

A Comparative Study of Anxiety, Depression and Stress in Caregivers of Psychiatric Illness and Chronic Medical Illness in Multan

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ABSTRACT

Objective: To assess and compare stress, anxiety and depression in long term caregivers of psychiatric and medical patients.

Study Design: Cross-sectional comparative study.

Place and Duration of Study: Out-patient Departments of Medicine and Psychiatry, Combined Military Hospital Multan, from Jan 2016 to Mar 2017.

Methodology: One hundred and two (102) caregivers were selected through consecutive sampling. Each participant was interviewed at Medical and Psychiatry Outpatient Departments. The interview involved socio-demographic variables. Depression, anxiety and stress were assessed by using DASS Scale.

Results: In this study, 102 caregivers were enrolled. Most of the caregivers, 67 (65.7%), were cared on a long-term basis for more than two years, while 35 (34.3%) had a history of care for more than five years. The mean score on the depression subscale of the depression, anxiety and stress scale (DASS) for medical caregivers (n=52) was 13.15 ± 10.552 as compared to psychiatric caregivers (n=50) 19.14 ± 9.337 and this difference was statistically significant. The mean score on the anxiety subscale for medical caregivers compared to psychiatric caregivers was also statistically significant. The mean score on the stress subscale for medical caregivers (n=52) was 15.58 ± 10.03 as compared to psychiatric caregivers (n=50) caregivers 20.38 ± 8.20 , and this difference (20.38 vs 15.58 , $p=0.009$) was statistically significant.

Conclusion: This study suggested a clinically significant relationship between anxiety, depression, and stress with caregiving experience. There is a higher level of depression, anxiety and stress in caregivers of psychiatric patients than in caregivers of medical illnesses.

Keywords: Anxiety, Care givers, Depression, Stress.

How to Cite This Article: Shah SZH, Tabassum AS, Saeed N. A Comparative Study of Anxiety, Depression and Stress in Caregivers of Psychiatric Illness and Chronic Medical Illness in Multan. *Pak Armed Forces Med J* 2022; 72(Suppl-2): S191-194.

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INTRODUCTION

According to the World Health Organization (WHO), more than 400 million people worldwide suffering are from mental illness. Many people with chronic medical or mental illness depend on family and friends for support and help. Caring for chronic psychiatric or medical disorders requires tireless effort, energy and emotional investment. Successful management of any illness always needs a network of caregivers. A caregiver is a family or non-family member who has been living with and closely involved in daily activities, health care, and social interaction of the patient for at least a year.^{1,2} The family forms a significant part of the support system in long term care. Caregivers witness severe distress in their loved ones and experience mental stress due to providing essential care to them. Many of them experience various emotional and behavioural symptoms like stress, frustration, low self-esteem,³ and increased risk of various physical and psychiatric

ailments.⁴

Care giving leads to various personal, family, financial and social problems,⁵ and increases the risk of social isolation and reduction in quality of life due to a high rate of stress, anxiety and depression.⁶ Stressful nature of caregiving experience may lead to harmful behaviours e.g., hostility and substance abuse.⁷ In recent years, a high level of psychological stress and mental health problems associated with caregiving experience have become an important mental health problem encountered by mental health professionals.

It was hypothesized in this study that there would be more significant stress, anxiety and depression in long term caregivers of psychiatric and medical patients with a higher rate in caregivers of psychiatric as compared to medical patients because unpredictable psychiatric symptoms have more significant stress and strain on caregivers.

METHODOLOGY

In this cross-sectional comparative study, we consecutively selected caregivers of patients from OPD Medical and Psychiatric Military Hospital, Multan

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Received: 07 Apr 2020; revision received: 25 Jun 2020; accepted: 13 Mar 2020

from 2016 to 2017. Ethical approval was taken from CMH Multan for this study. A sample size calculator (ClinCalc.com) was used to calculate the sample size to compare two equal-sized groups taking power as 80% and a two-sided significance level as 0.05. The calculated sample size of each group was 47.

Inclusion criteria: The caregivers of immediate family relative (parent, spouse, sibling, brother or sister) living with and taking care of chronic psychiatric or medical patients for the last two years were included in the study. Caregivers of age 18-70 years and without any past history of psychiatric illness were included.

Exclusion criteria: The caregivers who were illiterate, non-immediate family relative or caregivers with any past history of psychiatric illness were excluded from the study.

Demographic profile sheet was used to record information regarding age, gender, marital status, education, socioeconomic status, relation with the patient, duration of psychiatric illness, and past psychiatric illness in caregiver.

The depression anxiety and stress scales (DASS) is a widely used screening tool to assess depression, anxiety and stress. It consists of three sub-scales (a) the Depression sub-scale, (b) the Anxiety scale, and (c) the Stress scale. There are two forms of the DASS, a full 42-item scale and the short 21-item versions. Both these scales assess the same domains. It has a validity of the DASS for use in both clinical and community settings.^{8,9} The reliability scores of the scales in terms of Cronbach alpha scores for the depression scale was 0.91, for the anxiety scale was 0.84 and for the stress scale was 0.90.

Data was collected from caregivers at the OPD from psychiatric or medical patients. Consent of the participants and personal/demographic data was taken, keeping in view their privacy and confidentiality. Instructions were given along with a questionnaire to the participants.

Statistical Package for Social Sciences (SPSS) version 20 was used for the data analysis. For comparison between the groups, independent sample t-test was used. The *p*-value of ≤ 0.05 was considered significant.

RESULTS

In this study, 102 caregivers were enrolled who fulfilled the criteria to participate. The mean age of medical caregivers was 32.38 ± 9.23 years, while

psychiatric caregivers' mean age was 34.64 ± 10.79 years (Table-I).

Table-I: Mean age of the caregivers.

Study Groups	Mean Age
Medical Caregivers	32.38 ± 9.23 years
Psych Caregivers	34.64 ± 10.79 years
Total	33.49 ± 10.04 years

In medical caregivers, 17 (16%) were females, and 25 (34%) were males, while in psychiatric caregivers, 15 (14%) were females and were 35 (34%) males. Between both the groups (n=102), about 34 (33.3%) caregivers were under matriculation, 39 (38.2%) matriculated, and 29 (28.4%) were graduates (Figure).

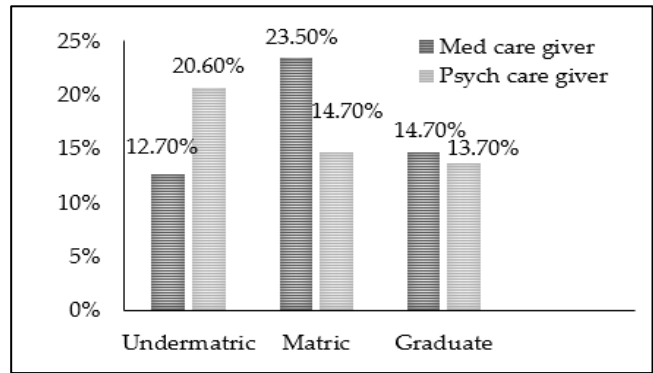


Figure: Education of caregivers.

About 26 (25.5%) were single, 74 (72.5%) married and 2 (2.0%) were separated or divorced. Most of the caregivers, (67, 65.7%), were cared on a long-term basis for more than two years, while 35 (34.3%) had a history of care for more than five years.

The mean score on the depression (Table-II) sub-scale of the depression, anxiety and stress scale (DASS) for medical caregivers (n=52) was 13.15 ± 10.552 as compared to psychiatric caregivers (n=50) 19.14 ± 9.337 and this difference (19.14 vs $13.15 =$ M.D. 5.986, $t < 0.003$) was statistically significant (Table-II).

Table-II: Relative scores of depression, anxiety and stress in caregivers.

	Group	n	Mean ± SD	<i>p</i> -value
Depression Score	Psych Care Giver	50	19.14 ± 9.33	0.003
	Medical Care Giver	52	13.15 ± 10.55	
Anxiety Score	Psych Care Giver	50	17.48 ± 9.00	0.017
	Medical Care Giver	52	13.00 ± 9.56	
Stress Score	Psych Care Giver	50	20.38 ± 8.20	0.009
	Medical Care Giver	52	15.58 ± 10.03	

The mean score on the anxiety subscale for medical caregivers (n=52) was 13.00 ± 9.56 as compared to psychiatric caregivers (n=50) caregivers 17.48 ± 9.00 ,

and this difference (17.48 vs 13.00, $p=0.017$) was statistically significant. The mean score on the stress subscale for medical caregivers (n=52) was 15.58 ± 10.03 as compared to psychiatric caregivers (n=50) caregivers 20.38 ± 8.20 , and this difference (20.38 vs 15.58, $p=0.009$) was statistically significant (Table-II).

DISCUSSION

The present study intended to explore the extent of depression, anxiety and stress in caregivers of patients suffering from a psychiatric illness compared to patients suffering from chronic medical illness in Multan, supported in the current literature.

Although the presence of depression, anxiety and stress among caregivers has been widely accepted, our research findings related to depression suggested that the level of depression was more in psychiatric caregivers as compared to medical caregivers, with mean scores of 19.14 vs 13.15=M.D. 5.986, $t<0.003$ which was statically significant and verified that caregivers of patients with psychiatric illness have more depression as compared to caregivers of patients with medical illness.

In a previous study by Prasanna *et al*, the depression mean score was 15.42 (S.D. 9.6, $t <0.13$) in caregivers of psychotic patients.¹⁰ Caregivers of patients with mood disorders also reported high levels of caregiver burden and low-income family functioning mentioned by Heru *et al*, with the report of depressive symptoms in 74% of caregivers.¹¹ A review study of 24 papers revealed 46% depression and up to 32.4% mental health service use in caregivers of patients with bipolar disorder.¹² A study on the patients with schizophrenia by Ali *et al*, suggested that depressive disorders were higher among caregivers (18.33%) than in the control group (3.33%). It is correlated with the burden of care perceived stigma.¹³ Depression is also the most common psychiatric illness in renal disease, especially the patients on hemodialysis or end-stage staged illness, which affects the quality of life in these patients and their caregivers.¹⁴

Our study also revealed that psychiatric caregivers also have a higher level of anxiety as compared to medical caregivers, which was 17.48 vs 13.00=MD. 4.480, $t<0.017$. It is much higher than the previous study, with a mean score of 4.22 (S.D. 5.38, $t<0.04$) in caregivers of psychotic patients.¹⁰ Another study suggested that 46.7% of primary caregivers of patients with mental disorders had mild anxiety, 23.3% had moderate anxiety, and nearly one third (30%) had severe anxiety.¹⁵ Another study of 130 caregivers suggested

that 11.5% (n=15) of the caregivers reported suffering from anxiety disorders.¹⁶ Anxiety level in medical caregivers is less in our study as compared to a previous study that suggested that the prevalence of anxiety disorders was significantly higher in female caregivers than in males in stroke patients.¹⁷

A previous study has shown high rates of depression, anxiety and stress among caregivers (72.8%, 76.5%, and 61.5%, respectively). Depression was found to be associated with long-term hospital stays and family caregivers. Anxiety was associated with family caregivers (78.8% vs 53.1%; p -value = 0.001).¹⁸

The increased perception of stress could also be due to the caregiver's maladaptive coping abilities to manage stress, hyperarousal to the stressors, and lack of alternative pleasurable or stress-reducing activities in daily lifestyle to modulate the effects of stressors.¹⁹

The high level of psychiatric morbidity in both the groups might be attributed to feelings of hopelessness or helplessness in managing an illness, limited education and knowledge about illness, associated despair, frustration or grief resulting in status or role loss in the family, disturbed interpersonal or family relations and financial or occupational difficulties in caring for the patients. Prolonging care without leisure and staying with the patient alone without support may also lead to depression.²⁰ The reasons for the high level of psychiatric morbidity, e.g. stress, anxiety or depression in caregivers of psychiatric patients as compared to caregivers of medical illness might be due to lack of knowledge about psychiatric symptoms, perception of unpredictable or mysterious behavioural or psychiatric symptoms, societal misperceptions about mental illnesses, unpredictable course or prognosis of psychiatric illnesses as compared to medical illnesses. Usually, caregivers are fearful of psychiatric patients with the belief that they are violent or harmful to others and stigmatization of psychiatric illnesses in society which may generate undue stress in caregivers of psychiatric patients compared to caregivers of medical patients.

The present study supported the findings of previous studies, which revealed a clinically significant relationship between Anxiety, Depression, and stress with caregiving experience. Moreover, this study also takes a step further to reveal a higher level of depression, anxiety and stress in caregivers of psychiatric patients as compared to caregivers of medical illnesses.

LIMITATIONS OF STUDY

Recruiting the patients from one institute was one of the important limitations of our study. Baseline characteris-

tics of patients were not matched for both groups, which may cause confounding factors to interfere with the associations established in the study. Studies in future may address these complications and generate better results to make clinical guidelines for our population suffering from this chronic illness.

ACKNOWLEDGEMENT

The authors would like to thank all the colleagues and the staff of CMH Multan for their valuable assistance and guidance.

Conflict of Interest: None.

Authors' Contribution

SZHS: Collection of data, Design, AST: Analysis of data, NS: Drafting of article, Referencing.

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