

The Influence of Burden of Care and Gender on Mental Health of Care-Givers in Uyo, Nigeria

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Abstract: The study participants were 97 care-givers (relatives and friends of mental patients) drawn from the Psychiatric Unit of the University of Uyo Teaching Hospital and the Psychiatric Hospital Eket. Their ages ranged from 17 to 63 years. Data were collected using the Zarit Burden Interview (ZBI) and the General Health Questionnaire (GHQ). A cross-sectional research design was used in the study while a 2-way analysis of variance (ANOVA) was adopted for data analysis. Findings indicated that burden of care had a significant influence on mental health of care-givers, $F(1, 93) = 8.40, p < 0.01$. Also, gender had a significant influence on mental health of care-givers, $F(1, 93) = 9.52, p < 0.01$. Findings were discussed with particular reference to providing intrinsic motivation to care-givers and a reform of the health system in Nigeria.

Keyword: Burden of Care, Gender, Mental Health, Care-givers

I. Introduction

The American Psychiatric Association via the Diagnostic and Statistical Manual of Mental Disorders 5- (2013) (DSM- IV, 2013) ¹ defines mental disorder as a psychological syndrome associated with distress, impairment in an important area or areas of functioning, or significantly increased risk of death, disability, or loss of freedom, occurring not merely as predictable response to a disturbing life event such as a bereavement but assumed to be a manifestation of a psychological or biological dysfunction. On its part, the World Health Organization via the International Statistical Classification of Diseases and Related Health Problems (1992) (ICD -10, 1992) ² defines mental disorder as a clinically recognizable collection of symptoms or behaviour associated in most cases with distress or interference with personal functions. Thus, a deviant pattern of behaviour, whether political, religious, or sexual, or a conflict between an individual and society, is not a mental disorder except it is symptomatic or dysfunctional in the individual. From the foregoing, mental illness is a condition that impairs a person's functioning in various facets of lives including work, relationship and leisure and this makes the patient to be in constant care or assistance of someone else whether in a hospital, nursing home or at a living home.

The word 'care' relates to both personal and professional activities: while personal care relates to services offered by relatives such as spouses, parents, children, family members, and friends of a patient, professional care are ones given by highly trained experts, whose autonomy of action is legally defined and who act in accordance with expert knowledge and in ways appropriate to their responsibilities. They are usually independent in their decision making. Care giving in either form can be greatly enriching and deepens human connections; but it can also create crushing burdens, dove-tailing into mutual punishment. Therefore, care-givers must be prepared morally and emotionally for the task, else they become frustrated and harbour regrets in the process. Even professional care-givers are not spared; they may become so stressed by impossible demands that they become incapable of giving the care they intended and their frustration can turn into undifferentiated anger, affecting their performance and resulting in denial of comfort to the patient and family (Gordon, 1997) ³.

In their care-giving identity theory, Montgomery and Kosloski (2000) ⁴ describe care-giving as a systematic process of identity change in which the initial familial relationship (such as father-son) gives way to a new one embedded in care-giving. As the needs of the care recipient increase in quantity and quality over time, there is a corresponding change in the care-giver's role and identity in relation to the care recipient. This culminates in care-givers' change in their own identity (Skyker & Burke, 2000) ⁵. Discrepancy between what a care-giver does and what he thinks he is doing brings about the change and this identity discrepancy causes stress or burden and serves as a guide for effectively targeting services. Care-giving can also result in feeling a loss of self-identity, lower levels of self-esteem, constant worrying or feelings of uncertainty. Care-givers tend to have less self-acceptance and feel less effective and less in control of their lives than non-care-givers (Pinquart & Sorensen, 2003) ⁶.

It is instructive to note that when patients expect more than the role expected of care-givers, there may be a functional decline on the part of care-givers and problem behaviours in the part of the patient may lead to stress and relationship burden in the care-givers. Burton (2003) ⁷ indicated that care-giving can make one to feel

good about oneself and that if one is appreciated, it may give meaning to one's life, enable one to learn new skills and strengthen one's relationship with others. Positive and negative aspects of care-giving tend to be associated with psychological well-being and the care-giver's willingness to continue to providing care (Balducci, Mnich, & Mckee, 2008)⁸. The positive aspect of care-giving can be strengthened by psychological support and practical assistance with problem solving from health care professionals (Haley, 2003)⁹. The negative aspect of care-giving can be particularly stressful, culminating in unrelenting responsibility, social isolation, burnout and increased risk for illnesses. This is exemplified in the concept of care-givers' burden.

Burden refers to the presence of problems, difficulties, or adverse events that affect the life (lives) of the mental patients' significant other(s) (Platt, 1985)¹⁰. It entails the impact the patient has on the family or the impact living with the patient has on the family's daily routines and health. Burden of care refers to a person's emotional response to changes and demands that occurs as he or she give help and support to the sick relative. It relates to all that happens in the psychological, physical, financial and social lives of the care-giver as well as all the changes in the life of the care recipient. That is, are those happenings / changes causing stresses and strains for the care-giver, and if so, to what extent?

Indeed, the majority of care-givers are personal, unpaid relatives and friends of the patient who provides services including lifting, turning, bathing, dressing, feeding, cooking for, shopping for, running errands for, giving medicines to, keeping company to the patient and providing emotional support to the patient. These roles are complex and multi-dimensional and quite hard as the care recipient may not know the care-giver anymore. He or she may be incapable of talking or following simple instructions. This may make the care-giver to view the patient in a different limelight, quite different from what he or she was prior to the illness. The burden of caring for a mental patient affects the care-giver's life in diverse ways including anxiety, depression, a diminished social life, loss of self-esteem, and a decline in job performance, among others. Family burden is the emotional and economic strains that family members experience when a relative is discharged from a mental hospital and returns home. It is a complex problem that affects the treatment of chronic mental patients. The physical and emotional status of the family members and care-givers (expressed emotion) impacts greatly in the health, welfare and successful rehabilitation of chronic mental patients (Kelly & Hewson, 2000)¹¹. In Davison and Neale (2001)¹² it was indicated that 58% of discharged schizophrenic patients that returned to high expressed emotion families relapsed.

Family members tend to be important providers of direct care and emotional support for their ill relatives and these roles are critical in the development of human capital and places enormous strains on family relations and household budgets. They contribute to the decline of family's income level and health of the care-givers, making them most vulnerable to physical and emotional problems (Cooney, Mortimer, & Winter, 1995)¹³. In their study, Dean and Gadd (1990)¹⁴ indicated that care-giving burden affects physical and mental health in the following ways: anxiety (care-givers tend to feel more tense and uneasy than non-care-givers); stress (80% of care-givers admitted to feeling a lot of stress); depression (50% of them have clinically significant depression); and illness (their immune system function more poorly and their wounds heal slower; they suffer from more colds and other viral infections than non-care-givers). Also, Brown and Biirstwistle (1998)¹⁵ in their study using 126 care-givers of schizophrenic patients indicated that among the five dimensions of burden, care-giver anxiety was the highest, followed by dependency of the patient, feeling of shame and guilt and then family interference. On their part, Ustun, Ayuso-Mateos, Chatterji, Mathers and Murray (2004)¹⁶, on care-giving burden in spouses, indicated that depression is the leading cause of disability worldwide accounting for 4.4% of lost years of healthy life due to premature death or disability among care-givers.

Sleep disturbance is also implicated in care-giving and this makes care-givers to resort to psychotropic drugs to induce sleep or relaxation. Chokroverty (1999)¹⁷ showed that about 30% of care-givers use psychotic drugs compared to 20% of non-care-givers. Also, Vitiello and Borson (2001)¹⁸ indicated that although there was no significant difference in the quantity of sleep by care-givers and non-care-givers (22.4 hours versus 23.7 hours every three days) but the quality of sleep by care-givers was less). A study by the American Medical Association (2005)¹⁹ showed that the strains and demands of care-giving put care-givers at increased risk for illnesses such as colds, flu, cancer, heart disease, and depression. An increased incidence of anxiety correlated with a higher amount of psychotropic drug among care-givers (Cochrane, Goering, & Rogers, 1997)²⁰. Prevalence of mood and anxiety disorders within a 12-month period is estimated to 9.5% and 18.1% respectively, among care-givers in the United States (Kessler, Chiu, Demler, & Walters, 2005)²¹. A similar finding was obtained in Norway: 10% of care-givers suffer from depression and about 20% from anxiety disorders during a 12-month period (Torgersen, Cramer, & Kringlen, 2002)²². Compared to non-care-givers, care-givers perceived their own health status to be lower (Grafstrom, Fratiglioni, Sandman, & Winblad, 1992)²³. Three measures of cellular immunity have been shown to be lowered in care-givers than in a normal control (Kiecolt-Glaser, Dura, Speicher, Trask, & Glaser, 1991)²⁴.

Literature also indicates that caring for a person that is cognitively impaired is highly stressful. Clipp and Moore (1995)²⁵ indicated that more than 80% of Alzheimer's disease care-givers experience high level of

stress, depression and physical, psychological, social, and financial problems that lead to disease morbidity. Furthermore, care-givers of Alzheimer's disease patients also report feeling of loss and grief, impaired immune system functioning, elevated blood pressure, and poor self-care (lack of exercise and sleep) and relatively high use of psychotropic drugs (Frank, 2007²⁶; Timmermann, 2004²⁷; Haley, 1997)²⁸. Meanwhile, Chakraborty, Kulhara, and Verma (1992)²⁹ also indicated that many caregivers tend to develop negative health behaviours such as smoking, failure to exercise and overeating.

Literature has also indicated that the gender of a care-giver is a critical factor on their mental health. A review of 229 studies by Pinquart and Sorensen (2006)³⁰ showed that the differences between male and female care-givers on mental health were very minimal. Both genders reported no differences in use of informal and formal support. However, women tended to have higher levels of burden and depression, lowered level of subjective well-being and physical health than their male counterparts. In addition, women reported that care recipient had more behavioural problems, they provided more care-giving hours, help with more care-giving tasks, and assisted with more personal care than their male counterparts. Furthermore, findings from Sharpley, Bitsika, and Efremidis (1999)³¹ indicated that female care-givers reported more burden of care than their male colleagues in terms of depression, anxiety and visits to physicians. On their part, Luttick, Jaarsua, Veeger, Tirjssen, Sanderman, and Velahuisen (2007)³² indicated that female care-givers of heart disease patients reported more physical and mental health problems than male care-givers; more colds, flu, high blood pressure, depression and impending doom. Male care-givers had less of these symptoms.

Generally, care-giving is embedded in economic, social, psychological, and health (physical and mental) burdens; however, care-givers should be made to derive intrinsic motivation in the task of caring for a sick relative.

1.1 Purpose Of The Study

Given the high incidence of mental illness in the society and the corresponding high rate of care-giving services to assist mental patients, the study seeks specifically to:

- (1) Determine the role of burden of care on mental health of care-givers;
- (2) Investigate the influence of gender on mental health of care-givers;
- (3) Determine the interactive role of burden of care and gender on mental health of care-givers.

1.2 Hypotheses

Two hypotheses were posited in the study as follows:

- (1) There will be a statistically significant difference between care-givers with high burden of care and care-givers with low burden of care on mental health;
- (2) There will be a statistically significant difference between male and female care-givers on burden of care.

II. Method

2.1 Participants

Ninety-seven (97) care-givers served as research participants. They were drawn from health institutions in Akwalbom State Nigeria as follows: University of Uyo Teaching Hospital, Psychiatric Unit (23), other units (31), Psychiatric Hospital Eket (33), Special Children's' Home Uyo (10). They were 39 males and 58 females who were further categorized into 59 high burden caregivers and 38 low burden caregivers. Their ages ranged from 17 to 63 years with a mean of 35.48 years. They were all personal care-givers that volunteered to partake in the study, having been individually approached and solicited to partake in the study by the researchers.

2.2 Instrument

The Zarit Burden Interview (ZBI) and the General Health Questionnaire -12 (GHQ-12) were used in the study. Burden of care was assessed using the ZBI (Zarit, Reever, & Bach-Peterson, 1980)³³ validated for the use with Nigerian samples by Akinbiyi (2001)³⁴. It has 22 items arranged and scored in a 5-point Likert scale format as follows: 0 = 'never', 1 = 'rarely', 2 = 'sometimes', 3 = 'quite frequently', and 4 = 'nearly always'. Items scores are added up to give a total score ranging from 0 to 88. The norm is obtained through the median score of the participants (47) and scores equaled to or above the norm depict high burden of care while scores below the norm depict low burden of care. The alpha co-efficient of the ZBI is 0.84 and test-retest co-efficient is 0.85 while its concurrent validity index is 0.64 (Akinbiyi, 2001)³⁵.

Mental health was assessed using the GHQ-12 (Goldberg & Blackwell, 1970)³⁶ validated for Nigerian use by Gureje and Obikoya (1990)³⁷. It has 12 items arranged and scored in a 4-point Likert scaled format ranging from 0 to 3 (with variation in items). The scale gives a total score ranging from 0 to 36. The mean GHQ-12) score of the participants yields the normative score (Goldberg, Oldhinkel, & Ormel, 1998)³⁸. Scores equaled to or above the norm reflect poor mental health while scores below the norm represent good mental

health. The GHQ-12 has a co-efficient alpha of 0.85, a one week test-retest co-efficient of 0.85, and a convergent validity index of 0.43, ($P < 0.001$)(Goldern et al., 1998)³⁹.

2.3 Procedure

Participants were individually approached and administered the instrument by the first author and trained research assistants at the health institutions. The assistance and cooperation of the authorities in each institution was solicited and obtained. These facilitated the task of recruiting and administering the instrument on the participants in the waiting room/ hall of each institution. Since the study made use of participants that could understand English Language there was no difficulty in completing the instrument. Participation in the study was voluntary and all participants provided informed consent.

2.4 Design And Statistics

The study adopted a cross-sectional research design. A 2-way analysis of variance (ANOVA), with unequal sample sizes was used for data analysis.

III. Results

The analysis of the mean scores shows the following: sum for high burden of care – 44.68; high burden of care, males – 18.12; high burden of care, females – 26.56; sum for low burden of care – 32.73; low burden of care, males – 13.84; low burden of care, females – 19.89; grand sum – 76.41.

Table 1: Summary Table For Burden Of Care × Gender On Mental Health Of Care-Givers

SOV	SS	DF	MS	F
A (BURDEN OF CARE)	3443.25	1	3443.25	8.40
B (GENDER)	3897.68	1	3897.86	9.52
A*B (INTERACTION)	148.21	1	148.21	0.39*
S/AB (ERROR)	38083.7	93	409.50	
TOTAL		96		

* Not significant.

As evident in Table 1, a 2 x 2 ANOVA revealed that there was a significant main effect of burden of care, $F(1, 93) = 8.40$, $p < 0.01$ and gender, $F(1, 93) = 9.5$, $p < 0.01$. The interaction of burden of care and gender was not significant.

IV. Discussion

The first finding showed that burden of care had a significant influence on mental health of caregivers. This finding is consistent with those of many scholars including Pinquart and Sorensen (2003)⁴⁰, Brown and Biirstwistle (1998)⁴¹ and American Medical Association (2005)⁴², among others, who indicated that care-giving impacts the physical and mental health of caregivers adversely. Caregivers on high burden of care experience poor mental health than their counterparts on low burden of care.

The second finding indicated that gender exerted a significant influence on mental health of caregivers. This finding is in line with the findings of Sharpley et al., (1999)⁴³ and Luttick et al., (2007)⁴⁴ who indicated that women tended to have lowered physical and mental health compared to the male counterparts on care-giving task. Female care-givers in the study trended to report high burden of care than their male counterparts.

The third finding indicated no significant interaction of burden of care and gender on the mental health of care-givers.

The findings of this research have implications in our mental health care system. Public education about the nature of mental illness is imperative. Frequently those living with mental patients are most familiar with the patients' behaviour in the early stages of the disease, when they are at their worst. During hospitalization, the patient's gradual change toward a more stable state is not readily observed. Care-givers may apprehensively expect to see again the bizarre behaviour that took the patient to hospital. Programs of public education and consultation with family members may help short-circuit fantasies and misguided expectations about the patient's condition and help the family to readily accept the patient. Moreover, living condition in a typical mental hospital is appalling. Mental hospital serves to remove nuisances from the community and keep them from public view; they often fail to meet the needs of the patients who hope to return to the community after treatment. A rethinking of the goals of hospitalization and the methods used to achieve them can make a significant contribution toward prevention of mental illness. Furthermore, a situation where the society does not provide any assistance to families of mental patients needs a rethink. The burden of caring for mental patients alone is heavy, coupled with the economic and financial costs involved. Payment of sickness benefits is hereby advocated to alleviate the sufferings of families with mental patients. Intrinsic motivation should be provided for such families to enable them cope with the high demands of caring for mental patients.

With respect to gender, the finding indicated that females are worst affected in caring for their sick relative. Of course, females have the natural tendency to be care-givers, but they do so at the risk of their own health. Also, females are worst affected in terms of economic dependence. Where they spend most of their working hours caring for a sick relative, they are exposed to abject poverty. They are denied the basic necessities of life. Effort should be made to help female care-givers, especially widows to cope by providing them with material and financial support. Special fund should be created to help alleviate the plights of families of mental patients. Finally, the ultimate aim of treatment is rehabilitation and re-integration of the ex-mental patient into community life. This can be actualized through occupational therapy. In these respect, patients' job aptitudes and capacities should be assessed and compared to existing work opportunity at the later part of hospitalization. Retraining should be provided where new skills will better fit the patient into the labour market. Discharged patients should be gainfully employed to prevent relapse and prevent their care-givers from being obsessed about their economic losses occasioned by the patient's sickness. Care-givers should not be sacked from their employment on account of caring for their sick relative. The health system reform advocated should be all-embrative and provide the needed synergies for care-givers to cope. Care-givers should be made to derive intrinsic motivation in their care-giving task and mental health experts should provide consultation to care-givers to enable them to cope with their burden.

V. Conclusion

It is evident from the results of this study that burden of care and gender exert a significant influence on mental health of care-givers. It can be concluded that burden of care and gender are critical variables in predicting the mental health of care-givers of mental patients. Female care-givers are more vulnerable to experiencing high burden of care than their male counterparts. However, the sample size of this study was relatively small to warrant generalization of the study to the entire population of care-givers of mental patients. More researches are needed in this regard.

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