



Original Article

Prevalence of Mental Illness in the Community

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Abstract

This is a cross sectional-descriptive study which was conducted in one urban mahalla and two rural mauza of Dhaka district. Self reporting questionnaire (SRQ) was applied on 327 adult respondents and structured clinical interview for diagnosis (SCID-NP) was applied on every second SRQ positive and every fourth SRQ negative respondent. The prevalence of neurotic disorders, major depressive disorder and psychotic disorders was 7.0% (7/1000 population), 4.0% (40/1000 population) and 1.2% (12/1000 population) respectively. The prevalence of psychiatric disorder was found higher in female 13.9% than male 10.2% and in middle and lower socio-economic class. The study would be helpful in future community survey on mental health and in formulating national mental health program and facilitating their effective implementation.

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Introduction

Psychiatric illness is a major public health problem. Today mental health and mental illness are key public health issue.^{1,2} According to the WHO study group at least 40 million people in the world suffer from severe forms of mental disorder such as schizophrenia and dementia. A further 200 million are incapacitated by less grave mental and neurological conditions. These figures are further augmented by alcohol and drug related problems and by mental disorders secondary for physical disease.³

Studies in developed countries such as USA, Australia and England have shown 15-25% prevalence of psychiatric illnesses in different

populations.^{1,2,4} Various surveys have found that 20%, 47-56%, 53.4%, 23-47%, 16.6%, 25-66% and 31.5% were suffering from psychiatric disorders in Uganda, Brazil, Chile, Nicaragua, Sudan, India and Spain respectively.⁵⁻¹² In 1978, one community based study reported that 6.5% of people in a village were suffering from psychiatric disorders.¹³ Around 20 years later, another study in an urban area reported a prevalence of 28% in adults.¹⁴ Topographically Bangladesh is situated where floods, storms and other natural disasters occur and cause great suffering. Several studies abroad have shown that natural or man made disasters, poverty and overcrowding are related to psychiatric morbidity.¹⁵⁻²²

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Objectives

Broad objective -

- To find out the prevalence of mental illness in the community.

Specific objectives -

- Types and distribution of psychiatric disorders in the community.
- Socio-economic correlation.

Methodology

This study was a cross sectional and descriptive in nature which will provide information on prevalence and socio-demographic correlates of mental disorders. The study was carried out during March 2003 to April 2003. The study was carried out in one urban mahalla (Azimpur of Lalbagh) and two rural mauza (Dohar and Keraniganj) of Dhaka district. The study was conducted on 327 adult respondents aged 18 years and above. The simple random sampling technique was applied. The self reporting questionnaire (SRQ) was applied for identification of probable case (screen positive) and probable non-case (screen negative).¹⁶⁻²² Cut off score of SRQ was fixed at 5. Respondents who scored 6 and above was SRQ positive respondents and who scored 5 and below was SRQ negative respondents. Then diagnostic tool structured clinical interview for diagnosis (SCID) non-patient version was applied on every

second screen positive and every fourth screen negative respondents.²³ Later on the data was processed and analyzed statistically through SPSS program.

Results

Table-1 showed that 45.9% were between 18-30 years of age group and followed by 30.6% and 13.8% were between 31-40 years and 41-50 years respectively. Remaining 6.0% and 3.7% were between 51-60 years and 61 and above respectively. Regarding sex distribution of the respondents, 48.0% was male and 52.0% was female. Among the respondents, 33.3% was urban and 66.7% was rural background. Regarding marital status of the respondents, 67.3% were married and 29.7% were unmarried, 2.4% were widow and 0.6% was divorced. Regarding educational status of the respondents, 87.8% were literate from primary to graduation up and 12.2% were illiterate. Regarding occupational status of the respondents, 37.9% was belonged to housewives, 16.2% cultivation, 12.2% service holders, 10.1% businessmen, 6.1% labor, 14.6% students, 2.1% retired and 0.6% unemployed. About economic condition of the respondents 51.7% were middle, 45.1% were lower and 2.4% were upper economic class.

Table -1: Socio-demographic parameters of the respondents.

Age in years	Male	Female	Total	Percent
18-30	68	82	150	45.9
31-40	45	55	100	30.6
41-50	25	20	45	13.8
51-60	12	8	20	6.0
61 and above	7	5	12	3.7
Sex	No.	Percent		
Male	157	48.0		
Female	170	52.0		
Habitus	Male	Female	Total	Percent
Urban	50	59	109	33.3
Rural	107	111	218	66.7
Marital status	Male	Female	Total	Percent
Married	100	120	220	67.3
Unmarried	57	40	97	29.7
Widow	-	8	8	2.4
Divorce	-	2	2	0.6

Educational status	Male	Female	Total	Percent
Illiterate	15	25	40	12.2
Primary	85	60	145	44.3
Secondary	60	35	95	29.0
Graduation	20	10	30	9.2
Graduation up	5	2	7	2.1
Occupation	Male	Female	Total	Percent
Housewife	-	124	124	37.9
Cultivation	53	-	53	16.2
Student	19	29	48	14.6
Service	30	10	40	12.2
Business	33	-	33	10.1
Labor	16	4	20	6.1
Retired	5	2	7	2.1
Unemployed	1	1	2	0.6
Economic condition	Male	Female	Total	Percent
Upper	5	3	8	2.4
Middle	90	79	169	51.7
Lower	90	60	150	45.9

Table -2: SRQ score distribution and SCID positive among the respondents.

SRQ score	Responders No. 327	Percentage	SCID positive n = 40	Percentage
1 - 5	144	44.03	7	2.14
6 - 7	82	25.07	9	2.75
8 - 9	53	16.20	7	2.14
10 - 11	19	5.81	5	1.52
12 - 13	12	3.66	4	1.22
14 - 15	8	2.44	2	0.61
16 - 17	4	1.22	2	0.61
18 - 19	3	0.91	2	0.61
20 - 21	1	0.30	1	0.30
22 - 24	1	0.30	1	0.30

Probable cases were identified by using the SRQ. Table-2 shows some of the scores for each person was compiled. A total of 183 subjects had a score of 6 or more, which was considered positive. The corresponding numbers of SCID positive subjects were also presented in Table-2. Out of the total 183 SRQ positive cases 33 were SCID positive.

This indicates a very low true positive rate (18.0%). Of the total respondents 144 (44.0%) were SRQ negative (non-probable cases) and among them 7 (2.1%) were found SCID positive. Thus a total of 40 cases were finally identified, which gives rise to a prevalence of 12.2%.

Table - 3: Prevalence of major psychiatric illnesses.

Name of Disorders	Population prevalence (n = 327)		Prevalence among SCID applicance (n = 127)		Prevalence among case (n = 40)	
	No.	%	No.	%	No.	%
Major depressive disorder	13	3.97	13	10.2	13	32.5
Generalized anxiety disorder	8	2.44	8	6.3	8	20.0
Somatoform disorder	6	1.83	6	4.7	6	15.0
Panic disorder	2	0.61	2	1.6	2	5.0
Schizophrenia	2	0.61	2	1.6	2	5.0
Bipolar mood disorder	2	0.61	2	1.6	2	5.0
Simple phobia	2	0.61	2	1.6	2	5.0
Agoraphobia	2	0.61	2	1.6	2	5.0
PTSD	1	0.30	1	0.8	1	2.5
Substance dependence	2	0.61	2	1.6	2	5.0

The predominant psychiatric illness was neurosis (7.0%) followed by major depressive disorder (4.0%) and psychosis 1.2% (Table-3).

Table - 4: Sex wise distribution of patients.

Name of Disorders	Male (n = 15)		Female (n = 25)	
	No.	%	No.	%
Major depressive disorder	4	30.8	9	69.2
Generalized anxiety disorder	3	37.5	5	62.5
Somatoform disorder	2	33.3	4	66.70
Panic disorder	0	-	2	100.0
Schizophrenia	1	50.0	1	50.0
Bipolar mood disorder	1	50.0	1	50.0
Simple phobia	1	50.0	1	50.0
Agoraphobia	1	50.0	1	50.0
Substance dependence	2	100.0	-	-
Post traumatic stress disorder	-	-	1	100.0

Of the total respondents, 7.6% female and 4.6% male were found cases and prevalence of mental illness was found more in female 13.9% (Table-4).

Discussion

A population based cross sectional study was conducted in one urban community and two rural community to estimate the prevalence of mental illness in adult population by using a screening instrument self reporting questionnaire (SRQ) and structured clinical interview for diagnosis (SCID-NP).

In the present study among the 327 respondents, 40 were found to be suffering from mental disorders. Therefore, the prevalence of mental disorders was 12.2% (122/1000 population). The prevalence of neurotic disorders, major depressive disorder and psychotic disorders was 7.0% (70/1000 population), 4.0% (40/1000 population) and 1.2% (12/1000 population) respectively. Among the neurotic disorders, generalized anxiety disorder 2.44%, somatoform disorder 1.83%. Substance dependence was found 0.61%. Among the psychotic disorders, schizophrenia and bipolar mood disorder was found 0.61% each. Of the total respondents, 7.6% female and 4.6% male were found cases and prevalence of mental illness was found more in female 13.9%. Major depressive disorder, generalized anxiety disorder, somatoform disorder was found higher in female than male.

Panic disorder and post-traumatic stress disorder (PSD) was prevalent in female and substance dependence was prevalent in male. Mental disorders were found more prevalent in younger age group, female sex, lower and middle income group people. Findings of the present study was similar to other studies in several other populations where they reported prevalence of mental disorders in the community varied between 6.5%-55.4% and psychiatric morbidity was more common in female and in under privileged people.^{5-14, 30-43}

Conclusions

Mental disorders are important public health problem in the country. The prevalences are comparable to findings in many developed and developing countries. Nationwide mental health programme and community based approach should be effective for the management of mentally ill patients in the community.

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