Association Between Socio-Demographic and Economic Characteristics, Community Care and Quality of Life of Elderly In Oyo State, South West, Nigeria

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ABSTRACT

Background: *Quality of life among elderly is an important area of concern that reflects the health status of this vulnerable population, as it might be influenced by socio-demographic and economic, physical, psychological, social and environmental changes that occur with aging.*

Objective: *This study aimed to assess the association between socio-demographics and economic, community care and quality of life among elderly in Oyo State, Nigeria.*

Methods: *Multistage sampling technique was employed to select 1000 elderly. Data on socio-economic and demographic, quality of life and community care were obtained using a semi-structured questionnaire, World Health Organization Quality of Life BREF and Comprehensive Geriatric Assessment tool respectively. Data were analyzed using frequency, percentages, means, standard deviation and Chi-Square.*

Results: *Higher percentage (54.0%) of the respondents had formal education, 21.6% were retirees, majority (82.0%) were between 65-74 years, 69.0% and 31.0% lived in rural and urban areas respectively while higher percentage (65.8%) earned below ₦10,000 per month. Result on the domains on quality of life revealed that physical health, psychological, social relationship and environmental domain of the respondents were (44.7±8.9, 48.0±7.5, 48.6±9.8 and 44.8±12.3) respectively. Majority (96.0%) had adequate community medical/nutrition care, physical care (90.1%) while little (19.6%) had adequate social care. Factors such as education, occupation, marital status and community care were found to be statistically significant ($p<0.05$) with quality of life.*

Conclusion: The respondents' mean score in each of the quality of life domains were less than average representing an unacceptably low quality of life.

Keywords: Elderly, Quality of Life, Community Care, Socio-demographic, Economic

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INTRODUCTION

According to the World Health Organization (WHO), quality of life (QOL) includes aspects of physical, psychological and social health. The WHO QOL group defines quality of life as the

individual's perception of their position in life with the context of the culture and value systems in which they live in relation to their goals, expectations, standards and concerns (1). The role of Health-related quality of life (HRQoL) in health care cannot be over emphasized (2), because it encompasses physical, psychological and social aspects of the elderly. Many studies have established the use of HRQoL as a measure because subjective health is perceived as a better predictor of survival than objective health.

Low Quality of Life (QOL) has been associated with chronic morbid conditions (3). Good nutrition promotes health-related quality of life (HRQOL) by averting malnutrition, preventing dietary deficiency disease and promoting optimal functioning. However, definitions of quality of life also encompass life satisfaction and both physical and mental well-being (4).

Well-being is a positive physical, social and mental state; it is not just the absence of pain, discomfort, and incapacity. It arises from not only the action of an individual, but from a host of collective goods and relationships with other people.

MATERIALS AND METHODS

Study Area

The study was carried out in Oyo State, one of the 36 States of the Federal Republic of Nigeria, with an estimated population of 8,183,356(2). The State is divided into three Senatorial Districts namely: Oyo North, Oyo Central and Oyo South with 13, 11 and 9 Local Government Areas (L.G.A) respectively.

Sample Size Determination

The minimum sample size for this present study was calculated using (6)

$$n = \frac{N}{1 + N(e)^2}$$

Where **n** is the minimum sample size, **N** is the total population of the target population (elderly), and the total population of elderly in Oyo State was 327,301 as at 2006 national census (7). Using the Nigeria growth rate of 2.6% (8), the total population of elderly in Oyo State as at 2019 will be

$$\left[\left(\frac{2.6}{100} X 327{,}301\right) X\ 13\right] + 327{,}301 = 437{,}929.$$

e is the sampling error (0.05).

The minimum sample size for this study was calculated to be:

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{437{,}929}{1+437{,}929\ (0.05)^2} = 399.99 = 400$$

The sample size of 1000 respondents was recruited for this study to increase reliability and to cater for incomplete and non-responses.

Sampling Techniques and Procedure

The study employed multistage sampling technique in selecting representative respondents. The three senatorial districtsof Oyo State [Oyo North (13 L.G.A), Oyo Central (11 L.G.A) and Oyo South (9 L.G.A)] constituted a stratum for the study.

The first stage involved the use of simple random sampling to select seven (7) local governments (20% of 13, 11, 9 = Oyo North 3, Oyo Central 2 and Oyo South 2 L.G.A respectively) in proportion to the total local governments in each senatorial district.

The second stage involved random selection of 14 wards which was proportional to the total number of wards in the local government area selected (20% of 69 wards).

The third stage involved systematic sampling selection of houses with eligible subjects in each ward.

Verbal and written consent were obtained from the participants prior to starting the study. Eligible elderly persons were identified and recruited for the study in the selected households.

Instrument for Data Collection

Socio-demographic and economic characteristics of the elderly was obtained using a validated semi-structured questionnaire, community care was assessed using a modified Comprehensive Geriatric Assessment (CGA) tool (Modified Comprehensive Geriatric Assessment Tool/ The Edmonton Scale, 2013), while a 26-item WHO Quality of Life- BREF questionnaire (WHOQOL-BREF) was administered to assess the respondent's quality of life.

Data Analysis

Statistical Package for Social Sciences (SPSS) version 23 was used for data computation and analysis. Frequency counts, percentages, mean and standard deviation (SD) were used in describing all the variables. Chi Square Test was used to explore the possible association between some selected socio-demographic and economic, community care and quality of life score of the elderly. P-value ≤0.05 was considered to be statistically significant.

RESULTS

As shown in table 1, 54.4% of the elderly were females, majority (82.0%) were between the age range 65-74 years. Higher percentage (38.1%) had primary school education while 65.8% received a monthly income less than ₦10, 000.

Table 2 shows the mean and standard deviation of Quality of Life of the respondents. The values for all the domains (physical health, psychological, social relationship and environment) were below average, depicting a poor QOL.

Results on the overall community care showed that the community medical care and community physical care were adequate at 96.0% and 90.1% respectively, unlike the community social care which was grossly inadequate at 80.4% (Table 3).

Table 4 revealed that socio-demographic and economic factors such as age was statistically significant ($p<0.05$) with physical health and psychological domain, income was statistically significant with physical health, psychological and social relationships at $p<0.05$. Educational level, occupation, marital status and community care services were statistically significant to the quality of life of the respondents based on the four (4) QOL domain (Physical Heath, Psychological, Social Relationships and Environment).

DISCUSSION

In this present study, the gender of the respondents were not statistically significant with their quality of life domain scores for physical health, psychological, social relationship and environment of the male and female which implies that quality of life has nothing to do with gender among the elderly respondents.

According to (9), changes in population structure will have several implications on health, economy, security, family life, well-being and Quality of Life of people. Quality of life is also described as a holistic approach that not only emphasizes on individuals' physical, psychological, and social relationship but also their connections with their environments; and opportunities for maintaining and enhancing skills. It is further said that ageing, along with the functional decline, economic dependence and social cut-off, autonomy of young generation, compromises quality of life (10).

It was observed that the respondents had better quality of life score in social relationship domain as compared to other domains and this is however contrary to a study by (11) who reported that physical health happens to be the maximum mean QOL scores amongst other domains. Our result is in contrast to other studies done at international and national level even the mean score obtained is more than those obtained in these studies (11,12). In summary, the domain score were below average, which also agrees with (11) except for differences in the domains. These differences in findings might be due to varying geographical locations with respect to culture and other factors that can possibly influence QOL.

Family life is very important in the overall wellbeing of the elderly. The situation of some elderly in this study revealed inadequate care. The care of older people within the families were culturally guaranteed in Nigeria and even in some other African countries until the intervention by colonial rule, modern migration, urbanization and industrialization. All these have led families to live in great distances, except communication through modern technology such as telephone, hence reducing opportunities to help each other meet certain needs.

Furthermore, socioeconomic changes have weakened the strength of the family to provide adequately for the family (13). Consequently, the family bonds by the need to ensure survival in a

harsh economy thus influencing negatively on the elderly. This weakening of family support structure has increased the vulnerability of older people. Despite this social pressure, the family is still identified as the most important institution for older people (13). Poor care can lead to social isolation contributing to reduced food intake, hence increased risk of malnutrition and poor quality of life. The issue of economic situation is very important in discussion of care. In Nigeria, there is no form of social security (14), the elderly discriminated against in terms of employment opportunities. In most cases, they are denied credit facilities and the value of paid pension by the government is eroded by inflation, leaving the elderly more vulnerable to poor quality of life (14).

In addition, one of the prevailing problems encountered by the elderly has to do with finances, some of them cannot still cater for their expenses asides the fact that majority claimed they are capable of doing that. This could be probably due to retirement which is expected because they are elderly's and that they are now dependent on others such as siblings for financial support. This is in consonance with a study done in Slovenia where it was reported that a key problem in the accessibility of care lies in the poor financial situation of the older people (15). It was also reported by (16) that the poor older people are expanding and that despite their need for services, they cannot access them. Thus, it was not a surprise that the occupation and income of the elderly in this present study was statistically significant with their quality of life scores.

According to researches done in Slovenia, it is reported that the family is the main caregiver and even in other countries (17, 18, 19, 20, 21, 22, 23, 24, 16). It was also reported by (25) that other formal part of care giving rests on the social services and health services, which are mainly supplied by state institutions in Slovenia.

In the present study, it was discovered that age of the respondents is statistically significant with both physical health and psychological domains of quality of life, which is quite similar to (11) who found out that the age group 60-69 age group had statistically significant better QOL scores in all four domains. Also, economic factors by (11) and (26) stated that economic factor is the strong predictor for QOL and these were found to have a strong relationship with domain scores in all the four (27) domains. Moreover, this agrees with the present study.

This study presents a statistically significant association between marital status and all the four (26) domains of QOL which supports (26) and (11) findings who reported that quality of life was significantly affected in those who were not living with spouse. Psychological situation of the elderly is measured in terms of family care, isolation, caregivers and dependents. All those factors have a direct effect on food appetite.

Finally, community care services for older people encompass services of long-term care and other supporting services (health, transport, housing), community social work and educational and informational activities and programs based in the community (28, 29, 30). It is also said that the other part represents informal care, which is linked to informal support networks, family care and others. However, not many studies have been conducted along this path. This present study revealed that there was a strong significant association between community care services and the quality of life domain scores of the elderly respondents.

Table 1: Socio-demographic and Economic Characteristics of the Respondents

Variable	Frequency	Percentage
Gender		
Male	456	45.6
Female	544	54.4
Age		
65 – 74 years	820	82.0
75 – 84 years	156	15.6
85 years and above	24	2.4
Location		
Rural	310	31.0
Urban	690	69.0
Education Level		
Primary	381	38.1
Secondary	150	15.0
Tertiary	42	4.2
Technical	12	1.2
Apprenticeship	259	25.9
None	156	15.6
Occupation		
Farmer	89	8.9
Trader	492	49.2
Artisan	151	15.1
Teacher	42	4.2
Retired	216	21.6
Cleric	6	0.6
Driver	4	0.4
Monthly Income		
Less than ₦ 10,000	658	65.8
₦10,000 – ₦ 19,000	220	22.0
₦ 20,000 – ₦ 29,000	79	7.9
₦ 30,000 – ₦ 49,000	31	3.1
₦ 50,000 and above	12	1.2
Marital Status		
Single	6	0.6
Married	723	72.3
Widow/widower	248	24.8
Separated/divorced	23	2.3
Single	6	0.6
Married	723	72.3

Table 2: Quality of Life Domain Scores (WHO QOL – BREF score 0 -100)

Domain	Mean ± S.D
Physical Health	44.7±8.9
Psychological	48.0±7.5
Social relationships	48.6±9.8
Environment	44.8±12.3

Table 3:Community Care Assessment of the Respondents (n=1000)

	Inadequate		Adequate	
Categories	**N**	**%**	**N**	**%**
Medical/Nutrition	40	4.0	960	96.0
Physical/Functional capacity	99	9.9	901	90.1
Social	804	80.4	196	19.6

CONCLUSION

The respondents mean score in each of the physical, social, environmental and psychological domains of the quality of life was less than average representing an unacceptably low quality of life. Notwithstanding its inadequacies as enumerated by the respondents, there was at least a primary health centre in every community but no special considerations were provided for the elderly and as such no specific institutional care was available to the respondents.

Factors such as age, education, occupation, income, marital status and community care were found to have statistically significant relationship with quality of life. These further shows that quality of life is a comprehensive concept that not only emphasizes on individual's physical, psychological and social relationship but also their connections with environmental factors, socioeconomic and demographic characteristics as well as lifestyle among others.

An elderly-focused community-based care intervention programme should be implemented from time to time to improve the elderly's health related quality of life.

Also, a nationwide survey of the community care of the elderly's should be conducted and used to formulate a national community care policy for the elderly.

Table 4: Association between the WHO QOL – BREF Domain Score with Socio-Demographic and Economic Factors and Community Care of the Elderly

		QOL Domain Mean Score			
Variables		**Physical Health**	**Psychological**	**Social Relationships**	**Environment**
Gender	Male	44.83	47.99	48.84	44.66
	Female	44.63	48.01	48.45	44.90
	P-value	0.729	0.964	0.531	0.766
Age group	65 –74 years	45.46	48.37	48.84	44.86
	75 –84 years	41.44	46.46	47.74	44.72
	≥85 years	40.70	45.38	47.29	42.78
	P-value	0.00*	0.004*	0.364	0.725
Location	Rural	43.53	48.08	47.64	43.41
	Urban	45.26	47.97	49.09	45.41
	P-value	0.04*	0.834	0.034*	0.016*
Education	None	43.37	48.86	46.58	46.44
	Primary	45.49	48.37	49.81	46.04
	Secondary	48.67	50.88	52.22	50.61
	Tertiary	48.13	49.58	53.60	51.38
	Others	44.00	46.75	46.36	47.75
	P-value	0.00*	0.00*	0.00*	0.00*
Occupation	Employed	40.39	46.46	44.20	39.12
	Retired	40.23	44.77	43.61	39.95
	Others	45.60	48.35	48.85	45.38
	P-value	0.00*	0.00*	0.00*	0.00*
Income	<₦20,000	44.69	47.91	47.85	44.79
	₦20,000 – ₦49,999	43.43	47.52	49.55	44.30
	≥₦50,000	50.60	55.20	53.33	51.00
	P-value	0.003*	0.016*	0.001*	0.353
Marital Status	Single	48.40	48.40	48.33	44.00
	Married	46.12	48.93	50..51	46.26
	Separated	40.59	45.30	43.21	40.64
	P-value	0.00**	0.00**	0.00**	0.00**
Community Care	Adequate	45.73	48.63	49.22	45.97
	Inadequate	39.43	44.74	45.52	38.55
	P-value	0.00*	0.00*	0.00*	0.00*

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