

Caregiving and Stress: Experience of People Taking Care of Elderly Relations in South-eastern Nigeria

*UO Okoye¹, SS Asa²

¹Department of Social Work, University of Nigeria, Nsukka, Enugu State, Nigeria.

²Department of Demography and Social Statistics, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria.

*Correspondence to: Uzoma O Okoye, uzokoye@yahoo.co.uk

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Abstract

Providing care especially to the elderly, takes a huge toll, both physically and emotionally on the caregiver. With the population of the elderly growing in Nigeria, one of the emerging issues is the care and support of elderly persons in years to come. Few people are prepared for the responsibilities and tasks involved in caring for the aged because of the stress involved. This study investigates the experiences of caregivers of elderly relatives. Questionnaires were distributed to 330 respondents. Result shows that there exists a significant relationship between caregiver's age and level of stress ($p=0.001$). The sex of care receiver, the level of education of caregivers, level of education of care receiver are all significantly related to the level of stress. The role of social workers in future care and support of the elderly in Nigeria is discussed.

Keywords: Caregiving; caregiver; stress; elderly.

1. Introduction

Providing care to someone especially the elderly whether full time, part time, formal, informal or long distance takes a huge toll, both physically and emotionally. Few people are prepared for the responsibilities and tasks involved in caring for the aged because of the stress involved in it. [1] and [2] state that caregivers provide many kinds of help to the care receivers ranging from assistance with shopping to help with daily task such as bathing, dressing, feeding, lifting, turning him or her in bed, cooking shopping, paying of bills, running errands, giving medicine, keeping him or her company, providing emotional support and so many other things. All these help rendered by caregivers can be time consuming and emotionally, physically and psychologically draining. This then contributes a lot of stress on the caregivers [3]. Literature suggests that caregiving produces great amounts of caregiver burden and stress [4, 5]. When stress builds up it can result in poor health and depression of the caregiver [1, 6-8].

Caregivers are at a greater health risk than the care receivers because when the caregivers devote themselves to the needs of someone else, they tend to neglect their own needs. They may not recognize or may ignore the signs of illness, exhaustion or depression that they are experiencing. Stress may negatively impact on the physical health of the caregiver or cause the caregiver to be physically or verbally aggressive towards the care receiver. Studies have also shown that one reason for elder abuse and neglect is caregiver stress [9].

Apart from health concerns brought about by stress, scholars are of the view that it is common for caregivers to feel anger, frustration, guilt, isolation, unhappiness in marriage, anxiety, depression, a diminished social life, loss of self esteem from time to time and dissatisfaction with life [10, 11]. Caregivers begin to feel guilty about all things they are not able to do for this elderly and responding to this, they start again giving more than they should just to know if they could effect change. Guilt therefore may be a cardinal feature of the caregiving experience. In a study of caregivers, scholars found that guilt was positively correlated with burden of stress and that it accounted for a significant amount of the variance in caregiver's sense of burden even after contextual and stressor variables were controlled [11, 12]. Frustration, though a normal and valid emotional response, is one of the feelings that could arise as a result of being a caregiver to the elderly. This arises out of trying to change an uncontrollable circumstance in taking care of the elderly, especially those with Alzheimer's disease or other kinds of dementia [13]. [14] reported that caregivers who are home bound tend to be isolated from normal daily contacts. Isolation may lead to depression and anxiety, which in turn increase the stress.

Feelings of depression can become a serious problem for some caregivers. Many caregivers tend to develop negative health behaviours such as smoking, over eating, not exercising and even neglect taking care of themselves which results to high

mortality rate of both the caregiver and the care receiver. Caregivers are also stressed by restrictions on their social life especially those taking care of an Alzheimer patient. The caregivers here, have fewer visits to friends and family, spend less time chatting, spend less time in their house of worship and spend less time with their hobbies [3]. Marriages can also be affected by caregiving responsibilities. Caregiving can reduce the time husband, wife and children (if any) have for themselves. [15] found that caregiving demand, role captivity, and job conflict were positively associated with self-reported depression. This suggests that work-related strains and role strains were associated with depression levels among caregivers.

Caregiving can create positive feelings. As a positive influence, stress can compel one to action, which can result in a new awareness and an exciting new perspective. Even though caregiving can be quite demanding and is linked to serious stress and health problem being a caregiver can also be rewarding [16]. Some caregivers feel happy and fulfilled because they are able to help and assist one in need and still wants to do more [17]. According to [18], providing for the needs of someone you care about can be very satisfying. It enables people to feel useful, needed, appreciated and important. The experience of caregiving can also bring families together and cause people to appreciate life more [19]. [20] reports that adult children who are caregivers to the elderly parents find caregiving gratifying because they can pay back the care, which their parents provided to them when they were young.

1.1 Factors influencing caregiver stress

Studies have shown that caregivers stress is also influenced by many factors. The first of these factors is the attitude of the caregivers towards the care receivers. For instance, caregivers who attribute patients troubling behaviours to the patient's illness are less burdened than caregivers who attribute the patient's behaviour to the patient's wilfulness. Caregivers who see the patients as emotionally demanding or dependent feel a higher sense of burden than those who see the patient as disturbing or disabled [13, 21-23]. In a study by [24], caregivers caring for very forgetful patients perceive their burden as being higher than caregivers who care for patients with mild forgetfulness. Also in another study, caregivers' interpretations of the situation appeared to have a more significant impact on the well-being of the caregiver than did objective characteristics of the experience [25].

Scholars have also opined that the behaviours and attitudes expressed by the care receivers can influence the caregiver's stress [26]. The elderly sometimes focuses exclusively on him or herself and try to use power, pressure, influence or control in ways destructive to their relationship with their caregivers. To some extent, the elderly person's behaviour can be self-centred and not noticing other people feelings and not realizing when they are upset or when something you do upsets them. Occasionally, the elderly develop abusive behaviour. In this regard, they complain bitterly about unavoidable situations, finding faults with almost everything, blaming others for problems caused by themselves, refusing advice that would ease care tasks because they think that they know better and their ideas should be carried, prolonging conversations through repetition and demanding help beyond the caregiver's capacity. This invariably may induce stress.

Educational attainment, unemployment, gender and religiosity have also been shown to influence caregiver stress. For instance, findings by [27] show that unemployed caregivers and caregivers with lower educational attainment have a higher chance of reporting caregiver stress than their employed and educated counterparts. In a study [28] found that sons tend to become caregivers only in the absence of an available female sibling; are more likely to rely on the support of their own spouses; provide less overall assistance to their parents, especially "hands-on" services; and tend to have less stressful caregiving experiences independent of their involvement than daughters. Therefore, females tend to experience stress during caregiving than males. Also [29] reported that intrinsic and organizational religiosity was associated with lower perceived burden of care and that negative religious coping (e.g. feelings that the caregiver burden is a punishment) predicted greater depression.

1.2 Theoretical orientation

Scholars have tried to provide an understanding of the relationship between caregiving and stress. The first of such theoretical orientation is attachment theory. According to [30] the primary attachment relationship is the child-parent relationship, generally, the child-mother relationship. Other primary and secondary attachment relationships are formed with the father, siblings, grandparents, and friends. The significance and durability of these relationships crystallize into personal bonds. The attachment figure provides proximity, a secure base which enables the attached person to engage in other activities with confidence and a safe haven in times of distress [31]. Therefore, the degree of attachment between a caregiver and a care receiver can determine the amount of stress that will be experienced by the caregiver. Another theoretical perspective is the social exchange theory which proposes that social behavior is the result of an exchange process. The purpose of this exchange is to maximize benefits and minimize costs. According to this theory, people weigh the potential benefits and risks of social

relationships. When the risks outweigh the rewards, people will terminate or abandon that relationship. Therefore, if the caregiver is feeling that the demands of caregiving far outweigh the rewards, and then stress may likely set in.

[32] is of the view that individual differences and not necessarily attachment or cost and benefits of a relationship are more important contributory factors in understanding issues that occur during caregiving. Also, [23] in a study in Germany found that many daughters who care for their parents do so as a moral duty and because of feeling or responsibility and not necessarily as a result of attachment relationship or what they hope to gain from the relationship.

To date, very few studies have tried to investigate caregiving and stress associated with it in Nigeria. Some of the studies that have done so include that of [33-36]. In all these, none has tried to examine the factors influencing the stress caregivers feel. This study therefore is an attempt to do this. In this study, we attempt to find answers to this question: what are the factors that determine the level of stress that will be experienced by the caregiver?

2. Methods

2.1 Study population

The target population of this research is all the caregivers living, working or schooling in Nsukka Local Government Area of Enugu State. Nsukka is situated in the northern part of the old Eastern Nigeria. It is about 65 km away from Enugu, the state capital. Nsukka is a university town in the sense that the University of Nigeria, Nsukka is the only major university in the town. This being the case we have a lot of students in the town. According to the 2006 Census, the population for Nsukka is put at 309,633. This is made up of 149,241 males and 160,392 females [37].

2.2 Sample and instrument

The sample size for the study was three hundred and thirty (330) respondents. Due to the fact that the study is focusing on a specialized population (those that are caring for elderly relatives) purposive sampling method was adopted. The instrument used for data collection was the questionnaire. The questionnaire for this research was divided into two parts. The first part included the socio-demographic characteristics of the respondents. The second part composed of general questions to ascertain the experiences of the caregivers taking care of elderly relatives.

3. Results and Discussion

Three levels of analysis have been employed in the analysis of the data. The univariate analysis was employed to examine the background characteristics of both the caregivers and care receivers. The Likert Scale was employed to determine the level of stress of caregivers from a series of questions which were placed on a measurement scale ranging from 5 to 1 (Very Often, Often, Sometimes, Rarely and Not at All). The level of Stress (with three categories of Low, Average and High) is used as the response variable. The bivariate analysis was employed to examine the existence of any significant relationship between the response variable and the explanatory variables using the chi square test of significance. This leads to determining the variables of factors that predict the level of stress. The multivariate analysis is the third level of analysis. This involves the use of logistic regression to examine which of the categories of the explanatory variables are more likely to induce high level of stress among the caregivers. This involves reducing the response variable to two categories of Low and High.

3.1 Background of caregivers

Total 330 respondents of which 57.3% were females were interviewed based on their experiences in caregiving to the elderly. A description of the socio-demographic characteristics of respondents shows that the median age of respondents is 27 years with a standard deviation of 9.46 years. More than half (51.8%) of the respondents are in the age group 20-29. The age classification also revealed that teenagers accounted for 7.3% of the respondents. About two-third of the respondents are yet to be married while 23.6% are married and widows accounted for 4.5%. The occupational status of respondents shows that the proportions of students who are into caregiving constitute 56.4% of the respondents while 16.4% are civil servants. Majority (65.5%) of the respondents have higher level of education, very few (2.7%) have low education while 70.9% are located in the low-income group.

3.2 Background of care receivers

The background characteristics of care receivers from the perspectives of caregivers reveal that there are 201 female care receivers and 129 male care receivers. Majority of the care receivers are in the age group 70-79. The median age of care receivers is 75 with a standard deviation of 9.637. The table revealed that 36.4% were without any form of education. Parents constitute a higher proportion (40.9%) of the nature of relationship with caregivers.

3.3 Factors that determine level of stress among caregivers

Table 1 presents the bivariate relationship between the response variable and the set of explanatory variables under consideration. The table shows that as the age of caregiver increases, the rate at which they are highly stressed reduces. This finding is supported by the fact that 50% of teenagers who are caregivers are more highly stressed. There exists a significant relationship between caregiver's age and level of stress ($p=0.001$). This finding agrees with that of [38]. Caregivers are more highly stressed by care receivers in the age group 70-89. There is a significant relationship between care receiver's age and caregivers' level of stress ($p=0.011$). The table also reveals that the proportions of caregivers who are in the high-income category are more highly stressed than those in the low-income category. The level of income is significantly related to the level of stress ($p=0.043$). The sex of caregivers have no significant relationship in the determination of level of stress ($p=0.390$). However, male caregivers are more highly stressed than their female counterparts are. The sex of care receiver, the level of education of caregivers, level of education of care receiver are all significantly related to the level of stress.

Table 1: Distribution of caregivers' and care receivers' characteristics by the level of stress.

Characteristics	Categories	Level of Stress			χ^2 - value	p-value
		Low	Average	High		
Age of Caregiver	<20	3 (12.5)	9 (37.5)	12 (50.0)		
	20-29	27 (15.8)	135 (78.9)	9 (5.3)		
	30-39	9 (12.5)	48 (66.7)	15 (20.8)		
	40-49	6 (13.3)	30 (66.7)	9 (20.8)		
	50+	-	15 (83.3)	3 (16.7)	42.844	0.000
Age of Care receiver	<70	15 (16.7)	78 (74.3)	12 (11.4)		
	70-89	18 (9.8)	132 (72.1)	33 (18.0)		
	90+	12 (28.6)	27 (64.3)	3 (7.1)	13.078	0.011
Income of Caregiver	Low	39 (16.7)	162 (69.2)	33 (14.1)		
	High	6 (6.3)	75 (78.1)	15 (15.6)	6.275	0.043
Sex of Caregiver	Male	15 (10.6)	105 (74.5)	21 (14.9)		
	Female	30 (15.9)	132 (69.8)	27 (14.3)	1.884	0.390
Sex of Care receiver	Male	21 (16.3)	81 (62.8)	27 (20.9)		
	Female	24 (11.9)	156 (77.6)	21 (10.4)	9.424	0.009
Level of Education of Caregiver	Low	-	6 (66.7)	3 (33.3)		
	Medium	9 (8.6)	69 (65.7)	27 (25.7)		
	High	36 (16.7)	162 (75.0)	18 (8.3)	22.459	0.000
Level of education of Care receiver	No education	24 (20.0)	78 (65.0)	18 (15.0)		
	Average	6 (5.9)	84 (82.4)	12 (11.8)		
	Educated	15 (13.9)	75 (69.4)	18 (16.7)	11.397	0.022

Table 2 shows the logistic regression model and the variables in the model. It presents the odds of being highly stressed on the basis of the reference category (RC). It further confirms that Age of Caregivers, Age of Care receivers, Income of caregiver, Sex of care receiver, Level of education of caregiver, Level of education of care receiver and Preference for paid help are factors that predict the level of stress. The odds ratio shows that care receivers who are less than 90 years of age are at least 6 times more likely to induce high level of stress than those who are 90 years and above. Those in the low-income category are less likely to cause high stress than the high-income earners. Caregivers who had at most a medium level of education are at least 7 times more likely to induce high stress than those who had high level of education. The model also revealed that care receivers who had average education are twice as likely to cause high level of stress as those with high level of education are, while those who had no education are less likely.

Table 2: Summary of logistic regression analyses predicting caregiver level of stress, age of caregivers, age of care receivers, income of caregiver, sex of care receiver and level of education of caregiver.

Variables		β	p-value	E(B)
Age of Caregiver			.029	
	<20	-8.539	.671	.000
	20-29	-8.610	.668	.000
	30-39	-9.230	.646	.000
	40-49	-11.063	.582	.000
	50+	RC	RC	RC
Age of Care receiver			.009	
	<70	2.038	.003	7.673
	70-89	1.832	.005	6.247
	90+	RC	RC	RC
Income of Caregiver				
	Low	-1.735	.007	.176
	High	RC	RC	RC
Sex of Caregiver				
	Male	.665	.161	1.944
	Female	RC	RC	RC
Sex of Care receiver				
	Male	-.921	.030	.398
	Female	RC	RC	RC
Level of Education of Caregiver			.001	
	Low	10.705	.706	44562.427
	Medium	1.978	.000	7.225
	High	RC	RC	RC
Level of Education of Care receiver			.004	
	No education	-.988	.036	.372
	Average	.972	.104	2.643
	Educated	RC	RC	RC
Constant		11.961	.553	156526.074

Findings from the present study show that there is a relationship between age of the caregiver and level of stressed being experienced. In other words, younger respondents said that they experience more stress in their caregiving role than older respondents do. This may be because younger people are grappling with a lot more in their lives than older respondents and so caregiving may not give them the needed time to attend to other things that interest them. In addition, older respondents may have had more experience in the caregiving role and so may be in a position to cope better than the younger ones. It could also be that they have a better interpretation of the caregiving situation according to [25].

Result from the study also shows that there is a relationship between the age of the elderly care receiver and the level of stressed being experienced by the caregiver. Respondents caring for care receivers aged 70 to 89 tend to experience more stress than others. One major reason for this could be that the elderly at this age range are still active and so can still make some demands that may affect the caregiver unlike the care receivers who are 90 years and above who may be weaker. [26] reports that the elderly can sometimes focus exclusively on themselves and try to use power, pressure, influence or control in ways that could affect their relationship with their caregivers negatively. This could lead to stress especially if the elderly person is a little bit more active.

It is generally reported in literature that caregivers with high income are more likely to experience less stress than those with low income [39-42]. However, findings from this study reveal that the proportion of caregivers who are in the high income category are more highly stressed than those in the low income category. In other words, the level of income is significantly related to the level of stress ($p=0.043$). One may argue that because of someone's level of income, there are certain societal expectations. In Nigeria for instance, a caregiver with high income will be expected to provide certain level of care than one with low income. Therefore, in the bid to provide this expected level of care, stress may set in. People do not expect much from respondents with lower income and so their stress level is low.

The relationship between sex and caregiver stress has been a subject of discourse among scholars. Whereas some scholars are of the view that females experience more stress than males [43], others believe that males experience more stress than females [28]. In the present study, the sex of the caregiver appears not to have any significant effect in the determination of the level of stress although looking at the percentage distribution; males appear to have higher level of stress than females. A lot of reasons can be adduced to this: firstly, females are usually the people that are engaged in caregiving. In fact, it is part of the socialization process. This being the case, they may feel that it is part of their natural duty and so may not feel any stress in caring for an elderly relative. Secondly, females may feel less stress because they have been prepared for the caregiving role during childrearing years and so may have gained some form of experience.

The findings suggest that the level of education of caregivers have effect on the level of stress being experience. Caregivers with lower level of education experience more stress than those with higher level of education. At face value, the findings appear to be consistent with the result of previous studies [27]. However, it does appear to contradict the point being made elsewhere [44] that caregivers with lower income experience less stress than those with higher income. One may argue that caregivers with low education may find themselves in more demanding jobs where they are answerable to another person. This may increase their stress level and not necessarily because they earn low income. It may be necessary to investigate this further.

Prior study has found a relationship between care receiver and level of stress experiences by the caregivers [45]. The present study found also that there is a relationship between sex of care receiver, level of education of care receiver and level of stress. In other words, care receivers who are females and those with low education appear to give their caregivers more stress than male care receivers or those with high education. The reasons for this may not be farfetched. The first one is that females are usually caregivers and so may feel frustrated when they are the ones that are now receiving the care. So their frustration may be channelled to the caregiver. Also, when one is educated one is more likely to be liberal minded and have better psychological well being than when one is not educated [46-48].

4. Conclusion

The results have implications for future care and support of the elderly in Nigeria. This is especially in area of the provision of intervention and educational programmes for current caregivers and would be caregivers. Studies by [49, 50] found that such intervention and educational programmes can help reduce misconception about the reason for caregiving which sometimes lead to caregivers not giving appropriate care. In order words, when people are not aware of why they are giving care, they may not be able to provide the right kind of care. This being the case, there may be need to involve professional like social workers in developing appropriate intervention and educational programs for caregivers and would be caregivers. These programmes according to [51, 52] will expose them to the issues and challenges involved in care giving for the elderly when the need arises.

Caregiving is going to be a challenging and demanding task especially for people of this generation who may have to juggle caregiving with taking care of the children and pursuing careers outside the home. This awareness may in the long-run help them to develop better and innovative ways of caregiving when the time comes. For people who are already providing care, there may also be need to organize public enlightenment campaigns to educate them on the act of caregiving since according to [51, 52] this may make it easier for them. This awareness may provide them with more competent ways of caring. Finally, there may also be need for human service professionals such as social workers to develop educational and counseling programmes that will focus on the elderly themselves. This may be by way of providing them counseling services that will enable them to understand the problems of aging and the need to accommodate caregivers. All these will go a long way towards equipping the elderly with necessary tools needed to live in harmony with their caregivers.

Competing Interests

The authors declare that they have no competing interests.

Authors' Contributions

UOO designed the study, collected the data and drafted the manuscript while SSA performed the statistical analysis and helped to draft the manuscript.

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