

INFLUENCE OF STRESS AND ANXIETY ON THE MENTAL HEALTH OF FAMILY CAREGIVERS OF MENTALLY ILL PATIENTS IN MAKURDI METROPOLIS

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Abstract

The study investigated the influence of stress and anxiety on the mental health of family caregivers of mentally-ill patients in Makurdi metropolis. Ex-post facto survey design was used. The participants were 107 caregivers comprising of 41 (38.3%) males and 66 (61.7%) females within the age range of 16 -64 years, mean age of 33.55 (SD=13.77). Perceived Stress Scale, the Manifest Anxiety Scale and the General Health Questionnaire were used for data collection. Statistical analysis involved the use of simple linear regression and multiple regressions. Findings indicated that, there was no significant influence of perceived stress on the mental of family caregivers of the mentally-ill in Makurdi metropolis. There was significant influence of anxiety on mental health among family caregivers of the mentally-ill in Makurdi metropolis. There was significant joint influence of anxiety and perceived stress on mental health among family caregivers of mentally-ill in Makurdi metropolis. Based on the findings, it was concluded that anxiety has a key role in the mental health of family caregivers of the mentally-ill patients. It was therefore recommended that efforts should be made to reduce the level of anxiety inherent in the family caregivers of the mentally-ill patients. On policy bases, it was therefore recommended that government should formulate policies that would help in assisting family caregivers of the mentally-ill patients in Benue State in particular and Nigeria at large.

Keywords: Stress, Anxiety, Mental health, Family caregivers of mentally ill patients.

Introduction

The burden of mental health problems is increasing globally (WHO, 2001). It is gradually been recognized that mental disorders are a public health which constitutes a major problem throughout the world (Darlami, Ponnose & Jose, 2016). In

2001, mental disorders accounted for 13 % of the world's burden of diseases and this figure is projected to increase to 15 % by the year 2020. Worldwide studies have shown that as many as 450 million people suffer from mental disorder and their disabling effect at individual and national levels to be quite

significant. This had led to the recognition of mental health care as one of the priorities and to its inclusion in the program of primary health care by member states of WHO (Darlami, Ponnose & Jose, 2016; Imas & Wandee, 2011).

The family constitutes a major support system in the continuing care of the mentally ill in our communities, hence many families show a strong resilience in caring for their ill relative, as such their share of physical and emotional distress associated with the distressful condition of the mentally ill cannot be ignored. Family caregiver is usually a family member who has been living with the patient, and has been closely involved in his/her activities of daily living, health care, and social interaction for more than a year (Sandeep, Rathi & Bishnoi, 2020; Lazarus & Folkman, 2014). The family caregivers take care of the day-to-day needs of the patients, monitoring the mental state, identifies the early signs of illness, relapse and deterioration, and help the patient in accessing services. The family caregiver also supervises treatment and provides emotional support to the patient (Bademli 2017; Ranjan, Kiran 2016).

Similarly, Mattoo, Nebhinani, Kumar, Basu, and Kulhara (2012) asserted that family caregivers play a major role in providing assistance to ill persons and their families, a burden that is associated with a lot of emotional and physical stressful experiences, hence individuals who suffer chronic diseases place a considerable burden on family caregivers who take the sole responsibility for caring for the chronically ill patients and this translates to an impaired

mental health of the caregiver (Sandeep, Rathi & Bishnoi, 2020).

Family caregivers undergo a lot of stress, which is associated with daunting problems, difficulties or adverse effects which affect the lives of psychiatric patients' caregivers and also greatly interferes with caregiver's mental health and wellbeing (Kudlicka, Clare & Hindle, 2014). Family caregivers in an attempt to provide the best possible care for a family member, often sacrifice their own physical and emotional needs and such emotional and physical experiences involved with providing care can strain even the most capable person (Bademli 2017). Almost one-third of all caregivers are balancing employment and care giving responsibilities, and of this group, two-thirds report conflicts in roles that require them to rearrange their work schedules, work fewer than normal hours, and/or take unpaid leaves of absence which collectively affects the caregivers mental health and quality of life (Rady, Mouloukheya & Gamal, 2021; Bademli 2017).

The vehicles of psychological stress and anxiety are conceptualized as adjustment to change, daily hassles, and role strains and this the caregivers of mentally ill patients experiences all the features which then translates to chronic stress. The family caregivers bear with the behavioral disturbances of the ill family members and sometimes can also be a target of the patient's abusive or violent behavior. They have to curtail on their social and leisure activities, and sometimes have to take leave from their jobs. In addition, they have to meet the financial needs of the ill member besides

meeting the treatment costs. The continuous stress of care giving may adversely affect the physical and mental health of the caregivers. Caregivers in discharging their duties undergo psychological and physical strain over long periods of time, and this has the capacity to spill over into various areas of life such as the workplace and family relations (Lazarus & Folkman, 2014).

Looking at the concept of stress and anxiety in relation to mental health, Cabral (2014) explained that stress as a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources has an endangering effect on such individuals well-being. The association between feelings of burden and the overall caregiver role is well documented in line with this opinion. Caregivers provide assistance with activities of daily living, emotional support to the patient, and dealing with incontinence, feeding, and mobility resulting to caregiver's high burden and responsibilities translates to their experiencing poorer self-reported health, engage in fewer health promotion actions than non-caregivers, and report lower life satisfaction and psychological wellbeing.

Similarly, Hajisadeghian, Ghezelbash and Mehrabi, (2021) asserted that caregivers, particularly that of closely involved family members such as parents, is important as an outcome measure in mental health care, so as to assess and reduce it for the well-being of both caregivers and the mentally ill. This is so because with the shift to the community, caregivers such as families naturally take on a more central role, hence individuals with

mental illness have typically been mentally ill for many years and they are usually unable to fulfill daily roles in society normally expected of individuals of their age and intellectual ability; thus, they are most likely receive family care.

Family members then, become the primary caregivers of such persons with mental illnesses in most of the nonwestern world. In India, more than 90% of patients with chronic mental illness live with their families. In India one in four patients attending primary care clinics has a mental disorder. Successful management of mental illness in the community relies significantly on an informal or non-professional network of caregivers (Hajisadeghian, Ghezelbash & Mehrabi, 2021).

There are several instances when the caregiver is so stressed with overt subtle changes in their moods (e.g., irritability, hopelessness, forgetfulness), physical signs (e.g., fatigue due to insomnia, reduced mobility, weight changes), and health behaviors (e.g., cleanliness, dietary changes) that might signal distress of an increasingly overwhelmed caregiver (Lazarus & Folkman, 2014). Furthermore, Cabral (2014) asserted that caregivers caring for their patient with mental illness feel stressed, anxious and low, since the illness tends to be chronic and demanding. In the long run, there may occur burnout and emotional exhaustion. The caregivers feel isolated from the society, both due to restriction of their social and leisure activities, as well as the social discrimination and stigma attached to the mental illnesses. Some caregivers may need to look after more than one patient in the

family.

As most caregivers struggle to balance work, family and care giving, their own physical and emotional health is often ignored. As a result of this and lack of personal, financial, emotional resources and stigma, many caregivers often experience significant physical and mental distress but physical effects of care giving are generally less intensive than the psychological effects (Mehmood, Hayat, & Talib 2022). Depression and anxiety disorders found in caregivers persist and can even worsen after the placement of the patient in a nursing home. Many caregivers who institutionalize their relative report depressive symptoms and anxiety to be as high as it was when care was in the home.

Depressed caregivers are more likely to have coexisting anxiety disorders, substance abuse or dependence, and chronic disease. Depression is also one of the most common conditions associated with suicide attempts (Spector & Tampi, 2005). The emotional impact of any psychiatric disorder on family caregivers can vary from frustration, anxiety, fear, depression and guilt to grief. Because care giving is such an emotionally draining experience, caregivers have high rates of anxiety when compared to the general population. Research on family caregivers of mentally ill relatives has historically focused on negative aspects of care giving, often described as caregiver burden.

The World Health Organization (WHO) states caregiver burden as the “the emotional, physical, financial demands and responsibilities of an individual's illness that

are placed on the family members, friends or other individuals involved with the individual outside the health care system (Mehmood, Hayat & Talib, 2022; WHO, 2005). The family caregivers bear with the behavioral disturbances of the ill family members and sometimes can also be a target of the patient's abusive or violent behavior. They have to curtail on their social and leisure activities, and sometimes have to take leave from their jobs. In addition, they have to meet the financial needs of the ill member besides meeting the treatment costs. The continuous stress of caregiving may adversely affect the physical and mental health of the caregivers.

Family members in most parts of the world are the primary caregivers of persons with mental illnesses. In India, more than 90% of patients with chronic mental illness live with their families. The family caregiver continually play multiple roles in care of persons with mental illness, including taking day-to-day care, supervising medications, taking the patient to the hospital and looking after the financial needs. The family caregiver also has to bear with the behavioral disturbances in the patient. Thus, the family caregiver experiences considerable stress and burden, and needs help in coping with it and as such develop different kinds of coping strategies to deal with the burden (Lazarus & Folkman, 2014). In Nigeria and to a lesser extent in other parts of the world, families have been the mainstay of caregiving for persons with mental illnesses, the family caregiver plays multiple roles in care of persons with mental illness, including taking day-to-day care, supervising medications, taking the patient to the hospital and looking

after the financial needs. He also has to bear with the behavioral disturbances in the patient. Thus, the family caregiver experiences considerable stress and burden, and needs help in coping with it. The family caregivers take care of the day-to-day needs of the patients, monitoring their mental state, having to identify the early signs of illness, relapse and deterioration, and helping the patient in accessing services and relevant information for effective coping with the illness supervises treatment and provides emotional support to the patient. In a nutshell, this key support system is provided by the family caregiver(s) and shouldn't be taken for granted nor ignored by the mental health professionals and society.

Generally, the burden of family caregivers leads to negative consequences not only for themselves but also for patients, other family members, and health care systems (Mehmood, Hayat & Talib, 2022; El-Tantawy, Raya, & Zaki, 2010). Their negative quality of life has impacted on poor caring, mistreatment or behaving violently to the patients which causes relapse in patients. Caregiver Stress theory, explained that, if a caregiver is given adequate coping orientation, his response to the care-burden presented will be considered normal and less stressful without interference on the caregiver's mental health. The theory is hinged on the basis that, if given adequate knowledge and information (input) on what a caregiver is expected to experience (control process) the caregivers anticipated care burden which amounts to stress will lessen through the explained coping strategies that ameliorates the influence on the individual mental health. More so Cognitive-relational

theory explains stress and anxiety as a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being. This theory totally agree to the fact that, anxiety has a significant influence on the mental health of family caregivers of mentally-ill patients. This research is aimed at assessing the influence of stress and anxiety on the mental health of family caregivers of mentally-ill patients.

Research Questions

In line with the research objective, the study is guided by the following questions:

- i. Does stress influence the mental health of family caregivers of mentally-ill patients in Makurdi metropolis?
- ii. Will anxiety influence the mental health of family caregivers of mentally-ill patients in Makurdi metropolis?
- iii. Is there a joint influence of stress and anxiety on mental health of family caregivers of mentally-ill patients in Makurdi metropolis?

Research Hypothesis

- i. Stress will have a significant influence on the mental health of family caregivers of mentally-ill patients in Makurdi.
- ii. Anxiety will have a significant influence on mental health of family caregivers of mentally-ill patients in Makurdi
- iii. There will be a joint significant influence of stress and anxiety on mental health of family caregivers of mentally-ill patients in Makurdi

Method

Design

The research design used for this study was a cross sectional survey design. The design was used to estimate the relationship between the independent variables (stress and anxiety) on the dependent variable (family caregivers of mental health) using a linear regression analysis.

Sampling

In order to obtain participants for the study, the researcher used a purposive sampling technique. The purposive sampling technique was adopted by the researcher due to his desire to select only those who are family care givers that provides the needed support and aid the patients cope in their mentally ill state while in or outside the hospital facility. Hence the population of the study is a special one that can be effectively handled with ease, the researcher engaged all the available participants that form the population of the study, but later used the findings to generalize on the entire family caregivers across the state. The researcher had 107 participants for the study after seeking their consent.

Participants

The participants for the study were 107 caregivers of mentally-ill in-patients and out-patients at the Federal Medical Centre and Benue State University Teaching Hospital, Makurdi. The participants comprised of 41 (38.3%) males and 66 (61.7%) females with the age range of 16- 64 years, mean age of 33.55 (SD =13.77). As to their educational level, 10 (9 8%) caregivers had Primary School Leaving Certificate, 52(48.6%) had

Secondary School Certificate, while 45 (42. 1%) had post Secondary School Certificates. Based on their marital status, 45(42. 1%) caregivers were single, 47(43.9%) were married, 15(14.0%) were widowed.

Instruments.

Three instruments were used for data collection. They include the perceived Stress Seale (PSS), The Manifest Anxiety Scale (MAS) and the General Health Questionnaire (GHQ).

- i. Perceived Stress Scale (PSS) developed by Cohen (1994). The Perceived Stress Scale is a 10 item scale developed to measure the degree to which situations in one's life are appraised as stressful. PSS scores are obtained by reversing responses (e.g., 0 = 4, 1 = 3, 2 = 2, 3 = 1 & 4=0) to the four positively stated items (items 4, 5, 7, & 8) and then summing across all scale items. The scale has a reliability coefficient of 0.92.
- ii. The Manifest Anxiety Scale (MAS) developed by Taylor and validated for use in Nigeria by Morakinyo and Oyelaran (1986) to measure anxiety triggered by stress and trauma related situations. The version with 28-item scale is used as an objective psychological measure of anxiety. Most of the items are drawn from the MMPL In scoring the instrument, a score of one is obtained on every item circled "True" while a 0 is scored for items circled "False" The scale has been confirmed to have a reliability coefficient of .79.
- iii. The General Health Questionnaire

(GHQ) developed by psychologists Goldberg and Williams (1988) to measure the degree at which stressful and traumatic events affects the emotional and mental health status of an individual. It has 12-items with options ranging from Seldom (1), Sometimes (2), Frequently (3) Always (4). The reliability coefficient of General Health Questionnaire has been established by to be .88.

Procedure

Prior to the administration of the questionnaire, the researcher obtained letter of introduction from the Department of Psychology which researcher used to seek ethical approval(permission) from the management of Federal Medical Centre and the Benue State University Teaching Hospital. The researcher recruited and trained two other research assistants who assisted in administration of the instruments. The researcher together with the research assistants meet with the participants individually to explain and solicit for cooperation in responding to the questionnaire.

The procedure of administration of the instrument was made easy as a face-to-face and on-the-spot administration approach was adopted, where the participants were attended to one at a time, Also, after showing the letter of introduction to those in hospitals management, the researcher and his

Table One: Stress and mental health.

Predictor	R.	R2	Df	F	t	P
Constant	.091	.008	1;105	β .880	.11.118	.000
Stress	22.01	1.98		.091	.938	.350

assistants were allowed to administer the copies of questionnaire to participants. This technique was adopted in line with other quality control measures such as permission and informed consent from the patients, where only the participants who accept were allowed to participate. Secondly, proper scoring of the items was done and the completed instruments were properly coded by the researcher. This quality control measure ensured standardization and reduced mutilation of the instruments.

Data Analysis

Data obtained from the administered questionnaires were collated. The demographic data collected through the questionnaire were analyzed using percentages and frequency counts, means and standard deviation for demographic information about the participants. In testing the hypothesis, the researcher used Linear Regression Analysis in testing the hypothesis so as to effectively establish the independent and joint influence of the independent variables on the dependent variable of the study.

Results

In testing the research hypotheses, linear regression was used, The influence of stress and anxiety as well as their combined influence on the mental health of family caregivers of mentally-ill patients in Makurdi is been examined using the linear regression.

The result presented in Table one revealed that, there was no significant influence of perceived stress on the mental health of family caregivers in Makurdi. $F_{(1, 105)} = .880; p > .05$). Perceived stress explained .8%

of the total variance observed in mental health among family caregivers of mentally-ill patients in Makurdi, Benue State. Based on this finding, hypothesis one was not confirmed.

TableTwo:Anxietyand mental health.

Predictor	R.	R ²	Df	F	B	T	P
Constant	.633	.401	1; 105	.70.351	.633	4.707	.000
Stress	22.01	1.98				8.388	

Table 2 showed that anxiety significantly influences family caregivers' mental health ($F_{(1,105)} p < .001$). This result indicated that 40.1% of the total variance accounted for family caregiver's anxiety with significant influence on the caregiver's mental health. This significantly confirmed the hypothesis that anxiety will significantly influence

mental health of family caregivers in Makurdi. Based on this finding, the result presented in table two showed that anxiety significantly influences mental health of mentally-ill patients' family caregivers in FMC and BSUTH Makurdi. Hypothesis two was therefore accepted.

Table Three: Stress and anxiety on mental health.

Predictor	R.	R ²	Df	F	B	T	P
Constant	.635	.404	2; 104	35.19		4.359	.000
Anxiety	22.01	1.98		0	.644	8.302	.000
Stress					-.050	-.647	.519

The result presented in table three showed that, there was a significant joint influence of anxiety and stress on mental health of family caregivers of mentally-ill patients in Makurdi, Benue State $R = .635$ and $R^2 = .404$, $F(2, 104) = 35.190; P < .001$). The result showed that anxiety and stress jointly accounted for 40.4% of the total variances observed in mental health among family caregivers of mentally-ill patients in Makurdi, Benue State. Based on this findings, hypothesis three was confirmed.

the mental health of family caregivers. Regression analysis was conducted and the results indicated that.

Hypothesis one was tested to find out whether stress has significant influence on the mental health of family caregivers of mentally-ill patients in Makurdi, Benue State. Finding from the analysis indicate that stress did not have significant influence on the family caregiver's mental health. The findings further showed that, most of the family caregivers'are able to quickly adjust emotionally to the stressful situations inherent during care-giving period. This also means that a family caregiver who

Discussion

In the study, two variables stress and anxiety were examined to ascertain their influence on

adequately prepare will be able to adjust to the stressful period of the care giving duration and it will not have adverse issues on his or her mental health. The family caregiver who is adequately prepared and understands the importance of caregiving responsibility will be able to understand what may happen to him/her (insight), develop an understanding of what has happens to others (empathy) and experience a quality of life that is often denied them during the caregiving period (achievement). Caregivers who emotionally adjust to this situation are able to maintain emotional equilibrium in the face of internal and external stressors and it is facilitated by cognitive processes of acceptance and adaptation, a prerequisite of coping tendencies which leads to mental health instability.

In agreement with the findings relating to hypothesis one, Cohen (2008) in his caregiver Stress theory, explained that, if a caregiver is given adequate coping orientation, his response to the care-burden presented will be considered normal and less stressful without interference on the caregiver's mental health. The theory is hinged on the basis that, if given adequate knowledge and information (input) on what a caregiver is expected to experience (control process) the caregivers anticipated care burden which amounts to stress will lessen through the explained coping strategies that ameliorates the influence on the individual mental health.

This findings of this work disagreed with those of Rady, Mouloukheya and Gama, (2021), Darlami, Ponnose and Jose, (2016), Marcon (2015), Hargrove, Nelson

and Cooper (2013), Maldonado (2014) who in their separate studies stated that stress can cause illness, hence all kinds of stress can lead to changes in behavior and in physiology of an individual, that is when someone is under stressful situation, it begins to negatively affect his or her physical and mental health. Furthermore, they stated that stress can make the individual more susceptible to mental and physical illnesses like the common cold (Cohen, Doyle, Skoner, Rabin, & Gwaltney, 2007). Stressful related events, such as caregiving and loss of loved one may result in insomnia, impaired sleeping, and health complaints.

Hypothesis two stated that, anxiety will have a significant influence on mental health of family caregivers of mentally-ill patients in Makurdi. The study found that anxiety experienced by the family caregivers of mentally ill patients have significant influence on their mental health in Benue State University Teaching Hospital and Federal Medical Centre Makurdi respectively, this means that, the second hypothesis was accepted. The results from this current study conform with those of previous studies and indicate that anxiety had significant influence on mental health of caregivers of mentally-ill patients. According to cognitive relational theory, our dysfunctional thoughts lead to extreme emotions and anxiety and these extreme emotions in turn, lead to maladaptive behaviors which impairs the mental health of the individuals concerned. Cognitive-relational theory explains stress and anxiety as a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or

her resources and endangering his or her well-being. This theory totally agrees to the fact that, anxiety has a significant influence on the mental health of family caregivers of mentally-ill patients.

This finding is in line with those of Mehmood, Hayat and Talib, (2022), Anderson and Shivakumar (2013) and Krucik (2014). They in their separate works reported that, anxiety disorders are the most common triggers of mental illness or disorders, affecting 14% of Australians in a one-year period. Caregivers with anxiety disorders may be unable to stop worrying about seemingly unimportant things, including the health and possible recovery of the patients and this may sometimes lead to situations as much worse than they actually are. Perception of anxiety interferes with the enjoyment of life and disrupts relationships and self-perceptions.

Hypothesis three stated that, there will be a joint significant influence of stress and anxiety on mental health of family caregivers of mentally-ill patients in Makurdi. The study found that perceived stress and anxiety had a combined influence on the mental health of the family caregivers. This implied that stress and anxiety have joint influence on mental health of family caregivers who are attending to mentally ill patients in Benue State University Teaching Hospital and the Federal Medical Centre in Makurdi respectively.

The result further indicates that, on independent basis, perceived stress did not significantly influence the mental health of the caregivers of mentally-ill patients in Benue State University Teaching Hospital

and the Federal Medical Centre in Makurdi, while perceived anxiety shows a Significant independent influence on caregivers' mental health.

This finding indicates that, the combination of stress and anxiety predicts mental health of family caregiver of mentally-ill patients. It therefore means that, a combination of stress and anxiety being experienced in high proportion by caregivers triggers a negative mental health. This finding is in line with the works of Sharma, Rathi and Bishnoi, (2020), Jordan and Young (2013) and Cabrera, Duarte, Ferreira and DosSantos (2014). From their separate studies, it was established that the family constitutes an important support system in the care of the mentally-ill in medical facilities in their various community, however, the task of caregiving results to a lot of stress and anxiety while there is little or planned strategies for local and community intervention to promote mental health and prevent mental illness and the caregivers. This situation continues to predict stress and anxiety among the caregivers of people with mental illness and this mediate on caregivers mental health and wellbeing, as such mental health professionals need to be aware of and address the stress and anxiety borne by the family in caring for patients with mental illness as they treat the patient.

Conclusion

In spite of the fact that anxiety have great impact on family caregivers of patients with mental illness, the benefit of family caregiving to mentally ill patients was observed in 80% in our study as such family caregivers' anxiety and stress should be

recognized as influencing domains on caregivers' mental health domain that need to be attended.

Findings from this study have led to the conclusion that, anxiety is a disturbing phenomenon faced by caregivers of mentally-ill patients but do not significantly influence the caregiver's mental health of family caregivers of mentally-ill patients in Makurdi metropolis.

Secondly, stress and anxiety are very important factors that significantly influence on the mental health of caregivers of mentally ill patients in Makurdi metropolis.

Recommendations

Based on the findings of this study, the following recommendations are put forward:

- i. The government and relevant organizations should make policies that will provide palliative assistance to family caregivers as this will ease the psychological trauma.
- ii. In as much as the finding from the study indicate that stress do not any way have significant influence on the family caregiver's mental health, it recommended that there should be provision for social support, adequate coping strategies and other well-tailored aspects of stress prevention and intervention programs for the family caregivers.
- iii. It was also recommended that, medical and rehabilitative facilities should make it a point of duty to have counseling sessions and psychological debriefing for the caregivers, as this reduces the fear and anxiety on the state

of their patients. This strategy will help the caregivers have a stable emotional disposition devoid of fear and anxiety which impairs their health of the caregivers when left wondering in the dark as to the health of their patients.

- iv. Detailed attention should also be given towards increasing the functional coping strategies through the provision of psycho-education so as to reduce the dysfunctional coping strategies used by the caregivers. A more specific approach can be followed that will allow focus on building stress resistance among the family caregivers in the various health facilities.

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