



International Hospital Federation  
Fédération Internationale des Hôpitaux  
Federación Internacional de Hospitales

# World Hospitals and Health Services

The Official Journal of the International Hospital Federation

UNIVERSITY OF IBADAN LIBRARY

Please tick your box and pass this on:

- CEO
- Medical director
- Nursing director
- Head of radiology
- Head of physiotherapy
- Senior pharmacist
- Head of IS/IT
- Laboratory director
- Head of purchasing
- Facility manager

#### Editorial

#### Policy

Insurance literacy in the United States

"Migrant-friendly hospitals": a European Initiative in an age of increasing mobility

#### Management

The misuse of clinical paths as an instrument for funding inpatient care in Bulgaria

Breaking down hospital costs for selected medical conditions in Canada

#### Clinical care

Influence of social support, depression, and self-esteem on burden of care among caregivers of oncology patients



# Influence of social support, depression, and self-esteem on burden of care among caregivers of oncology patients



DR ADEBAYO ADEJUMO

LECTURER IN PSYCHOLOGY AND ETHICS, NIGERIA

**ABSTRACT:** This study investigated the influence of social support, depression and self esteem on the burden of care among informal caregivers of oncology patients. The cross-sectional correlational study included 278 informal oncology caregivers. Results showed a significant main effect of self-esteem ( $F(1, 277) = 5.35; p < .05$ ), and interaction effect of social support and depression ( $F(1, 277) = 4.86; p < .05$ ) on caregivers' burden. Caregivers with high levels of depression ( $t=4.06, df = 282, p < .001$ ), and others with high levels of social support ( $t=4.06, df = 282, p < .001$ ) recorded significantly higher levels of caregivers' burden. This suggests the need for improving the psychological well-being of informal caregivers of oncology patients in the expanding role of family and community members in caring for cancer patients.

Recent findings reveal that cancer is no longer a problem exclusive to developed countries. Available reports from resource-limited settings like Nigeria also point to an upward swing of the incidence of the disease (Ogundipe & Obinna, 2008, The Cancer Registry Report, 2003, de Groot et al 2005).

When someone is diagnosed with cancer, the relative physiological and psychological homeostasis become disturbed. Cancer could not only be stressful to victims but also to caregivers or people involved in rendering care to oncology and radiology patients (Guberman, 2001; Magliano, Fiorillo, De Rosa, Malangone, & Maj, 2005; and Robinson, 1990). Studies have specifically revealed that caregivers suffer both physical and emotional problems as a result of care giving (Vachani, 2002, and Schulz, O'Brien, Bookwala, & Fleissner, 1995). Because their role as caregiver is considered voluntary, the federal, state and local recourses for assistance is often limited (Mittleman et al, 1995), leaving heavier burdens for caregivers.

Several efforts have been made in times past to examine the pathology and chemotherapeutic management of cancer. These include: the vital role played by informal caregivers in supporting dying cancer patients (Vaughn & Grant, 2002 and Walker, Adam, & Walker, 2004); the relevance of psycho-demographic factors such as family support and education among others, and the critical role of social support in maintaining emotional health and psychological well-being while giving care to cancer patients (Eva and Teressa, 2002, Aneshensel, 2002, Arno (2006). Similarly, depressed caregivers have been found to experience higher burden levels (Ferrell, 1998). However, the main and interactive effects of related psychological factors on oncology care givers' burden especially in resource-limited settings like Nigeria remains unclear.

In Nigeria, the rising incidence of cancer, poor institutional facilities and specialist manpower (Ogundipe & Obinna, 2006) in a

society with high values for kinship network; point to the likelihood of responsibility of oncology caregiving shifting on family and close associates. Supporting the huge burden in giving care to oncology patients, the inherent financial burden has been found to be even more problematic than the effect of carrying on with family routines in the care of people living with cancer in developing countries, but beyond this, the need for relatives of cancer patients to take more active part in oncology caregiving has also been highlighted (Ohaeri, Campbell, Ilesanmi, & Ohaeri, (1998).

In another dimension, despite the high probability of experiencing sadness and shock of having a loved one with cancer, many people find personal satisfaction in caring for their cancer patient in their time of need, with resultant deep sense of satisfaction, confidence, and accomplishment in caring for someone (Goldman, Hain & Liben, 2005, Gowen 1989). In addition, informal caregivers often see themselves as responsible for the care of their loved ones and feel guilty, or view it as a personal failure if they were unable to meet the needs on their own, which could also be a burden on its own (Dyson, 1993). An empirical investigation of the role of psychological factors is critical for planning effective intervention strategy in reducing caregivers' burden. This is expected to lay the foundation for enhancing the coping abilities of both cancer patients and their care givers, thereby improving their psychological health.

## Objectives

The objectives were to:

- Examine whether social support, depression, and self esteem will have significant independent and joint influence on informal oncology care givers' burden
- Discover whether care givers with high levels of depression will report higher levels of caregiver burden than caregivers with lower levels of depression and



**TABLE 1: 2X2X2 ANOVA SHOWING THE INDEPENDENT AND JOINT INFLUENCE OF SOCIAL SUPPORT, DEPRESSION AND SELF ESTEEM ON ONCOLOGY CARE GIVERS' BURDEN**

Social support (A)	1	2.72	2.72	0.07	>.05
Depression (B)	1	54.57	54.57	1.32	>.05
Self-esteem ©	1	221.22	221.22	5.35	<.05
AxB	1	200.98	200.98	4.86	<.05
AvC	1	56.61	56.61	1.37	>.05
BxC	1	7.63	7.63	0.18	>.05
AxBxC	1	4.35	4.35	0.27	>.05
Error	277	11460.41	41.37		
Total	283	11988.79			

- Investigate whether care givers with high levels of social support will report lower levels of care givers burden than individuals with low levels of social support.

**Design**

It was a cross sectional survey. The independent variables were psychological factors; social support, depression and self esteem. The dependent variable was level of caregivers' burden. These variables were considered because authors such as Eva and Teresa, (2002), and Aneshensel, (2002) reported their relationship as well as possible impact on caregivers' burden.

The study was carried out at the University College Hospital, Ibadan, Nigeria. The 850-bedded premier teaching hospital is federally-funded with facilities for oncology among others. Participants were purposively selected at the Surgical Out-patients and Radiotherapy Departments of the Hospital. These were caregivers who accompanied oncology patients for consultation, and treatment. Data collection was preceded by expedited permissions from the Departments of Psychology and authorities of the Clinical Services Division of the Hospital, having reviewed the research protocol. Over the 8-week period of data collection, the researcher sought the permission of oncology caregivers (≥18years) at the clinics to respond to the survey question following an informed consent process. Of the 410 English literate caregivers contacted, only 300 (76%) volunteered and participated in the study. However, only 278 of the returned questionnaires were fit for analysis.

A 72-item self-report survey questionnaire was designed for data collection. This was made up of five sections. Section A was made up of a 14-item set of questions designed to tap demographic information. Section B comprised the 13-item Rhonda Montgomery & Borgatta (2000) Caregiver Burden Assessment Scale. During the study, the scale yielded a reliability ranging from .71 to .83 and coefficient alpha of .85. Section C of the questionnaire contained the 21-item Beck Depression Inventory. Becks and Steer (1987) reported a split half reliability ranging from .78 to .93, and coefficient alpha of .87. Section D contained the 10-item Rosenberg self esteem scale. It has a positive and negative overall evaluation of one's worth or value. It has a reliability of .92 and Chronbach alpha of .72. Section E contained the 14-item social support questionnaire authored by Jones Norbeck (1995). It has a split half reliability ranging from .80 to .87 and coefficient alpha of .92.

Potential participants were adequately informed about the purpose, potential risks and benefits of the study. Following the informed process, consenting participants were presented with a copy of the permission letter, as well as a copy of the research questionnaire. Responding to a questionnaire took an average of 30 minutes. Of the 300 willing participants, only 278 questionnaires were completely filled and fit for analysis. Retrieved questionnaires were coded, entered into the computer and analysed with the Statistical Package for the Social Sciences. Data analysis involved the use of ANOVA and the t-test for independent means. All analysis were calculated and interpreted at 0.5 level of significance.

**Results**

Three hypotheses were tested. The results are hereby presented:

Table 1 shows that there was a significant main effect of self esteem on caregivers' burden ( $F(1, 277) = 5.35; p < .05$ ) as well as a significant interaction effect of social support and depression on caregivers' burden ( $F(1, 277) = 4.86; p < .05$ ). However, there was no significant main effects of social support ( $F(1, 277) = 0.07; p > .05$ ), and depression ( $F(1, 2,277) = 1.32; p > .05$ ) on caregivers' burden. Similarly, there was no significant interaction effects of social support and self-esteem ( $F(1, 277) = 1.37; p > .05$ ), depression and self-esteem ( $F(1, 277) = 0.18; p > .05$ ), as well as social support, depression and self esteem ( $F(1, 277) = 0.27; p > .05$ ) on caregivers' burden.

Hypothesis 2 predicted that there will be no significant difference between the score of care givers with high levels of depression and those with low levels of depression on oncology care givers' burden. This was tested using a t test of independent means, the result is presented in Table 2 below:

The above table shows that caregivers who scored higher on depression recorded significantly higher levels of caregivers' burden than caregivers with low levels of depression ( $t=4.06, df = 282, p < .001$ ). Caregivers with high levels of depression scored (= 40.23) on caregivers' burden while those who scored low on depression scored (= 37.17) with a mean difference of -4.55. This result implies that there is a significant difference in the burden of care suffered between oncology caregivers with high and low levels of depression.

The third hypothesis states that caregivers with high levels of

**TABLE 2: SHOWING A T TEST OF INDEPENDENT MEANS COMPARING CAREGIVERS WITH HIGH AND LOW LEVELS OF DEPRESSION ON ONCOLOGY CAREGIVERS' BURDEN**

DV	Depression	N	x	Std	Df	t-value	Sign
Caregiver burden	Low	127	37.17	5.54	282	-4.06	<.001
	High	157	40.73	7.19			

**TABLE 3: SHOWING A T TEST OF INDEPENDENT MEANS COMPARING HIGH AND LOW LEVELS OF SOCIAL SUPPORT ON ONCOLOGY CAREGIVERS' BURDEN**

DV	Social support	N	x	Std	Df	t-value	Sign
Oncology caregiver burden	Low	127	40.78	5.4	282	-5.367	<.001
	High	157	36.49	7.4			



social support will report low levels of oncology caregivers' burden. This was also tested using an independent sample t-test and the result is presented in Table 3 below:

The above table shows that participants with low levels of social support scored higher on levels of caregivers' burden than caregivers with high levels of depression ( $t=4.06$ ,  $df = 282$ ,  $p<.001$ ). Caregivers with low levels of social support scored ( $= 40.78$ ) on caregivers' burden while those with low social support scored ( $= 36.49$ ) with a mean difference of ( $= 4.29$ ). This result implies that there is a significant difference in the burden of care suffered between oncology care givers with high and low levels of social support.

## Discussion

The purpose of this study was to examine the influence of psychological factors on burden of care among oncology patients. It was discovered that of the psychological factors considered in this study, only an interactive effect of social support and self esteem, as well as interactive effect of social support and depression yielded a significant influence on care givers' burden. This is in line with findings in similar related studies (Eva and Teressa, (2002), Aneshensel, (2000). It implies that these factors are potential determinants of the level of burden faced by informal care givers of oncology patients.

In developing countries, there is an increasing incidence of cancer and lifespan as a result of westernization of lifestyles and newer life prolonging mechanisms respectively in palliative care (Ogundipe & Obinna, 2008). Managers of health institutions would soon more than ever before be faced with dwindling available human and material resources in form of; increasing nurses' turnover, greater demand for overall utilization of hospital bed spaces, and increasing cost of providing and maintaining newer life prolonging cancer treatments. Considering these within the context of current global economic recession, a negative balance of available health resources versus needs for sustaining public health should be expected. By extension, the rate of health workers' overseas migration among qualified and competent health workers will possibly increase, while poor remunerations at home would reduce health workers' motivation for optimal care of terminally and chronically ill patients.

With these, two scenarios could be predicted: The rate of burnout among formal care givers of oncology patients in the local health industry will increase. Nurses, oncologists, and other health workers will entrust heavier care responsibilities to family members and spouses of oncology patients who are not specially trained for the care they give; and psychologically challenged by the cancer diagnosis of their loved one. Therefore, relieving the burden of care among informal oncology caregivers by creating an environment conducive for improving their psychological wellness is imperative. Obviously, there are factors (some latent, others manifest) beyond the usual issues considered in physician-patient interaction which could potentially impact care outcomes. The role of self esteem, depression, and social support was the focus of this paper. □

## References

- Aneshensel, L.K. et al. (1995). *Care giving Process. Structural Equation Modeling with LISERW*, Baltimore, The Johns Hopkins University Press.
- Aneshensel, C.S. (2002). Commentary: Answers and Questions in the Sociology of Mental Health. *Journal of Health and Social Behaviour*, 43: 236-246.
- Arno, P. S. (2006). Economic value of informal caregiving: Employee Education System and the Office of Care Coordination, Bethesda, MD.
- Beck, A., Steer, R. (1987). *Manual for the Beck Depression Inventory*. San Antonio, Texas, Psychological Corporation.
- Ferrell, B.R. (1998). End-of-Life Care: How Well do We Serve Our Patients? *Nursing*, 28, 9, 58-60.
- Vachani, C. (2002). We can cope: helping parents help children when a parent has cancer. Oncolink Abramson Cancer Centre, University of Pennsylvania, Philadelphia. Downloaded on July 4 via <http://www.oncolink.com/library/article.cfm?c=1&s=6&id=719>.
- Dyson, L.L. (1993). Response to the Presence of a Child with Disabilities: Parental Stress and Family Functioning over time. *Am J. Mental Retardation*, 98:207-21.
- Eva and Teresa, (2002). Given, B. & Given, C. (1991). Family Caregiving for the Elderly. *Annual Review of Nursing Research*, (9): 77-101.
- Goldman, A., Hain, R., Liben, S. (2005). *Textbook of Palliative Care in Children*. Oxford, United Kingdom: Oxford University Press.
- Gowen, J. W., Johnson-Martin, N., Goldman, B.D., & Appelbaum, M. (1989). Feelings of Depression and Parenting competence of Mothers of Handicapped and Non-handicapped infants: a Longitudinal Study. *American Journal of Mentally Retarded*, 94:259-271.
- Norbeck, J. (1995). Development of the 14-item social support questionnaire.....
- For Smith Magliano, L., Florillo, A., De Rosa, C., Malangone, C., Maj, M. (2005). Family burden in long-term diseases: a comparative study in schizophrenia vs. physical disorders. *Social Science & Medicine*, Volume 61, Issue 2, July 2005, Pages 313-322.
- Mittelman, M. S., Ferris, S.H., Shulman, E., Steinberg, G., Ambinder, G., Ambinder, A., Mackell, J.A., Cohen, J.A. (1995). Comprehensive support program: effect on depression in spouse-caregivers of cancer Patients. *Gerontologist*, 35:792-802.
- Ogundipe, S., & Obinna, C. (2008). Why Cancer is on the rise in Nigeria. Vanguard Newspapers, Mon. 16, June, 2008. Downloaded via [http://www.vanguardngr.com/index.php?option=com\\_content&task=view&id=10406&Itemid=0](http://www.vanguardngr.com/index.php?option=com_content&task=view&id=10406&Itemid=0)
- Ohaeri, J.U., Campbell, O.B., Ilesanmi, A.O., & Ohaeri, B.M. (1998). Psychosocial concerns of Nigerian women with breast and cervical cancer. *Psychooncology*, 7: 6: 494-501.
- Okobia, M. N. (2003). Cancer care in sub-Saharan Africa – urgent need for population-based cancer registries. *Ethiopia Journal Of Health Development*, 17: 89-98.
- Montgomery, R. & Borgatta (2000). Caregivers' burden assessment scale...
- Robinson, K. (1990). The relationships between social skills, social support, self-esteem and burden in adult caregivers. *Journal of Advanced Nursing*. 15:788-795..
- Schulz, R., O'Brien, A.T., Bookwala, J., Fleissner, K. (1995). Psychiatric and Physical morbidity effects of dementia caregiving: Prevalence, correlates, and causes. *Gerontologist*, 35:771-771.
- The Cancer Registry Report (2003). Cancer Registry, University College Hospital (UCH), Ibadan, Nigeria. IARC publication 153 of 2003; 8797.
- Walker, A.R., Adam, F.I., & Walker, B.F. (2004). Breast cancer in black African Women: a changing situation. *Journal of Research in Social Health*, 124: 81-85.
- Waugh, A., & Grant, A. (2002). *Anatomy and Physiology in health and illness*, 9th ed. Edinburgh, UK, Churchill Livingstone.

Dr Adebayo Adéjumo trained, practiced and taught perioperative nursing for about two decades in Nigeria. He is also a Psychologist and also trained in Research and Clinical Ethics following his education in Nigeria and Canada. He is currently a lecturer in Psychology and Ethics at the University of Ibadan, Nigeria.