



RESEARCH PAPER

Depression, Stress and Life Satisfaction among the Caregivers of Patients with the Symptoms of Schizophrenia

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ABSTRACT

The purpose of the study was to explore the relationship of depression, stress and life satisfaction among the male and female caregivers of the patients with symptoms of schizophrenia. Ninety (60 out of which 30 male and 30 female) were caregivers of patients of diagnosed patients as per the DSM IV TR criteria with patients with the symptoms of schizophrenia disorder and (30 out of 15 male and 15 female) were non-caregivers as control group were selected through purposive sampling. The Depression Anxiety Stress Scale (DASS) sub scale of stress and depression as well as Satisfaction with Life Scale (SWLS) were administered on each participant to measure the level of depression, stress and life satisfaction. The results showed that there is a significant difference in depression, stress and life satisfaction among male and female caregivers of patients with the symptoms of schizophrenia. Female caregivers of the patients with schizophrenia faced more depression and stress as well as low satisfaction with life as compared to male caregivers of the patients. There is a significant difference in depression, stress and life satisfaction among the caregivers and non-caregivers of patients with Schizophrenia.

KEYWORDS Caregivers, Depression, Schizophrenia Stress

Introduction

Depression and stress are the most common problems that are faced by the caregivers of psychotic patients especially schizophrenics. Unfortunately, in Pakistan, no considerable work has been done yet in this field to highlight that its importance to increase the level of caregivers' life satisfaction by making interventions to decrease the level of depression and stress among the caregivers of schizophrenics. As it is evident that the caregivers hesitate to tell the doctor or psychiatrist that they are facing such problem from the fear of being labeled like the patient, like the care they are giving such as schizophrenic.

Chronic psychiatric disorder as schizophrenia produces a type of disability that further causes different challenges, as its management is very difficult. It incurs huge cost to the patient and the caregivers, as it affects the patient's personal life as well as the life of caregiver as a result of increase burden of care shifted from hospital to the families of schizophrenics. It also affects the society in both direct as well as indirect way, that includes patient long term hospitalizations and schizophrenics also need support that is both economical and psychosocial, as well as lost in life-time productivity (George et al., 2008).

Relatives of patient with this disorder may feel that they are being stressed, long before when schizophrenia is diagnosed. Early symptoms and signs of schizophrenia can emerge many years before a diagnosis of schizophrenia is made. Family members may also start to notice changes in behavior in their relatives who is schizophrenic. These types of behavior changes can become the reason of a lot of anxiety, guilt, as well as worry, for a family member of someone with schizophrenia (Butts, 2005).

Multiple challenging demands of time and resources are supposed to lead to the negative physical and psychological consequences on the caregivers. It encompasses a wide range, from mild irritation to drastic dysfunction that may cause poor life satisfaction. It may be due to physical exhaustion and deterioration of mental and physical health. Lack of one's social life and activities can be the other reason of it. Caregivers of the patients, with chronic or psychiatric illnesses, such as schizophrenia significantly having higher levels of depression, even when no other mood disorder are present. The most common variables related to depression among caregivers are gender, socio-economic status, marital status, family size, education, relationship with the patient and the burden of care. Mental health services should aim to assist key caregivers of people with chronic schizophrenic disorder to manage their stress and related mental disorders. Early interventions by conducting routine assessments of the depression status of caregivers and their available social support, thereby prevents or minimize the effects of depression in these caregivers (El-Tantawy,2010).

Caregivers within the family have often been described as forgotten patients and it was suggested that caregivers' symptoms such as mood swing, fatigue, headaches, joint and muscle pains, marital and family conflicts and financial problems may have been a reflection of caregivers' stress in looking after a sick relative. Researches exploring emotional distress in caregivers have enumerated various problems ranging from stigma to financial difficulties without any public assistance and suggested these to be arising due to providing care to a sick relative.

Studies have been carried out to investigate the etiology, epidemiology and treatment patterns of the psychiatric disorders with most of them focusing on the patients. There has been less attention on the issues of the caregivers who take care of the patient and clinicians hardly give any attention to their needs. Therefore, this study was planned to find out the stress, depression and life satisfaction in caregivers of patients with schizophrenia. Data on depression, stress and life satisfaction of patients with mental illness is very minimal in developing countries. The research finding would be helpful in applications on developing countries as findings from developed countries cannot be applied directly on them due to culturally specific factors.

Literature Review

According to estimation of the National Alliance for Caregivers, 65.7 million Americans served as caregivers for mentally ill or disabled relative in the past years. Caregiver roles may vary but the impact of stress on such a large percentage of the U.S. population is a health care concern is very noticeable. Research shows that family caregivers are usually at added risk for emotional and physical health problems due to stress. As according to the Journal of the American Medical Association, high strained family caregivers are at high risk for depression and stress. Other studies shows that caregivers are at risk for increase heart diseases and stroke, particularly under high stress (Schulz & Beach, 1999).

The stress in America as indicated by the survey is more than half (55 percent) of caregivers because they feel overwhelmed by the amount of care their aging or chronically ill family member requires (Haley et al., 2003). Caregivers are more likely as compared to general population because they feel they are doing a poor job with several un-healthy behaviors, including managing stress (45 percent vs. 39 percent). Caregivers are more likely than those in the general population to report doing a poor job in preventing themselves from experiencing stress (55 percent vs. 44 percent) and fully recovering after it occurs (39 percent vs. 31 percent) (Lee et al., 2003).

Caregivers are not only more likely to report stress, but also report it at a high level than present in general public. On a scale of 1 to 10 where 1 is little or no stress and 10 is a great deal of stress, the mean level of stress reported by caregivers was 6.5 as compared to

5.2 reported by the general public. Likewise, caregivers are more likely to be in stress than the general public in the past 5 years (59 percent vs. 44 percent) (Navaie-Waliser et al., 2002). Research demonstrates that older adults in caregiver roles seems to be particularly vulnerable because care giving demands may harm their health and physical abilities and as well compromise their immune response systems; similarly, the stress associated with care giving may produce chronic health conditions.

Due to the high requirements of time, caregivers are less likely to engage in preventive health behaviors than non-caregivers (Schulz & Beach, 1997). Caregivers are more likely than the general population to have a chronic illness and psychiatric problems (82 percent vs. 61 percent). Caregivers aged 50 and older are more likely than those in the same age bracket in the general population to report experiencing physical symptoms (92 percent vs. 70 percent, respectively) and non-physical symptoms of stress (86 percent vs. 63 percent), respectively.

Caregivers are more likely to say they are poor in health (34 percent vs. 20 percent) and are also significantly more likely to cite personal health concerns as a significant source of stress (66 percent vs. 53 percent) (Schulz & Beach, 1997). Caregivers are more likely to report experiencing physical (94 percent vs. 76 percent) and non-physical (91 percent vs. 71 percent) symptoms of stress when compared to the general population. In particular, caregivers are far more likely than the general population to stay awake at night (60 percent vs. 44 percent), overeat or eat unhealthy foods (53 percent vs. 39 percent) or skip a meal (48 percent vs. 29 percent) because of stress and depression. Caregivers are more likely than those in the general population to report that they believe their stress has a strong/very strong impact on their body/physical health (47 percent vs. 37 percent) (Schulz et al., 1997).

Likewise, another research was conducted to evaluate depressive disorders among caregivers of schizophrenic patients and its relationships along with huge responsibility of care and perceived stigma. For that purpose, sixty caregivers of patients with schizophrenia were taken and 30 healthy non-caregivers as a control group. Both groups were assessed for depressive symptoms using the Center of Epidemiological Studies for Depression Scale. Diagnosis of Depressive Disorders was made according to DSM-IV-TR criteria. The Caregiver Strain Index and the Discrimination-Devaluation Scale were administered to the caregivers. The results indicate that depressive disorders were higher among caregivers (18.33%) than control group (3.33%) with ($p < 0.05$). The most common depressive disorders among the caregivers' group were adjustment disorder with mixed anxiety and depressed mood (6.67%). Depressive disorders were correlated huge responsibility of care and perceived stigma. Depressive symptoms were associated with increased number of hours per week for providing care, older age of the caregiver and duration of care giving. So, at the end it was concluded in the research that interventions should be planned in order to reduce caregiver stressors by Mental health services that they must provide direct care and services to caregivers as well as patients of schizophrenia (El-Tantawy et al., 2010).

The findings of Anjum, Rashid and Irfan (2010) investigated the level of burden among the caregiver of patients with schizophrenia leads to decrease level of life satisfaction among the caregivers. High levels of stress and burden was found among female caregivers showed the psychological problems like worry, insomnia somatic complaints, social dysfunction and depression that leads to poor life satisfaction among females.

Similarly, Kumar, Singh, Verma and Chaudhary (2009) investigated that subjective burden on the life of caregivers of schizophrenic patients. Fifty (25 male and female 25) caregivers of schizophrenic patient were selected as sample. The results indicated that no significant difference was found between male and female caregivers of schizophrenic patients that leads to significant difference in their life satisfaction among male and female caregiver.

Patients suffering from any psychotic disorder as schizophrenia impose considerable burden on their spouse and other family members. The burden includes numerous responsibilities such as financial costs, physical care of the patient, compromises on the personal freedom and leisure activities and has been reported to affect the course of illness. Severity of illness and symptoms characteristics are important predictors of burden with disorganized behavior being especially associated with higher level of burden (Dingemans & Schene, 2002).

The spouses and family of schizophrenic patients develop different kinds of coping strategies to deal with the burden which includes; finding a reasonable solution of the problem, looking for support from friends or other near ones or try to avoid the situation by indulging into activities like smoking abuse. The spouses of schizophrenics experience high level of burden that leads to stress and depression and poor quality of life when they limited coping resources. Reduction in the perceived burden has been reported in the spouses who adapt less emotion focused coping strategies (Ohaeri & Fido, 2011)

The impact of schizophrenic disorder is extensive often long lasting and sometime profound. The most reported burdens on the caregivers are stress, problem in social activates, economic difficulties and problem in work place. The emotional distress among the caregivers of schizophrenics affects their ability to cope with stress. Other negative implication among the caregivers of schizophrenics include depression due to that they use alcohol, substance abuse, self-medication, aggressive behavior and impaired quality of life (Knapp, 2001).

Similarly a study on caregivers' stresses when living together or apart from patients with chronic schizophrenia was conducted.in this study with anxiety along with trouble and mental side effects which were screened by the General Health Questionnaire (GHQ). Cases were gathered from two sorts of essential guardians either living with (n = 37) or independently from (n = 48) a patient with an incessant schizophrenic jumble. The anxiety levels along with guardians living separated were comparable to the individuals who were existing together with patients and around 25 percent of both assemblies met GHQ basis for having a mental jumble. Numerous relapse examinations of all subjects recognized push with the patient's jumble and strain in their own conjugal relationships as generally prescient of their subjective worldwide stress evaluations. These outcomes prescribe that mental health administrations may as well expect to support scratch parental figures of individuals with incessant schizophrenic clutters to administer push whether the patient exists in the same family as the guardian (Tannis et al.,2002)

As a conclusion It was obvious that a large number of the measures fail to offer hypothetical groundwork and sound psychometric planes. Furthermore, a portion of the measures needed utility, plausibility and specificity. The research also proposed different proposals for future research (Shae-Leigh et al.,2012). In spite of the fact that a sizable grouping of literature work is concentrating on caregivers of schizophrenia, studies that inspect depressive clutters as per ICD-10 criteria, the extent that we know, are few. Likewise, the proceeding pattern to deinstitutionalization of schizophrenic patients will accelerate more burden on the guardians. In an exertion to boost and drag out care giving in the group, it gets crucial to grasp the outcomes of care giving of patients with schizophrenia. There is small research that investigated the care givers and relatives of schizophrenic patients in developing nations. The present study tried to gather qualitative and quantitative information from a specimen of schizophrenic caregivers and relatives.

Hypotheses

1. There would be a difference in level of depression, stress and life satisfaction in male and female caregivers of schizophrenic patients.

2. The level of depression would be higher among female caregivers than male of schizophrenic patients.
3. The level of stress would be higher among female caregivers than male of schizophrenic patients.
4. The level of life satisfaction would be lower among female caregivers than male of schizophrenic patients.
5. There would be a difference in level of stress, depression and life satisfaction among non-caregivers and caregivers of schizophrenic patients.
6. There would be a difference in level of stress, depression and life satisfaction in upper and lower-class caregivers of schizophrenic patients.

Materials and Methods

The sample would include 60 caregivers who are regularly accompanying the patient diagnosed as schizophrenic according to DSM -IV-TR criteria as research participants (N=60), 30 will be male (n=30) and 30 will be female (n=30) and 30 non-caregivers will be taken as control group (n=30) Those who did not participate almost invariably cited geographical distance from the hospital. The participants will be selected from different government as well as private mental health hospitals of Faisalabad and Lahore. The age range of the research participants will be from 18 to 55 years.

A caregiver must be having following inclusion criteria:

- 18 years old or above.
- Taking care of a patient who is 18 years old or above with the diagnosis of Schizophrenia as per the DSM-IVTR criteria.
- Taking care of a patient who is on medication and on regular follow up in outpatient department for the past 6 months.
- Immediate family relative (Parent, spouse, sibling, brother or sister), non-immediate family relative (Other relative) or non-relative.
- Primary caregiver as defined by an adult relative living with a patient, in the same environment, for at least 12 months and was involved directly in giving care to the patient and most supportive either emotionally or financially

The caregiver will be excluded from the study in the following situations by following the given exclusion criteria:

- If the patient has a diagnosis other than schizophrenia or a comorbid diagnosis.
- If the patient was admitted to the inpatient departments during the past 6 months.
- If the patient was not on medications.
- If the caregiver is less than 18 years old.
- If the caregiver is not living with the patient for at least 12 months.
- If the caregiver is not involving directly in giving care.

Comparative group design (with in group design) was used in current study. Convenient and purposive sampling technique was used in the current study to collect data.

Following operational definitions of variables are used in this research. Stress is operationally defined as the scores obtained on the Depression Anxiety Stress Scale DASS (Depression Anxiety Stress, 1995). Likewise, depression is operationally defined as the scores obtained on Depression Anxiety Stress Scale DASS. (Depression Anxiety Stress, 1995). Similarly, life satisfaction is operationally defined as the scores obtained on The Satisfaction with Life scale SWLS (Satisfaction with Life Scale, 1985). Caregivers of schizophrenic patient is operationally referring to unpaid relatives or friends of a schizophrenic individual who help that individual with his or her activities of daily living. Non-caregivers are operationally defined as male and female, who are normal will be recruited attending the hospital for other purposes than a patient care. The normal non-caregivers must be 18 years old or above. They must have no history of psychiatric disorders or have taking care of a schizophrenic patient or other chronic serious illness either physical or mental illness.

Multiple instruments were used in the current study to measure the variables which are given below:

- Demographic form

The data collection questionnaire consist of a self-prepared demographical form will enquire about age, gender, education, marital status, occupation and socioeconomic status.

- Depression Anxiety Stress Scale

The DASS is a 42-item questionnaire which includes three self-report scales designed to measure the negative emotional states of depression, anxiety and stress. Each of the three scales contains 14 items, divided into subscales of 2-5 items with similar content. The Depression scale assesses dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest/involvement, anhedonia, and inertia. The Stress scale (items) is sensitive to levels of chronic non-specific arousal. It assesses difficulty relaxing, nervous arousal, and being easily upset/agitated, irritable/over-reactive and impatient. Respondents are asked to use 4-point severity/frequency scales to rate the extent to which they have experienced each state over the past week. Normative data are available on a number of Australian samples. From a sample of 2914 adults the means (and standard deviations) were 6.34 (6.97), 4.7(4.91), and 10.11 (7.91) for the depression, anxiety, and stress scales, respectively. A clinical sample reported means (and standard deviations) of 10.65 (9.3), 10.90 (8.12), and 21.1 (11.15) for the three measures.

- Satisfaction With Life Scale

Satisfaction With Life Scale is created by (Diener & Griffin, 1985). SWLS is a 5-item scale designed to measure global cognitive judgments of one's life satisfaction (not a measure of either positive or negative affect). Participants indicate how much they agree or disagree with each of the 5 items using a 7-point scale that ranges from 7 strongly agree to 1 strongly disagree. It is usually used in research to collect data.

The formal permission for the scales will be taken from the authors to collect the data. The prior permission will be taken from concerned institutions. Before administration the participants will be informed about the nature and purpose of the study. They will be ensured that this information would be used only for research purpose. A consent form will also be obtained from each participant. After their consent data will be collected. In order to avoid any hurdle in data collection permission letter given by the Head of the Department was shown to the authorities of the hospitals so that the process of data collection was carried out smoothly. Participants were given brief description about the purpose of the data collection and were assured that the data collected from them will only be used for research purposes and will be kept confidential.

In the current study the t-test used through SPSS window version 15.00. T-test was used to compare the scores of male and female caregivers as well as of caregivers and non-caregivers on Depression Stress and Life Satisfaction.

Results and Discussion

The sample was selected of 90 participants in that 60 caregivers, 30 non-caregivers of schizophrenic patients (male & female) age ranging from 18 to above years. All research participants were selected from District Head Quarter Hospital (DHQ) Faisalabad, Services Hospital Lahore and Sir Ganga Ram Hospital Lahore. For statistical analysis, t-test were used and results were obtained from data.

Table 1 shows significant difference found in the mean scores between depressions, stress and life satisfaction among schizophrenic patients. Schizophrenic patients on depression sub scale of DASS as $t(29) = .808$, $P < 0.05$, stress sub scale of DASS as $t(29) = -2.897$, $p < 0.05$ and satisfaction with life scale on SWLS $t(29) = -2.482$ $P < 0.05$. Therefore, hypothesis 1 is supported by the results and is significant at $P < 0.05$. It is clear from Table # 1 that there is difference in the level of depression, Stress and Life Satisfaction among male and female caregivers of schizophrenic patients.

Table 1
Difference between male (n= 30) and female (n = 30) caregivers of schizophrenic patients for their score of depression sub scale of DASS, stress on stress sub scale of DASS and satisfaction with life scale SWLS.

Variable	Group	M	SD	t-value	p-value
Depression	Female	22.83	12.34	.808	.019
	Male	21.23	9.57		
Stress	Female	26.80	9.33	-2.897	.007
	Male	15.87	8.76		
Life Satisfaction	Female	14.90	12.34	-2.482	.029
	Male	17.17	8.76		

Df = 29, $p < 0.05$

Table 2 results indicate that depression level is high among female caregivers by comparing the mean score of depression between male and female caregivers of schizophrenic patients $t(.808)$, $P < 0.05$. Therefore, hypothesis 2 is supported by the results and is significant at $P < 0.05$. It is clear from Table 2 that there is high level of depression among female caregivers than male caregivers of schizophrenic patients.

Table 2
Difference between male (n= 30) and female (n = 30) caregivers of schizophrenic patients for their score of depression on sub scale of DASS.

Variable	Group	M	SD	t-value	p-value
Depression	Male	17.17	8.76	.808	.019
	Female	22.83	12.34		

df = 29, * $P < 0.05$

Table 3 results indicate that stress level is high among female caregivers by comparing the mean score of stress between male and female caregivers of schizophrenic patients $t(-2.897)$, $P < 0.05$. The hypothesis is supported by the results and is significant at $P < 0.05$. It is clear from Table 3 that there is high level of Stress among female caregivers than male caregivers of schizophrenic patients.

Table 3: Difference between male (n= 30) and female (n = 30) caregivers of life schizophrenic patients for their score of stress on sub scale of DASS.

Variable	Group	M	SD	t-value	p-value
Depression				-2.897	.007
	Male	21.23	9.57		
	Female	26.80	9.33		

$df = 29$, $*P < 0.05$

Table 4 results indicate that life satisfaction level is high among male caregivers by comparing the mean score of life satisfaction between male and female caregivers of schizophrenic patients $t(-2.482)$, $P < 0.05$. The hypothesis is supported by the results and is significant at $P < 0.05$. It is clear from Table 4 that there is high level of life satisfaction among male caregivers than female caregivers of schizophrenic patients.

Table 4: Difference between male (n= 30) and female (n = 30) caregivers of schizophrenic patients for their score of satisfaction with life scale on SWLS.

Variable	Group	M	SD	t-value	p-value
Depression				-2.482	.029
	Male	15.87	8.76		
	Female	14.90	12.34		

$df = 29$, $*P < 0.05$

Table 5 shows significant difference found in the mean scores between depressions, stress and life satisfaction among caregivers and non-caregivers of schizophrenic patients. Schizophrenic patients on depression sub scale of DASS as $t(3.956)$ $p < 0.01$, stress sub scale of DASS as $t(2.663)$ $p < 0.01$ and life satisfaction on SWLS $t(-4.630)$ $p < 0.01$. The hypothesis is supported by the results and is significant at $P < 0.01$. It is clear from Table 5 that there is difference in level of Stress, Depression and Life satisfaction among non-caregivers and caregivers of schizophrenic patients

**Table 5
Difference between non-caregivers (n= 30) and caregivers (n= 30) of schizophrenic patients for their score of depression sub scale of DASS, stress on stress sub scale of DASS and satisfaction with life scale SWLS.**

Variable	Group	M	SD	t-value	p-value
Depression				3.956	.000
	Caregivers	20.80	12.13		
	Non- caregivers	10.3	8.06		
Stress				2.663	.013
	Caregivers	23.60	10.42		
	Non- caregivers	16.47	9.80		
Life Satisfaction				-4.630	.000
	Caregivers	15.87	6.60		
	Non- caregivers	25.10	5.89		

$Df = 29$, $p < 0.05$

Table 6 shows significant difference found in the mean scores between depressions, stress and life satisfaction among upper class and lower class of schizophrenic patients.

Schizophrenic patients on depression sub scale of DASS as $t (-2.070) p < 0.05$, stress sub scale of DASS as $t (-1.150) p < 0.05$ and life satisfaction on SWLS $t (2.484) p < 0.05$. The hypothesis is supported by the results and is significant at $P < 0.05$. It is clear by the Table 6 that there is difference in level of Stress, Depression and Life satisfaction among upper and lower class caregivers of schizophrenic patients.

Table 6
Difference between upper class (n= 30) and lower class (n = 30) caregivers of schizophrenic patients for their score of depression sub scale of DASS, stress on stress sub scale of DASS and satisfaction with life scale SWLS.

Variable	Group	M	SD	t-value	p-value
Depression				-2.070	.019
	UC	17.13	8.31		
	LC	23.40	12.23		
Stress				-1.150	.040
	UC	22.00	8.40		
	LC	24.93	10.74		
Life Satisfaction				2.484	.047
	UC	18.87	7.13		
	LC	13.87	6.94		

Df = 29, $p < 0.05$

Conclusion

The present research was carried out to explore difference of depression, stress and life satisfaction among the male and female caregivers and as well as among caregivers and non-caregivers of patients with schizophrenia. Mental illness intertwines a web of doubts, uncertainty and confusion around the family. Unwittingly, the individual with schizophrenic disorder can dominate the entire family through panic, helplessness and inability. Sixty caregivers including thirty male and thirty female caregivers of diagnosed patients as per the DSM-IV-TR criteria with Schizophrenic disorders whose duration of illness was ranged from 1 to 5 years were selected from the different public and private hospitals of Lahore and Faisalabad and 30 non caregivers from general population. There Six main hypotheses were formulated for the study. The t-test was used for statistical analysis. The results of the current study showed the significant difference is present among male and female caregivers of schizophrenic patients, there would be a difference in level of Depression, Stress and Life satisfaction in male and female caregivers of schizophrenic patients. The level of Depression is higher among female caregivers than male of schizophrenic patients. The level of Stress is higher among female caregivers than male of schizophrenic patients. The level of Life satisfaction is lower among female caregivers than male of schizophrenic patients. There is a difference in level of Stress, Depression and Life satisfaction among non-caregivers and caregivers of schizophrenic patients. There is a difference in level of Stress, Depression and Life satisfaction in upper- and lower-class caregivers of schizophrenic patients. There is a difference in level of Stress, Depression and Life satisfaction in caregivers of schizophrenic patients belonging different age groups. In Pakistan, the probable reasons for these findings were that Pakistani society is the male dominating society and in Pakistan mostly male used avoidance coping styles because they want to avoid the stressful situation. Females are more involved in care giving activities such as cooking, helping with eating, putting clothes or shoes, medical care etc, all were done in higher frequency than by male caregivers. So, these activities increase the level of burden among females.

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