Psychiatric Morbidity Among Caregivers of Psychiatric Patients Admitted in Psychiatric Ward

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ABSTRACT

Objective: To determine the psychiatric morbidity among the caregivers of psychiatric patients admitted in the psychiatry ward of a tertiary care hospital.

Study Design: Comparative cross-sectional study.

Place and Duration of Study: Pakistan Institute of Medical Sciences, Islamabad Pakistan, from Jan to Jun 2018.

Methodology: The sample population comprised of 150 caregivers of psychiatric patients admitted at a tertiary care hospital in Islamabad, Pakistan. Psychiatric morbidity was assessed by using the General Health Questionnaire-12 (GHQ-12) among the caregivers of psychiatric patients admitted in the ward for more than one week. Relationship of age, gender, marital status, education, duration of psychiatric illness, duration of current admission and tobacco smoking was assessed with the presence of psychiatric morbidity among the caregivers of psychiatric inpatients.

Results: Out of 150 caregivers screened, 107 (71.3%) showed the presence of psychiatric morbidity while 43 (28.7%) had no psychiatric morbidity. After statistical analysis, we found that female gender and current duration of admission had significant association with the presence of psychiatric morbidity among the caregivers of psychiatric patients admitted in ward (p-value<0.05).

Conclusion: This study showed a high frequency of psychiatric morbidity among the caregivers of psychiatric patients admitted in ward. Routine screening for psychiatric morbidity should be done among the caregivers of psychiatric patients and special attention should be paid to the female caregivers and to those who have a long stay with patients in the hospital.

Keywords: Caregivers, General health questionnaire-12, Psychiatric inpatients.

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INTRODUCTION

Mental health illnesses are common cause of hospital admissions in all parts of the world.[1] Pakistan is no exception to that and a lot of health budget is spent on the admission of patients suffering from psychiatric disorders.[2,3] Common mental health illness which cause the hospitalization of the patients include major depressive disorder, schizophrenia, bipolar affective disorder and mental and behavioral disorder due to substance use.[1,4]

Care giving of chronic patients involves many challenges. Many medical, neurological and psychiatric illnesses pose their effect on the mental health of the caregivers of patients suffering from these illnesses.[5,7] Learning disability, stroke, schizophrenia, substance use, epilepsy and cancer are some of the diseases which are often linked with precipitation of mental health problems among the caregivers of patients suffering from them.[5,6]

Previous research highlights the presence of psychiatric morbidity among the caregivers of the patients suffering from mental health disorders. Alzahrani *et al*, concluded that caregivers ofpatient with psychiatric problems feel a lot of burden on them.[7] Majority of the caregivers ofpsychiatric patients suffered from psychiatric morbidity in a study done in Euthopia.[8]

Another large study involving the caregivers of neuropsychiatric disorders done in Nigeria showed the high prevalence of psychiatric morbidity among the study participants.[9] Psychiatric morbidity is an open term which reflects the physical or mental burden individual is facing. Care giving burden affects the quality of life of the caregiver in all the aspects and may prone him to various health related conditions.[10] Family caregivers may be more prone to psychiatric illnesses due to genetic predisposition as most psychiatric illnesses have a strong genetic component. Social and demographic factors may also enhance the care giving burden and lead to mental health problems among the caregivers.[10]

Multiple risk factors have been found associated with the development of psychiatric morbidity among the caregivers of psychiatric patients. Some of these

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include increasing age, gender, relationship with the patient, socio-demographic profile, perceived stigma and multiple attempts of suicide by the patient.[7,10] Local data is insufficient regarding this aspect of psychiatric illnesses and impact on the caregivers. Limited data has been generated regarding presence of psychiatric morbidity among the caregivers of all the psychiatric inpatients. This study was planned with the aim to assess the psychiatric morbidity among the caregivers of patients of mental health illness admitted in the wards and analyze the associated socio-demographic factors linked with the presence of psychiatric morbidity among these caregivers.

METHODOLOGY

This comparartive cross-sectional study was conducted at the Psychiatry Department of a tertiary care hospital of Islamabad between January-June 2018. Sample size was calculated by using WHO sample size calculator by using population prevalence proportion of major depression among caregivers of schizophrenia patients as 2%.[11] Non-probability consecutive sampling technique was used to gather the sample. **Inclusion Criteria:** All the caregivers of psychiatric patients who were admitted in the psychiatry ward for more than one week were included.

Exclusion Criteria: The caregivers less than 18 years or more than 65 years of age or those who did not consent to or those with a past or current history of any psychiatric illness,or with a past or current history of substance use. Patients who were pregnant or had history of any chronic neurological medical or autoimmune illness or those could not read or perform the questionnaire were also excluded.

General Health Questionnaire (GHQ-12) was used to assess the psychiatric morbidity. It is a standardized screening tool for measuring the overall well being of the individuals. It is 12-item self-rating scale which takes less than 15 minutes to complete. Validated Urdu version was used and score greater than 3 by Likert scoring is taken as the cut off score i.e. individuals scoring greater than 3 were considered as having some sort of psychiatric morbidity.[12]

Ethical approval for the study was obtained from the Ethical Review Board Committee of the concerned hospital. Subjects were provided with a detailed description of the study and were inducted into the study after written informed consent. Subjects with confounding variables like presence of chronic mental or neurological illness or substance use were identified by detailedhistory taking and excluded from the study.

The GHQ-12 questionnaire was administered to the caregivers of psychiatric patients admitted in psychiatry ward for more than one week. Socio demographic variables were also collected. Variables in the study included age, gender, marital status, education, duration of illness, duration of current admission and tobacco smoking. Marital status was classed as married and single or divorced or widowed. Duration of illness was defined as total duration of the symptoms for more or less than five years. Duration of current admission was classed as admission of patient for more or less than two weeks. A history of tobacco smoking was obtained. People answering "yes" to question "do you smoke or have you smoked tobacco products regularly, in other words daily or nearly daily?" were classified as smokers. Education was classed as patients having education of less than 10 years or 10 years and more. The socio demographic data of the full sample of subjects participating in the research was entered in a structured proforma specially designed for this study.

Characteristics of participants and the distribution of the GHQ-12 score were described by using the descriptive statistics. Participants were resulted by categorical compared by presence and absence of psychiatric morbidity. Chi-square was used to determine between-group variances in categorical correlates. All statistical analysis was performed using Statistics Package for Social Sciences version 23.0 (SPSS-23.0). Differences between groups were considered significant if p-values were less than or equal to 0.05.

RESULTS

A total of 170 caregivers of psychiatric patients admitted in the ward were approached to participate in the study. Five refused participation and 13 were ineligible due to exclusion criteria (04 gave history of psychoactive substance use, 02 were diagnosed cases of depression, 03 had panic disorder, 02 had epilepsy and 2 were pregnant). After being consented, an additional 2 did not provide complete data at baseline, leaving 150 participants who had completion of the GHQ-12 after one week of the admission of their patient in the psychiatry ward. Mean age of the participants was 47.5 ± 8.625 years. Out of 150, 107 (71.3%) showed the presence of psychiatric morbidity, while 43 (28.7%) had no psychiatric morbidity. Table-I shows the distribution of the patients with respect to the presence or absence of psychiatric morbidity. Female gender, longer stay at hospital during current admission and less education of the caregiver had significant

association with psychiatric morbidity when chi-square was applied (Table-II).

Table-I: Characteristics of the study group and their GHQ-12 scores.

Socio Demograp Factors	No Psychiatric Morbidity	Psychiatric Morbidity	*p*-value
Age			
50 year or less	27 (62.8)	61 (57.1)	0.514
>50	16 (37.2)	46 (42.9)	
Gender			
Male	30 (69.8)	29 (27.1)	<0.001
Female	13 (30.2)	78 (72.9)	
Duration of illness			
< 5 years	22 (51.2)	51 (47.7)	0.698
5 Years or more	21 (48.8)	56 (52.4)	
Marital Status			
Married	16 (37.2)	58 (54.2)	0.059
Unmarried/ widowed	27 (62.8)	49 (45.8)	
Education			
<10 years	31 (72.1)	58 (54.2)	0.041
10 years or more	12 (27.9)	49 (45.8)	
Duration of Current Admission			
< 2 weeks	37 (86.1)	70 (65.4)	0.008
2 weeks or more	06 (13.9)	37 (34.6)	
Smoking			
Non Smoker	38 (88.4)	96 (89.7)	0.810
Smoker	05 (11.6)	11(10.3)	

Table-II: The correlated factors relating to psychiatric morbidity: the binary logistic regression.

	B	*p*-value	OR (95% CI)
Age (Ref. is 50 Years or Less)	0.262	0.505	1.300 (0.601-2.813)
Gender (Ref. is Male)	1.941	<0.001	6.968 (3.151-15.413)
Marital Status (Ref. is Married)	-0.325	0.404	0.723 (0.337-1.551)
Duration of Psychiatric Illness (Ref. is <5 Years)	-0.103	0.806	0.902(0.395-2.059)
Smoking (Ref. is non Smoker)	0.803	0.217	2.231(0.624-7.982)
Education (Ref. is 10 Years or Above)	-0.572	0.108	0.564(0.281-1.134)
Duration of Current Admission (Ref is <2 Weeks)	1.137	0.033	3.117(1.095-8.875)

DISCUSSION

Our study was unique in a sense that it helps in the understanding of psychiatric morbidity and mental health issues among the people who are doing a unique and challenging job of care giving and that too of the patients who are suffering from psychological disorders. Using GHQ-12 we found that more than 71% of our sample population showed the presence of psychiatric morbidity. This is similar to the other studies done on caregivers of psychiatric patients regarding in other parts of the world.[13,14,15] We used a screening tool so result may show a higher reflection and needs some diagnostic tool to ascertain the problem among the positive individuals regarding specific mental health abnormalities. Also, longitudinal studies and repeated assessments are required to classify this psychiatric morbidity into specific psychiatric illnesses.

Some of the factors that may affect the psychological health of these caregivers have been reported as increasing age, gender, relationship with the patient, socio-demographic profile, perceived stigma and multiple attempts of suicide by the patient.[16-18]

Psychiatric morbidity is a broad term. GHQ-12 screens the individual for overall wellbeing. Chronic psychiatric patient in the family affects overall well-being of the caregivers. Initially the individual himself is usually unable to comprehend the mental health issues he is facing due to prolonged care giving which sometimes causes delay in diagnosis of the problems of caregivers. Mental health issues affect the overall quality of life.[19] Therefore timely screening and treatment of this aspect may improve overall quality of life of a caregiver who is already doing a strenuous-job.Various studies in the past showed that female caregivers develop more psychiatric morbidity as compared to males.[11,20] Results in our study also showed strong association of female gender with the psychiatric morbidity among the caregivers of psychiatric inpatients. Reason might be overall more predisposition of females to psychological issues or culturally appropriate expectations of the family to care for the patient unconditionally.

Long duration of current admission had strong association with presence of psychiatric morbidity among the caregivers of psychiatric inpatients in our analysis. Similar results have been demonstrated in the past as well.[12] Reason for this may be abstinence from work and tiring and different environment of the hospital.

Long duration of psychiatric illness was related with high GHQ-12 scores on chi-square. Irfan *et al,* produced similar results in their study in 2017.[11] Long duration of illness poses the burden on caregivers in a lot of ways including physical, mental, economic and legal.

LIMITATIONS OF STUDY

There were few limitations in our study. We used the cross-sectional study method. Therefore, the cause and effect relationships remain unclear and results cannot be generalized. GHQ-12 is a self-reported screening tool in which there is always a chance of over or under reporting of the

symptoms. Severity and control of the co morbid medical illnesses among the caregivers was not done as DM, HTN or other medical diseases can add to the psychiatric morbidity. More studies with a large sample size addressing these limitations should be done to ascertain the prevalence and correlates of mental health problems among this high-risk group.

CONCLUSION

This study showed a high frequency of psychiatric morbidity among the caregivers of psychiatric patients admitted in ward. Routine screening for psychiatric morbidity should be done among the caregivers of psychiatric patients and special attention should be paid to the female caregivers and to those who have a long stay with patients in the hospital.

Conflict of interest: None.

Author's Contribution

AK:Direct Contribution, UBZ:, RT: Intellectual Contribution.

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