.6	Rural	7	6.7
Attention Deficit Disorder	Male	0	0	Urban	1	0.9
	Female	2	1.9	Rural	1	0.9
Bipolar Disorder	Male	4	3.8	Urban	6	5.7
	Female	4	3.8	Rural	2	1.9
Depression	Male	23	22.1	Urban	31	29.8
	Female	24	23	Rural	16	15.3
Disorganized Behavior	Male	0	0	Urban	1	0.9
	Female	1	0.9	Rural	0	0
Dissociative Disorder	Male	6	5.7	Urban	2	1.9
	Female	0	0	Rural	4	3.8
Easy irritability	Male	0	0	Urban	1	0.9
	Female	1	0.9	Rural	0	0
Epilepsy	Male	2	1.9	Urban	2	1.9
	Female	1	0.9	Rural	1	0.9
Insomnia	Male	1	0.9	Urban	1	0.9
	Female	1	0.9	Rural	1	0.9
Mania	Male	1	0.9	Urban	3	2.8
	Female	2	1.9	Rural	0	0
Mental Confusion	Male	0	0	Urban	0	0
	Female	1	0.9	Rural	1	0.9
Obsessive-compulsive disorder	Male	3	2.9	Urban	2	1.9
	Female	2	1.9	Rural	3	2.8
Paranoia	Male	0	0	Urban	1	0.9
	Female	1	0.9	Rural	0	0
Psychological hoarseness of voice	Male	1	0.9	Urban	0	0
	Female	0	0	Rural	1	0.9
Psychosis	Male	0	0	Urban	1	0.9
	Female	3	2.9	Rural	2	1.9
Schizophrenia	Male	3	2.9	Urban	3	2.8
	Female	3	2.9	Rural	3	2.8
Stress Disorder	Male	0	0	Urban	1	0.9
	Female	1	0.9	Rural	0	0
Tinnitus	Male	0	0	Urban	1	0.9
	Female	1	0.9	Rural	0	0

Table-5: Marital status of the patients

Disorder	Single	Married	Divorced	Widowed
Anxiety	3	9	0	0
Attention Deficit Hyperactivity Disorder	1	1	0	0
Bipolar Disorder	5	2	1	0
Depression	16	25	2	4
Disorganized Behaviour	0	1	0	0
Dissociative Disorder	3	2	1	0
Easy irritability	0	1	0	0
Epilepsy	3	0	0	0
Insomnia	1	1	0	0
Mania	1	2	0	0
Mental Confusion	1	0	0	0
Obsessive-compulsive Disorder	3	1	1	0
Paranoia	1	0	0	0
Psychological hoarseness of voice	0	1	0	0
Psychosis	2	1	0	0
Schizophrenia	4	2	0	0
Stress Disorder	0	1	0	0
Tinnitus	0	1	0	0

DISCUSSION

Out of total 104 patients, 45.2% subjects had positive history of depression. Out of these patients, 42.8% of total males had depression, and in females 47.9% had depression. Another study by Min JA et al[22] in Korea showed that out of 178 outpatients with depressive disorder, the female patients were 87. That study also showed that 23.6% patients had comorbid mental conditions along with their primary diagnosed mental illness. Comorbid mental conditions were also found in our study.

Studies performed on mentally ill patients show a consistent relation between poverty and mental disorders, especially when there is lack of education. In our study 90.4% patients were from lower economic status; 32.7% patients were uneducated while 25% educated up to primary level only. In another study[23] from India out of 259 patients, 44.4% belonged to poor families and they had not studied more than primary education. Their patients were also experiencing financial or housing problems. Common mental disorders (depression and anxiety) are occurring more in people of low economic status across every society and the poor and disadvantaged suffer disproportionately from common mental disorders and their adverse consequences.[24]

Vega W et al[6] reported that the prevalence for mental disorders was slightly more in urban compare to rural areas. Our findings are in agreement to Vega et al.

Srinath et al[25] found that children ranging from 0–16 years had 12.5% prevalence of mental disorders. In our study, in children from 0–15 years the prevalence of mental disorders was comparable (10.6%) to them.

Monawar et al[26] from Bangladesh showed the prevalence of depression and anxiety as 50% and 33% respectively. A prevalence of mental disorders was significantly higher economically poor people, in females from large families and also in people with ages above 45 years. We had 45.19% patients of depression and 11.5% patients of anxiety which is less than Monawar et al[26].

Another study by Gove W[27], shows that mental disorder cases are more in married women and rates of mental disorders is low in widowed women as compared to widowed men and is also low in divorced women as compared to divorced men. According to our results too, the ratio of mental disorders was higher in married individuals.

CONCLUSION

The mental disorders were more prevalent in females, young age (early thirties), married people, and in people living in urban areas with poor hygienic measure. It was also more prevalent in lower socioeconomic class with significant family history. Majority of the patients were

suffering from depression followed by anxiety and most of them were treated with due care and affection by their family and relatives. Due to lack of education and lower socioeconomic condition majority of patients take help of religious healers and tombs of saints also.

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