

Burn Out and Psychological Distress among Care Givers of Dementia Patients Attending the Out Patient Geriatric Clinics of Two Nigerian Tertiary Health Institutions.

Abstract

Aim: This study investigated burnout and psychological distress among 460 caregivers of dementia patients attending the outpatient geriatric clinics of two Nigerian tertiary health institutions.

Study Design: The study used the descriptive cross sectional study design.

Place and duration of the study: The study was conducted at the outpatient geriatric clinics of two tertiary health institutions in Enugu, South East Nigeria between the months of July and August 2023.

Methodology: A total of 460 care givers of dementia patients, aged 18- 65 years, attending the outpatient geriatric clinics of two tertiary health institutions in Enugu, who consented to participate in the study, were assessed for burnout and psychological distress using the Maslach Burnout Inventory (MBI), and the General Health Questionnaire (GHQ-12).

Results: Result showed that 23.9% had emotional exhaustion, 14.6% had depersonalization and 18.5% had reduced personal accomplishment, while psychological distress was present in 39.6% of the respondents. Significant relationships were noticed between age and psychological distress, $\chi^2=57.36$; $p=0.03$; marital status and burnout $\chi^2=10.95$; $P=0.01$ as well as education and psychological distress $\chi^2=10.95$; $p=0.05$.

Conclusion:

High levels of burnout and psychological distress were present among the caregivers who participated in the study, in view of this there is need for government to ensure proper institutional care for dementia patients and provide some incentives for those who care for them. Policy formulation should also aim at establishing community caregiving centers where dementia patients can receive adequate attention from government agencies

Key words: Dementia, caregiver, burnout, psychological distress, geriatric clinic, tertiary health institutions, Nigeria.

1. Introduction

The National Institute of aging [1] see dementia as a loss of cognitive functioning, such as thinking, remembering and reasoning, which usually interferes with a person's daily life and activities. Furthermore, they argued that some people with dementia find it difficult to control their emotions and may have changes in personality. Arguing further, they posited that dementia affects millions of people around the globe, especially as people grow older.

According to Prince, *et al.*, [2] dementia is a clinical syndrome resulting from neuro degeneration and leads to progressive deterioration in cognition and capacity for independent living. They further reported that about 47.5 million people are living with dementia globally, with majority living in low and middle income countries including Africa. In Nigeria, Adeloje, *et al.*, [3] reported a pooled crude prevalence of dementia to be 4.9% with women having a higher prevalence than men (6.7% as against 3.1% respectively). They also reported that age greater than 80 years, female sex and body mass index (BMI) ≤ 18.5 were significant risk factors for dementia; and that dementia cases in Nigeria increased by more than 400% over a 20 year period among persons aged 60 years and above.

Freudenberger [4] initially noticed burnout among some voluntary health workers. According to him burnout has three major features comprising emotional exhaustion, disillusionment and withdrawal.

Thorsen, *et al.*, [4] argued that burnout occurs when people devote so much time, effort and energy to their work without making out some time for rest pauses; whereas Ibikunle, *et al.*, [5] conceptualized burnout as a state of physical, emotional and mental exhaustion that results from too much involvement in emotionally demanding tasks. Furthermore, Maslach, *et al.*, [6] identified emotional exhaustion, depersonalization and reduced personal accomplishments as the three significant components of burnout. According to them, emotional exhaustion occurs when people feel so tired and drained by their work, depersonalization manifests in the form of negative attitudes and dehumanizing treatment of people towards their clients; whereas reduced personal accomplishment has to do with lack of feelings of competence and achievements in one's work.

Some symptoms like tiredness, headache, eating problems, insomnia, irritability, emotional instability and rigidity in relationship with other people have been associated with burnout [7].

The Maslach Burnout Inventory (MBI), developed by Maslach and Jackson [8], has widely been used as a major instrument for assessing burnout.

According to Chalfont, *et al.*, [9] psychological distress relates to continuous experience of unhappiness, nervousness, irritability and problematic interpersonal relationship by an individual.

Due to inadequate resources for caring for dementia patients in institutions by most developing countries including Nigeria, the need for home care is highly advocated

especially with the extended family system being practiced by Nigerians [10]. The practice of the extended family system in Nigeria makes people to act as their brothers and sisters keepers with the belief that ‘what affects one affects others. Furthermore, because of this practice, many caregivers of dementia patients in Nigeria are their relatives. However, in spite of this belief, care givers have been reported to experience a lot of burnout and psychological distress while caring for dementia patients.

For instance, Narme [11] using the Maslach burnout inventory, has reported presence of burnout among nurses caring for dementia patients. From the study the author observed that higher personal distress predicted higher burnout scores while higher compassionate care predicted lower emotional exhaustion; whereas higher perspective-taking predicted lower depersonalization as well as higher accomplishment.

Using the Brief Symptom Inventory (BSI), Anthony-Bergstone, *et al.*, [12] investigated symptoms of psychological distress among caregivers of dementia patients. They observed that both the Anxiety and Hostility subscales of the BSI had strong correlation with the Burden Interview, which measures the demands imposed by caregiving activities. According to them, this high correlation between burden and symptomatology underscored the stressful nature of caregiving.

Sugawara, *et al.*, [13] investigated psychological distress in caregivers of people with dementia in a Population-based analysis of a national cross-sectional study and reported that 5.3% (34/643) of their subjects experienced serious psychological distress. They advised clinicians to be mindful of psychological distress among caregivers of dementia patients.

Etters, *et al.*, [14] argued that caring for dementia patients is associated with negative outcomes on the life of their care givers, and factors like gender, relationship to the patients, culture and personal characteristics have substantial impacts on the caregiving experience. In their own contribution, Kazuko, *et al.*, [15] examined the relationship between the behavioral and psychological symptoms of dementia (BPSD) and burnout among care givers of dementia patients in Japan and observed significant correlation between BPSD symptom severity and caregiver distress. Furthermore, they reported that aggression, irritability, abnormal motor behavior and hallucinations were the dementia symptoms that had strong relationship with caregiver burnout.

2. Materials and method

2.1 Study Location

The study was conducted at the dementia outpatient clinics of **University of Nigeria Teaching Hospital and the Enugu State University (ESUT) Teaching Hospital Park lane, all in Enugu state, South East Nigerian**. The two teaching hospitals are the largest referral tertiary health institutions in south east Nigeria. The geriatric outpatient clinics of these two tertiary health institutions receive referrals from other hospitals and clinics from all the states in **South East** Nigeria including Enugu state. This hospital based study used the descriptive cross sectional method, to investigate burnout and psychological distress in a sample of caregivers of dementia patients attending the outpatient geriatric clinics of these two tertiary health institutions in Enugu, South East Nigeria. The study was conducted between the months of July and August 2023.

2.2 Subjects

Two hundred and thirty (230) caregivers of dementia patients who accompanied their dementia relatives for medical attention in the outpatient clinics, between the months of July and August 2023, were recruited from each tertiary health institution. This brings to a total of 460 dementia caregivers who were subjects for this study.

Those included in the study are caregivers in the age range of 18-65 years, those who have been looking after their dementia relatives as an outpatient for about 4 years and those who gave their verbal consent to participate. They were assured that participation is voluntary and non participation will not prevent their dementia relatives from receiving their usual clinical attention. The anonymity of their responses was guaranteed by telling them that their responses are strictly confidential and they will not be identified in person. The research ethics committees of these two tertiary health institutions gave their approval for carrying out this study.

2.2.1 Data collection and instrument

The instruments used for data collection consisted of three parts. (1) Part one was a socio demographic questionnaire which contains information about the caregivers' age, gender, educational status, occupation and marital status. (2) Part two was the Maslach Burnout Inventory (MBI) [7]. This is a 22 item measure that was used to assess the three dimensions of burnout: (1) Emotional exhaustion (EE), which relates to the depletion of a person's emotional capacity without any source of replenishment. The nine items of EE subscale describe feelings of being emotionally overextended and exhausted by one's work (e.g. I feel like I am at the end of the rope). (2) Depersonalization (DP), which relates to the feeling of indifference and cold to other people's needs. The five items of the DP subscale

are used to pick out negative and cynical feelings about one's patients or colleagues (e.g. I don't really care to what happens to some patients). (3) Reduced personal accomplishment (PA) which refers to a sense of inadequacy about one's ability to relate to patients which may result in a self imposed verdict of 'failure'. The eight items of the PA subscale assess how one perceives his or her competence (e.g. I deal very effectively with the problems of my patients). The MBI items are rated by respondents on a seven point Likert format indicating their frequency of response to each feeling starting from 0 = never to 6 = everyday. Scoring the scale is done by calculating the means of the subscales [9].

Reliability coefficients for EE 0.90; DP 0.79 and DP 0.71 respectively; with test-retest reliabilities ranging from 0.50 to 0.82 for the three subscales have been reported [6]; while both the convergent and discriminant validity of the MBI were equally established [8]. Since its development, the MBI has been sighted in over 500 studies on burnout among different population groups including nurses, doctors, psychologists and teachers across the globe including Nigeria [16; 17; 5; 18]. This numerous usage of the MBI for studies of burnout justifies its usage in the present study.

Part three is the General Health Questionnaire (GHQ-12) [19]. This was used to assess for psychological distress among the subjects. The total obtainable score on the GHQ-12 range from 0-12, with a score of 1 and above indicating the presence of psychological distress. This instrument which takes about three minutes to administer has been translated into 38 languages with over 50 validity studies; Test-retest reliability has been reported to be high (0.78) and inter rater and intra rater reliability have both been shown to be excellent (Cronbach α 0.95), [20] Furthermore, the GHQ-12 has been used for studies in Nigeria [21; 18]

2.3 Data analysis

The Statistical package for social science; version 16.0 was used for data analyses; means, standard deviations, percentages and chi square test were also performed to find relationships between variables. $p \leq 0.05$ at 95% confidence interval was chosen as the significant level.

3. Results

Age of respondents ranged from 18 to 65 years. Mean age was 37.8 ± 10.6 years. Fifty nine point six percent (59.6%) were females; fifty three point nine percent (53.9%) had tertiary educational attainment, sixty one point three percent (61.3%) were married. It was also found that twenty four point six percent of the subjects (24.6%) were unemployed, forty one point one percent (41.1%) were self-employed and thirty four point three percent (34.3%) of the respondents were public servants respectively. Furthermore, burnout levels were present among the respondents as follows: twenty three point nine percent (23.9%) had emotional exhaustion, fourteen point six percent (14.6%) had depersonalization and eighteen point five percent (18.5%) had reduced personal accomplishment, while psychological distress was present in thirty nine point six percent (39.6%) of the respondents (Table 1). No significant relationship was noticed between burnout, psychological distress and gender (Table 2); however, age was significantly associated with psychological distress, $\chi^2=57.36$; $p= 0.03$, but not with burnout (Table 3). Equally, significant association was observed between marital status and burnout $\chi^2=10.95$; $p= 0.01$, but not with psychological distress as shown in table 4. Table 5 revealed no significant association between burnout, psychological distress and occupation; whereas there was significant association between education and psychological distress $\chi^2=10.95$; $p= 0.05$ but not with burnout (Table 6).

TABLE 1: Distribution of Socio Demographic Variables; Burnout and Psychological distress of the respondents

VARIABLE	FREQUENCY	PERCENTAGE (%)
Sex		
Male	186	40.4
Female	274	59.6
AGE		
18-35	209	45.4
36-65	251	54.6
Mean Age	37.8	
Standard deviation	10.6	
EDUCATION		
Primary	83	18.0
Secondary	129	28.0
Tertiary	248	53.9
MARITAL STATUS		
Single	178	38.7
Married	282	61.3
OCCUPATION		
Unemployed	113	24.6
Self employed	189	41.1
Public servant	158	34.3
PSYCH. DISTRESS		
No distress	278	60.4
Distressed	182	39.6
BURNOUT		

No burnout	198	43.0
Emotional exhaustion	110	23.9
Depersonalization	67	14.6
Reduced personal accomplishment	85	18.5

TABLE 2: Burnout and Psychological distress of the respondents by Gender

Burnout	Gender	
	Male (n=186)	Female (n=274)
Absence of burnout	92 (49.5)	106 (38.7)
Emotional exhaustion	39 (20.9)	71 (25.9)
Depersonalization	25 (13.4)	42 (15.3)
Reduced accomplishment	30 (16.2)	55 (20.1)
	N/s	
Psychological distress		
Distressed	74 (39.8)	108 (39.4)
No distress	112 (60.2)	166 (60.6)

TABLE 3: Burnout and Psychological distress of the respondents by Age group

Burnout	Age group	
	18-35Years(n= 209)	36-65Years(n= 251)
None	84 (40.2)	114 (45.4)
Emotional exhaustion	48 (22.9)	62 (24.7)
Reduced	53 (25.4)	32 (12.7)
Accomplishment	24 (11.5)	43 (17.2)
Depersonalization		
Psychological distress		
Present	78 (37.3)	104 (41.4)
Absent	131 (62.7)	147 (58.6)
	$\chi^2=57.36$; P= 0.03*	

***= Significant.**

TABLE 4: Burnout and Psychological distress of the respondents by marital status

Burnout	Marital status	
	Single (n =178)	Married (n =282)
None	73 (41.0)	125(44.3)
Emotional exhaustion	37 (20.8)	73 (25.8)
Reduced	46 (25.8)	39(13.8)
Accomplishment	22 (12.4)	45 (16.1)
Depersonalization		
	$\chi^2=10.95$; P= 0.01*	
Psychological distress		

Present	68 (38.2)	114 (40.4)
Absent	110 (61.8)	168 (59.6)

***= Significant.**

TABLE 5: Burnout and Psychological distress of the respondents by Occupation

OCCUPATION	Unemployed (n=113)	Self employed(n=189)	Public servant (n=158)
Burnout			
None	52 (46.0)	83 (43.9)	63 (39.9)
Emotional Exhaustion	23 (20.4)	51 (26.9)	36 (22.7)
Reduced Accomplish.	25 (22.1)	30 (15.8)	30 (18.9)
Depersonalization	13 (11.5)	25 (13.4)	29 (18.5)
Psych. Distress			
Present	46 (40.7)	76 (40.2)	60 (37.9)
Absent	67 (59.3)	113 (59.8)	98 (62.1)

TABLE 6: Burnout and Psychological distress of the respondents by Education

EDUCATION	Primary (n=83)	Secondary(n=129)	Tertiary(n=248)
Burnout			
No burnout	43(51.8)	60(46.5)	95 (38.3)
Emotional exhaustion	16 (19.2)	32 (24.8)	62 (25.0)
Reduced accomplish..	14 (16.8)	24 (18.6)	47 (18.9)
Depersonalization	10 (12.2)	13 (10.1)	44 (17.8)
Psych. Distress			
Absent	48 (57.8)	68 (52.7)	162(65.3)
Present	35 (42.2)	61(47.3)	86(34.7)
		$\chi^2=10.95; P=0.05^*$	

* = **Significant**

4. Discussion

Care givers have been reported to experience a lot of burnout and psychological distress while caring for their sick relatives including those suffering from dementia. This study investigated burnout and psychological distress, among caregivers of dementia patients, attending the outpatient geriatric clinics of two

Nigerian tertiary health institutions. Results showed that 23.9% of the caregivers had emotional exhaustion, 14.6% had depersonalization and 18.5% had reduced personal accomplishment, while psychological distress was present in 39.6%. Previous studies had observed the presence of burnout and psychological distress among caregivers of dementia patients. For instance Narme [11] observed that higher personal distress predicted higher burnout scores among nurses caring for dementia patients.

Anthony –Bergstone, *et al.*, [12] had earlier reported the stressful nature of caregiving experienced by caregivers of dementia patients. In this study 39.6% of the caregivers experienced psychological distress, this was higher than the 5.3% earlier reported by Sugawara, *et al.*, [13] in their investigation of psychological distress in caregivers of people with dementia in a Population-based analysis of a national cross-sectional study. Kazuko, *et al.*, [15] had reported significant correlation between severity of behavioral and psychological symptoms of dementia and caregiver distress. The findings in this study corroborate these earlier reports. Significant relationships were observed between education, age and psychological distress as well as marital status and burnout. These three variables may impose significant distress and burnout on the caregivers who tried to combine their care giving role with the stress associated with these variables. For instance, younger caregivers may be finding it very tasking combining their educational role with looking after the dementia relatives. **The same** may apply to married couples, who may be struggling with the caregiving role and providing for the family needs. Caring for dementia patients has been found to be associated with negative outcomes for the caregivers, whereas factors like gender, relationship to the patients, culture and personal characteristics have substantial impacts on the caregiving experience [14].

5. Conclusion

High levels of burnout and psychological distress were present among the caregivers who participated in the study. **Twenty three point nine percent** (23.9%) had emotional exhaustion, **fourteen point six percent** (14.6%) had depersonalization and **eighteen point five percent** (18.5%) had reduced personal accomplishment, while psychological distress was present in thirty nine point six percent (39.6%). It was also found that some variables like age and education were significantly associated with psychological distress just as marital status was associated with burnout.

In view of the high levels of burnout and psychological distress being faced by caregivers of dementia patients as revealed by this study, there is, therefore, need for government to ensure proper institutional care, for dementia patients, as this may help to reduce the high experience of burnout and psychological distress being encountered by the caregivers in the course of bringing them to the geriatric clinics and back to their homes on every clinic day. Policy formulation should also aim at establishing community caregiving centers where dementia patients can receive adequate attention from government agencies, instead of taking them to tertiary health care institutions some of which may be very far from the places of residence of the patients and their caregivers.

6. Strength and Limitation of the study

The ability of this study to find out the various levels of burn out and psychological distress being experienced by care givers of dementia patients attending outpatient geriatric clinics of two Nigerian tertiary health institutions is a major strength of the study; while locating it in only one state in the south east of Nigeria will limit its generalization, but more states will be included in future researches.

Consent

All the subjects gave their **verbal** consent to participate in the study.

Ethical Approval

The research and ethics committees of the University of Nigeria Teaching Hospital and the ESUT Teaching Hospital Enugu gave ethical approval for the study.

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Competing interests

There were no competing interests for this study.

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