# Original Article



# Stress and Coping Status Among the Caregivers of Psychiatrist Patients

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#### Abstract

**Background:** Mental disorder account for 13% global burden of disease which has affected more than 970 million people worldwide in 2017. About 1 in 17 suffers from serious mental illness in worldwide. Therefore, the affected person is dependent on caregiver and their wellbeing is directly related to nature and quality of care provided by caregiver. Caregiver are especially vulnerable as they face complex, high burden care situation resulting in higher caregiver stress. The aim of this study is to determine the level of stress and coping of caregivers of Psychiatric patients.

Materials and Methods: This cross sectional study was conducted among 171 caregivers, aged more than 18 years in National Institute of Mental Health (NIMH) Shyamoli, Dhaka. Study period was from 1 January to 31 December 2020. The research participants were selected following the convenient sampling method based on defined selection criteria. A semi structured questionnaire was developed and the respondents were interviewed face to face individually, while maintaining privacy and confidentiality.

**Result:** Distribution of the socio demographic status of the study participants were females 74% and male 26%. Their mean age was  $40.09(\pm 13.31)$  years. In educational level 33.9 % of the participants were illiterate, secondary level education up to 21.1%. In occupation housewife 57.9%, service holder 18.7%. Caregiver having 76.6% moderate stress, low stress 21.6% and 1.8% having high perceived stress. Association between stress and coping average, good coping 74.8% and 88.2% had moderate stress respectively. Their significant P value .009(p<0.05). The person's correlation present between stress and coping was positive. The correlation co-efficient was .06 (p<0.05). So, there was a weak positive correlation between level of stress and coping status.

**Conclusion:** Health care personal may screen the stress level of caregivers and if there is any functional impairment is present, they could proper evaluation and therapeutic intervention.

Key words: Psychiatric patients, Stress, Coping status and Caregivers.

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# Introduction

Mental illness is the ill-adjustment of one's thought, feeling, memory, perception, and judgment in Living and unusual change that causes disharmony in the capacity of the individual to effectively meet human needs and work with culture. Mental illness is not easily cured and requires a long course of treatment and close supervision. Most of the mentally ill are cared for by their families. For too long, mental health was concealed behind a veil of shame and racism. It's time to get it out of the door.

In terms of illness and expenses to people, families and communities, the scale, misery and responsibility is staggering. The world has become more conscious of this huge burden and the opportunity for improvements in mental health over the past few years. Use of current knowledge ready to be applied, we can make a difference. According to the WHO, a psychological or emotional illness affects 450 million people.<sup>2</sup>

Mental disorder account for 13% global burden of disease. in 17 suffers from serious mental illness in worldwide. The global

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life time prevalence of mental disorders is major concern of public health. According to the 2001 World Health 10-20% of children and adolescents globally suffer from a mental disorder and 50% of mental disorders start before 14 years of age.<sup>3</sup> Mental disorders are also a leading contributor to the global disease burden: in 2013, 5.4% of global DALYs (Disability-Adjusted Life Years) and 17.4% of global YLDs (Years Lived with Disability) were due to mental disorders. About 90% of suicides are due to underlying mental illness. World Health Organization (WHO) estimating an incidence of 800,000 suicides per year in 2005, with 86% being in low- and middle-income countries.<sup>2</sup>

Mental illness, also called mental health disorders, refers to a wide range of mental health conditions disorders that affect your mood, thinking and behaviour. Examples of mental illness include depression, anxiety disorders, schizophrenia, eating disorders and addictive behaviours. Many people have mental health concerns from time to time. But a mental health concern becomes a mental illness when ongoing signs and symptoms cause frequent stress and affect your ability to function. 16

Mental disorders were responsible for 22.5 million of the 36.2 million DALYs allocated to suicide in 2010 with depression contributing the most (46.1%) to suicide DALYS.<sup>4</sup> Every year, almost million people commit suicide. Neuropsychiatric disorders (depression, anxiety disorders, psychosis, schizophrenia, and bipolar disorder) are responsible for four of the six leading causes of years living with disability (YLD).<sup>5</sup> At least one member in four families has a mental disorder.

Caregiver stress: "stress" when we feel that everything seems to have become too much, we are overloaded and wonder whether we can really cope with the pressures placed on us. Anything that poses a challenge or a threat to our well-being is stressful. A caregiver is described as someone who frequently supports and cares for a person with a disability or illness with tasks such as dressing, shopping or household tasks, or who provides other kinds of practical or emotional support. A caregiver may be a family member, a parent, a spouse, a son, a daughter or other relatives or friends.<sup>6</sup>

Family members are often the primary caregivers of people with mental disorders. It is difficult to assess and calculate the severity of the effect of mental disorders on family members and is therefore frequently overlooked. However, it does have a huge impact on the quality of life of the family. In addition to the health and social costs, mentally ill people are also victims of violations of human rights, stigma and discrimination, both within and outside psychiatric institutions. A survey in Iran (2001) shows that the prevalence of psychiatric disorders is 2-2.5% among social population. Nearly 50 to 80% of psychotic patient lives with one of their relatives, thus most of their relatives perceive a high psychological burden1.

In Bangladesh many mentally ill people stay with family members and the primary caregiver is responsible for the patient's needs. Caregivers of psychiatric patients with high level stress. Mental disorder varied from 6.5% to 31% among adults and from 13.4% to 22.9% among children in Bangladesh.<sup>2</sup> Mental illness is most neglected in Bangladesh, although a large number of people are suffering from different types of mental illness. It is prevalent in Bangladesh probably in the

same magnitude as in developed countries. According to WHO, the number of mentally ill people in Bangladesh is about 8.4 million i.e; 7% of the population of 120 million.

#### **Matirials and Methods**

This Cross-sectional study was conducted among caregiver of major psychiatric patients at the National Institute of Mental Health (NIMH). The place was selected because psychiatric patient admitted here with their caregiver. The objective of the study was to assess the level of stress and coping status among the caregivers of major psychiatric patients. The study was conducted over a period of 12 months from 1st January 2020 to 31st December 2020. The study population comprised of caregiver of age >18 years and who spends at least 30 minutes with the patient in a day. Convenience sampling was followed 171 sample was selected from the caregiver who stay with psychiatric patient. The semi structured questionnaire was used for data collection. The questionnaires were prepared keeping in view of objectives and variables of the study. Data were collected by semi-structured questionnaire constructed by perceived stress Scale version 10 and Coping Scale. Interview was taken at hospital (ward, cabin) of the participant ensuring the privacy and confidentially as far as possible. Before the interview, the detail of the study was explained to each eligible respondent and written informed consent was taken. After data collection, data were entered; cleaned and re-coded using Statistical Package for Social Sciences (SPSS 17). An analysis plan was developed according to the objectives of the study. Values were expressed frequencies and percentage. Monthly family income, family member, educational level was assessed as categorical responses Chi-square was done to see the association with 5% level of significance. Correlation was done to see the strengths of association.

#### **Results**

**Figure 1:** Distribution of respondents according to their age group. n= 171

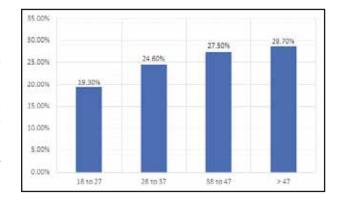


Figure 1: shows that among caregivers 49 (28.76) were within the age group > years followed by 47(27.5%) within the age group 38-47 years, 42 (24.6%) with 28-37 years, were 42(24.6%), the rest of the respondents 33 (19.3%) were within a group 18-27 years. Mean age was 40.09 and SD ( $\pm$ 13.31) years.

Figure 2: Distribution of respondents according to sex.

n = 171

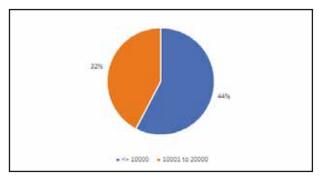


Figure 2 Pie chart shows that among 171 caregivers most of them (74%) were female & 26% were male.

**Table I:** Distribution of respondents according to their occupational status (n=171)

Occupations	Frequency	Percentage
House wife	99	57.9
Service holder	32	18.7
Business	11	6.4
Farmers	9	5.3
Students	9	5.3
Others	11	6.4
Total	171	100

Table 1 shows among all respondents 57.9% housewife, service holder was 18.7%, Students & farmers were 5.3%.

**Figure 3:** Distribution of psychiatric patients taking cared by the respondents according to their illness related information.

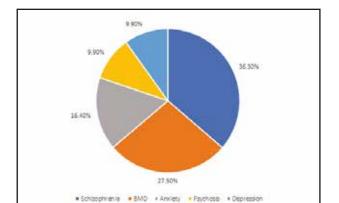


Figure 3 Pie chart shows among 171 caregivers 36.3% took care schizophrenia patients, 27.5% caregiver take care of bipolar mood disorder patients, 16.4% caregiver take care anxiety disorder patients, 9.9% caregiver take care of psychosis & depression patients.

**Table II:** Association between level of mental stress & sex of the respondents. n=171

	Low	Moderate	High	
Male	10 (27.0)	34 (26.0)	1(33.3)	2 2 4
Female	27 (73.0)	97 (74.0)	2(66.7)	$\mathbf{v}^2 = 0.44$ $\mathbf{p} = 1.00$

<sup>\*</sup>Percentages in parentheses

Table 2 shows that among 17l respondents, 97 (74%) respondents were female found in moderate stress; followed by 34 (26%) were male. Low moderate stress 27 (73%) found in female followed by 10 (27) males. High moderate stress 2 (66.7%), rest of them are male 1 (33.3%). To see the difference whether it is statically significant or not we did chi-square test and Fishers exact test the difference was not statistically significant. So, there was no association between sex and level of mental stress.

**Table III:** Association between the level of mental stress & occupational status of the respondents.

- Housewife	<b>Low</b> 20 (54.1)	<b>Moderate</b> 78 (59.5)	High 1 (33.3)	_
Service holder	8 (21.6)	23 (17.6)	1 (33.3)	
Business	4 (10.8)	7 (5.3)	0	
Farmers	2 (5.4)	7 (5.3)	0	$\mathbf{x}^2 = 12.11$
Students	3 (8.1)	5 (3.8)	1 (33.3)	p = 0.216
Others	0	11 (8.4)	0	

<sup>\*</sup>Percentages in parentheses

Table 3 shows that 99 respondents are housewives. Among them 78 (59.5%) were moderately stressed, 20 (54.1%) low stress. To see the difference whether it is statically significant or not we did chi-square test and Fishers Exact test. The difference was not statistically significant. So, there was no association between Occupation and level of mental stress.

**Table IV:** Association between the level of mental stress and monthly income of the respondents. n=171

	Low	Moderate	High	-
<= 10000	14 (37.8)	61 (46.6)	0	-
10001 to 20000	10 (27.0)	44 (33.6)	1 (33.3)	$x^2 = 10.685$ ,
20001 to 30000	8 (21.6)	16 (12.2)	0	$x^2 = 10.685,$ p = 0.054
>30000	5 (13.5)	10 (7.6)	2 (66.7)	р 0.054

<sup>\*</sup>Percentages in parentheses \*Fishers exact test

Table 4 shows that the highest moderate stress founds 10000 income group 61(46.6%) then the 10001-20000 income group 44(33.6%). To see the difference whether it is statically signifi

n = 171

cant or not we did chi-square test and Fishers Exact test. The difference was statistically significant. So, there was association between monthly income and level of mental stress.

#### **Discussion**

Age: Among 171 respondents, 49 (28.7%) were within the age group>47 years; followed by 47 (27.5%) within the age group 38-47 years, 42 (24.6%) within 28-37 years, were 42 (24.6%), the rest of the respondents 33 (19.3%) were within age group 18-27 years. Mean age was 40.09 and SD (±13.31) year another study showed that 45.99% were between 18-30 years of age group and followed by 30.6% and13.8% were between 31-40 years and 41-50 years respectively. Regarding the gender among 171 respondents (74%) were female and male (26%). caregiver burden of patients with mood disorder and they found the 43.8% were male and 56.2% were female, another study also shows the female caregiver was more in psychiatric illness than male in community.

Residential status: In this study most of the respondents urban (43%), and rural (56%) another study most of the respondents (67%) came from urban area of Dhaka city as the study place was within Dhaka city but a number of patients (32%) came from rural area. That's indicate rural caregivers are more sufferer than urban caregiver. Association between urban and rural group with coping group rural caregivers had average coping (56%). Here significant p value 0.034.

Occupation: Among total 171 respondents' housewife 57.9%, service holder 18.7%, business were 6.4%, farmer were 5.3% and student also 5.3% rest of the respondents 6.4%. That means maximum caregiver were house wife, in another study occupational status was housewife 26.3% and 20% was service holder. There was 1.1% unemployed. In previous community survey found 12.25 were student 14.2% were house wife and 3% were unemployed, this study difference due to place and approach of study design, that present study done in a tertiary care hospital and the community level.9

Education: Among 171 respondents according to educational status illiterate were 33.9%, secondary level of education 21.1%, primary level education was 20.5% where higher secondary level education was 9.4%, honours were 9.9% and rest of the respondent's educational qualification were graduation and above (5.3%). Another study respondent was completed secondary (27.3%), higher secondary 27.3% that means the patients within age groups are completed 10-12 years' education.

Family: In this study care giver relationship son/daughter (49.75%), sibling (19.9%). In Bangladesh culture parental bonding is stronger. Another study that also occur in Bangladesh mood disorder burden, 43.2% caregivers were spouse 18.9% husband, 24.2% wife and 35.8% were parents (13.7% father, 22.1% mother) of the patients. 54.7% caregivers were parents and 38.4% were spouse. In Bangladesh culture the marital bondage is stronger and divorce rate lower than western society also found the parents are more involved (44.3%) in care giving to patient than spouse (23.5%). In this study son /daughter (49.75%), siblings (19.9%) is similar with other study. Within last 5 years the inflation rate was high and the

people's income level also increased8 but in this study respondents were found in poor coping monthly income >30000. Here significant p value 0.070. Most of the case that among the 171 respondents, 62(36.3%) respondents took care schizophrenia patient, 47(27.5%) respondents take care of bipolar mood disorder patients, 28(16.4%) respondents take care of anxiety disorder patients, 17(9.9%) respondents take care of psychosis and depression patients. Another study found 44.4% depressive disorder, 43.1% bipolar mood disorder, 7.4% anxiety disorder and 5.3% psychosis.8 This study found that mean duration of the disease (years) 5.18 years (SD  $\pm 5.98$ ). Mean number of times got admitted in hospital 1.95 times (SD ±2.31), Mean duration of taking medicine 4.14 years (SD ±5.23). Another study found that care-giving related stress duration of care giving 5(8%); time spent for care giving per day less than 4 to 8 hours (30.5%).

In Bangladesh culture of the marital bondage is stronger and divorce rate lower than western society also found the parents are more involved (44.3%) in care giving to patient than spouse (23.5%).<sup>10</sup> In this study son/daughter (49.75%), siblings (19.9%) study is similar with another study. Availability of support or assistance 108(55.46). 11 It is found that responsibility of care unwillingly 3(1.89%), slight willingly 25(14.69%), with own interest 107(62.6%), according to circumstances 36(21.1%).<sup>12-19</sup> Another study found that no choice 35.7%, little choice 15.7% quite a lot of choice 5.3%, free to make any choice 4.3%.20 In the current study relationship and responsibility is stronger. Among the respondents, who were moderately stressed 0.0% (0) 74.8% (101) and 88.2%(30) had poor average and good coping status respectively. Respondents having high perceived stress had 50%(1) poor coping, 1.5%(2) had average coping and 0.0% (0) had good coping status. This difference was statistically significant G2-1269 p value 0.009). So, there was an association between level of stress and coping. Another study found that among the disabled child parents, moderate stress is 62.8%, high stress 28.6% and low stress is (8.5%). In this study, having low stress, 50% had poor coping, 23.7% had average coping and 11.8% had good coping status.<sup>17</sup> The current study correlation between stress level and Coping status was analysed by using Pearson's correlation method and presented in figure. The correlation between stress level and coping status of caregivers of major psychiatric patients was positive because the direction of change of change of those variables was same; coping status was slightly increasing if the perceived stress level on an average was also increasing. The correlation co-efficient was 0.06(p<.05). So, there was a weak positive correlation between level of stress and coping status of the respondents. In another study, among the coping styles, positive reinterpretation and growth was the single best predictor of stress symptoms (1.78) = 6.48; p<0.05), accounting for 7.7% of the variance this difference occurs due to scale difference.22

## **Conclusion**

The current study demonstrates that most of the caregivers of psychiatric patients have moderate level of stress and average level of coping and it was significantly associated statistically. The caregiver's stress and coping are statistically significant with his or her monthly income. The study findings shall help to mitigate the stress of the caregivers and as well as provide

well-being for patients. Stress reduction through effective coping is one of the care giving goals in providing care for psychiatric patients. This study revealed that mentally ill patient's caregivers were at the moderate level of stress and sometimes used overall coping methods. Stress reduction intervention may help to reduce stress and cope up with their conditions.

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