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Social Networks and Support as an Indicator of Quality of Life: Evidence from Elderly Group in Osun State, Nigeria

Authors
Oluwaseun Lara Ariyo and Joel Faronbi
Department of Nursing, Basic Medical Science Obafemi Awolowo University, Ile Ife, Nigeria
Corresponding Author
Oluwaseun Lara Ariyo

Abstract

Background: *Reductions in social network and support among the elderly have been found to be a predictor of low quality of life among them. This study was conducted to assess the influence of social network and support on the quality of life among the elderly in Osun State, Nigeria.*

Objectives: *The objectives of this study were to Assess the level of the quality of life of the elderly in this population in Osun State, Nigeria.*

Methods: *The study employed a cross sectional design of 432 participants aged 60 and above, using a multistage sampling technique.A structured questionnaire was used to collect data.*

Results: *Findings from the study revealed that majority (47%) of the respondents had a moderate quality of life, 43% had high/good quality life and just 10% were observed to have had poor/low quality of life. Furthermore, the result shows the majority (61.4%) of the respondents had a high quality of life in the physical domain, 31.6% had a high quality of life in the psychological domain, more than half of the respondents (56.4%) had a moderate quality of life in the social relationship domain and 57.3% had a moderate quality of life in the environmental domain.*

Conclusion: *The study concluded that risk of depression, loneliness, social support and social network statistically significantly influenced the quality of life among the elderly in Osun State. as elderly persons have adequate social support and network, there would be a significant improvement in their quality of life.*

Introduction

Reductions in social network and support among the elderly have been found to be related with higher risk of depressive symptoms (Fuller-iglesias & Antonucci, 2016). These in turn predict low quality of life among them (Bahramnezhad *et al*. 2017), making it an important public health problem. Furthermore, old age has also been identified to usually comes with frailty and withdrawal resulting to dependence on various support systems for assistance, however, studies have shown that social support available for older adults from these support systems especially in South-east, Nigeria is inadequate (Ebimgbo, Atama, Onalu, Obasi-Igwe, & Aghedo, 2021).

Quality of life in the elderly population can be affected by many environmental factors (Khaje-Bishak, Payahoo, Pourghasem & Jafarabad, 2014). Poor economic, cultural, educational and health care conditions and also inadequate social interactions can result in poor quality of life in elderly people (Bussche, Koller, Olonko, Hansen,

Wegscheide, 2011).Social support is itself a salient feature of quality of life, and it is an important target for social intervention among both the healthy and ill older adult populations.

Conversely, social isolation and inadequate instrumental support are negative quality-of-life indicators; thus, reducing their occurrence is a worthwhile goal (White, Philogene, Fine, & Sinha, 2009). In a related study, a positive and significant correlation was found between social networks and the quality of life in the elderly (Bahramnezhad *et al*., 2017).

Research has shown that 58% of persons 65 years and over need help to carry out their daily activities (Bahramnezhad *et al*. 2017). As the population of the elderly is increasing, their quality of life should also be considered. García & Navarrro (2018) stated that the older the person, the greater the deterioration in the quality of life. Poor economic, cultural, educational and health care conditions, as well as inadequate social interactions, can result in the poor quality of life in elderly people (Bussche, Koller, Olonko, Hansen, Wegscheide, 2011). Also, the person's life experience, how they feel and how they interpret their lives, along with good habits, social support and relationships significantly affect health (García & Navarrro, 2018). According to Gustafsson, Berglund, Faronbi, Barenfeld & Ottenvall (2017), enhanced social conditions have shown a positive impact on life satisfaction and well-being of older people. As positive social relationships are defensive for health, it has been revealed that weak social relationships are associated with a wide-ranging variety of adverse health outcomes.

Social support can also be expressed through informal care provision, i.e., care activities provided by non-professionals.). In Nigeria, the elderly are faced with several health and social challenges which create a gap in the traditional family system that caters for the well-being of the aged (Oluwagbemiga, 2016).

Still, it is important to note that most public policy debates are concerned with the physical issues of aging, whereas social issues, such as social support, need to be further explored. Older people are faced with greater losses, given fewer social resources and less adequate social support in both subjectively perceived support and the frequency of contact (Yue *et al*., 2016).

Hesitancies in providing prompt solutions to inadequate social support in elderly populations can cost the society a lot. However, to the best knowledge of the authors, study on the influence of social networks and support on the quality of life of the elderly in the study area is very scarce or non-existence thus creating a knowledge gap in the study area. Thus, this study investigated the influence of social network and social support on quality of life among the elderly population. The results obtained could be used by researchers interested in this subject matter and can contribute to the formulation of public policies aimed at improving the quality of life of elderly persons. This study contributes to improvements in the mental health of the elderly as it is particularly significant for nurses providing community-based support services to meet the mental health needs of the elderly. In addition, this study will contribute to the achievement of SDG (Sustainable Development Goal) number 3 (United nation by 2030), which is to promote good health and wellbeing for all. Improving on the social network and support among elderly people will serve as a contributory factor in achieving good health and wellbeing.

Material and Methods

Research Design

A cross-sectional design was used to assess the influence of social networks and social support on the quality of life among elderly persons of 60 years and above in the selected local government areas of Osun State. As a methodology, it focused on examining the current situation as depicted by the participants.

Research Setting

The study was conducted in three Local Government Areas of Osun State, Nigeria,

namely: Atakumosa West, Ife North, and Ilesa West local government areas. Osun State is one of the thirty-six states in Nigeria and it is located in the South-Western region of Nigeria. It covers an area approximately 14,875 sq km and lies between latitude 7° 30′ 0″ N and longitude 4° 30′ 0″ E. It has a total land area of 9,251 Sq Km. Osun State has an estimated population of 3,416,959 comprising 1,734,149 males and 1,682,810 females. The state consists of thirty (30) Local Government Areas namely: There are over two hundred towns in Osun State. Economic activities in Osun State are predominantly commerce and farming. The people of Osun practice Islam, Christianity and traditional religion. The population and the large number of its local government areas of this state make it suitable for this study.

Target Population and sample size of the Study

The target population was men and women, 60 years and above, who were living in the selected communities in Atakunmosa West, Ife North and Ilesa West Local Government Areas of Osun State. The sample size (n) was determined using the Cochran formula: $n= Z^2PQ/d^2$, Where P is the quality of life, 50% (Lilian, Ranganath & Thangaraj, 2015).

Q is 1-P i.e., the proportion of the population that does not have the characteristic.

Z is the standard normal deviation for the 95% confidence level (1.96).

d is the precision, i.e., the level of accuracy desired or sampling error or one half of the width of the confidence interval (usually set at 0.05).

A 95% level of confidence is chosen (i.e., α = 0.05, which is the value for d in the formula).

$$n= \frac{(1.96)^2x0.5x(1-0.5)}{(0.05)^2}$$

n=384

10% attrition rate is added to the sample size which makes it 422, rounded up to 432. Hence, the total sample size was 432.

Sampling Technique

A multistage sampling procedure comprising four stages was adopted for sampling the respondents. Stage 1 involved the selection of the three Local Government Areas (LGA) of Osun State, using a simple random technique and they are Atakunmosa West, Ife North and Ilesa West Local Governments Areas. Furthermore, since Atakunmosa West has 11 political wards, Ife Central 11, and Ilesa West 11; the respondents were sampled from two-fifths of the wards following guidelines from the World Health Organization (WHO) sampling manual (Vaughan & Morrow, 1989), meaning four wards were randomly selected from each LGA, making it the second stage. For Atakunmosa West: Ibodi, Osu I, Oke-Bode and Ita-Gunmodi; Ife North: Ipetumodu, Edunabon, Moro and Yakoyo; and Ilesa West: Ayeso, Araromi, Isokun and Omofe. Subsequently, the selected wards were stratified into Enumeration Areas (EAs), 24 EAs were selected. Lastly, 18 households were selected from each EA following the house numbering by the National Population Commission using a systematic random sampling technique. The selected households were visited and a person of 60 years and above was recruited from each household for the study. In instances where there was more than one eligible elderly respondent, one was selected through simple balloting.

Research Instrument

Theinstrument for data collection was a structured questionnaire adapted from Duke Social Support Index and Berkman-Syme Social Network Index (SNI). It was divided into seven sections and was also translated by experts into Yoruba language for non -English speaking respondents through back to back method by experts in the fields of English and Yoruba languages.

Section A consisted of socio-demographic characteristics such as age, sex, education (no formal education, primary school, junior secondary/college and tertiary institution), religion (Christianity, Islam); marital status (married, widow/widower, separated); occupation (petty

trader, artisan, retiree with limited skill, farmers, clergy, retiree with skill, businessman, caterer; civil servant, pensioner, others with no specific work); ethnic group (Yoruba, Igbo, Hausa, others (please specify); estimated monthly income; source of income (self, friend, family, and others); do you live alone and for how long?; number of living children; local government area and the number of elderly support centers in your area.

Section B is a Social Support Scale (Duke Social Support Index-DSSI). The DSSI comprises of 2 subscales: social interaction and satisfaction subscales. The social interaction subscale has four items and the satisfaction subscale has seven items. The total score for the DSSI ranges from 11-33 with the increased values indicating higher levels of support. The DSSI's reliability and validity have been confirmed in a sample of community-dwelling older Australian men and women. It has the Cronbach's alpha coefficients of 0.80 for the 'satisfaction' factor and 0.58 for 'interaction' factor. The 11 DSSI items indicated reasonable internal reliability.

He maximum score on the scale was 80, and the minimum the score was 20, with a high score indicating an increased loneliness level he maximum score on the scale was 80, and the minimum the score was 20, with a high score indicating an increased loneliness level he maximum score on the scale was 80, and the minimum the score was 20, with a high score indicating an increased loneliness level. According to Perry's loneliness classification scheme, a score of 65 to 80 indicates a severe high degree, 50 to 64 indicates a moderately high degree, 35 to 49 indicates a moderate degree and 20 to 34 indicates a low degree of lonely

Section C is a Social Network Scale (Berkman-Syme Social Network Index-SNI). This measure assessed (1) size of the network; (2) frequency of contact with members of the network; and (3) quality of the network. These social network components were based on the structural dimension of the Berkman–Syme Social Network Index, which measured the size of the social network, closeness with member of the network, and frequency of contact. Total scores were dichotomized using the median value of frequency of contact and the quality and size of the social network (Abella *et al*., 2017). The categorizations were low, moderately low, high and moderately high social network.

Section D is a WHOQOL- BREF, which contains 26 items classified into four domains. They are physical health, psychological, social relationship and environmental domain. The physical domain assesses seven items which are; the presence of pain and discomfort, dependence on medical treatment, energy and fatigue, mobility, sleep and rest, activities of daily living, and perceived working ability. The psychological domain assesses six items which are: affect, cognitive function, body image and appearance, self-esteem, negative affect, and spirituality. The social relationship domain assesses three items. They are: personal relationship, social support, and sexual activity. The environmental domain assesses eight items namely: physical safety and security, physical environment, financial resources, opportunities for acquiring new information and skills, participation in and opportunities for recreation/leisure activities, home environment, health and social care accessibility and quality transport.

Respondents' total scores were transformed to a scale of 100 using the transforming scale, and that produced the quality of life score in each domain. The mean score of the four domains produces an overall quality of life. The quality of life was graded thus: 0 – 39, low QOL;; 40-69, moderate QOL;; and 70 and above, high QOL. This classification is in line with the findings of Soares, Santos and Saliva (2014) that there is a lack of national and international studies for cutoff points specific to QOL. Score results range from poor quality of life with a possible least score of 0, to high quality of life with a possible optimal score of 100.

Validity of the Instrument

The face and content validity of the instrument was established by giving copies to experts in the field of nursing and mental health education and public health. This was done to assess the relevance to the subject matter, its scope and coverage.

Reliability of the Instrument

The reliability of the instrument was established using a test re-test method within the space of 14 days; instruments were administered to 43 elderly persons from Ife Central Local Government Area, Ile Ife. The analysis showed that the Cronbach's alpha coefficient for Section B, C and D are 0.814, 0.836, and 0.847respectively. Finally, the scale was proved to bereliable and valid, with a Spearman Pearson correlation coefficient value (r) of 0.876*.

Training of Research Assistants

Three research assistants were recruited and trained for the study over a period of three days. During this course, the scope and the coverage of the study as well as its basic concepts were explained to them. They were trained on how to explain the questionnaire and administer itto the elderly in the selected Local Government Areas. Parameters to be measured and how they are able to be measured were also explained and demonstrated. The importance of ensuring the questionnaire was completely and properly filled was also stressed during the training. At the end of the training, the research assistants were evaluated via evaluation forms which were duly filled and assessed to be perfect. In addition, regular debriefings were held to assess their compliance with the protocol of the study.

Pilot Study

A pilot study was carried out in Ife Central Local Government in November 2019 upon receipt of consent from the Local Government Secretariat to determine the feasibility of carrying out a large scale study among the elderly in Osun State. The questionnaire was administered to 43 elderly persons with their consent. Results from the analysis of the pilot study informed the need for instrument amendments, such as the increase of data collection times to 20 minutes per respondent, as well as the re-ordering of questions.

Ethical Consideration

The study received a formal approval from the Institute of Public Health Research and Ethics Committee of the Obafemi Awolowo University, Ile-Ife (IPHOAU/12/1405). Gate keeper permission was also obtained from the community leaders of the selected communities in the Local Government Areas in Osun State. The ethical principles of respect for person, anonymity and confidentiality, beneficence and principle of justice were all observed in the course of the study. For instance, data collection was only done after informed consent had been obtained from the respondents. Confidentiality of the information provided was ensured by using codes instead of real name and storing the information collected as passworded document on the personal computer of the investigator and that of her supervisor. All respondents, irrespective of their ethnicity and creed, were treated fairly and equally throughout the conduct of the study.

Procedure for Data Collection

Following ethical approval for the study, the principal investigator with the three trained research assistants visited the communities repeatedly for a period of three weeks to administer questionnaires to selected respondents. Informed consent was obtained from the respondents after explaining the voluntary nature and the purpose of the study. Respondents were informed of the guidelines for completing the questionnaires and given time for their completion, but those who could not read or write were offered assistance. An average time of 20 to 30 minutes was used per respondent. Completed copies of the questionnaire were retrieved from the respondents as soon as they were done with them. In cases where the respondent asked for more time, an appointment was booked for the retrieval of the completed questionnaire.

Method of Data Analysis

Data generated from the study were analyzed using the Statistical Product for Service Solution (SPSS) Version 20. The questionnaires were pre-coded for easy analysis and statistical techniques were used to summarize results and interpretation of findings. Both descriptive and inferential statistical techniques were used.

Univariate analysis was done using frequency and percentage distribution of respondents' background characteristics. Descriptive statistics such as frequency, percentage, mean, standard deviation and confidence interval were used to summarize other findings. Furthermore, a bivariate analysis was done primarily to check which variables had an association with the socio-demographical data using chi-square. In addition, multiple regression was used to analyze the influence of the independent variables on the outcome variables. An independent t-test was used to compare the differences between two means on different variables of the hypothesis. Correlation analysis was used to compare relationship between the variables.

Results

Socio-Demographic Characteristics

This section presents the results of the study and their interpretation. Table 1 reveals that the age of the elderly ranged from 60 to 99 years with a mean of 69.2 ±8.70. More than half of the respondents ranged between the ages of 60-69 years and were females. Also, the proportion of respondents with no formal education, primary and secondary education were relatively equal at around 31.9%, unlike those with tertiary or post-secondary with just 5%. It is noticeable that three-quarters of them were Christians as well as married. Additionally, the participants of the study were mainly from the Yoruba tribe at 94.1%; the highest average monthly income of the respondents was between 10,000 - 19,000 Naira, which was mainly self-generated as they receive very little money from friends, family members, and others. Over four-fifths of the elderly in Osun State live alone.

Table 1: Socio-demographic Characteristics of Respondents

Characteristics (N = 432)	Frequency	Percent
Age group (in years) mean = 69.2 ± 8.70		
60 – 69	264	61.4
70 – 79	101	23.3
80 – 99	67	15.3
Sex		
Male	168	39.5
Female	264	60.5
Education		
No formal education	138	31.9
Primary school	135	31.3
Secondary	138	31.9
Tertiary/Post-secondary	21	4.9
Religion		
Christianity	324	75.2
Islam	102	23.5
Traditional	6	1.4
Marital status		
Married	323	75.2
Widow/widower	94	21.4
Separated	15	3.4
Ethnic group		
Yoruba	407	94.1
Igbo	17	4.1
Hausa	8	1.8
Occupation:		
Petty trader	260	59.6
Artisan	17	3.8
Retiree	22	5.4
Farmers	41	10.2
Civil servant	92	21.0
Monthly income (in naira)		
Less than 10000	112	25.9
10000 – 19000	199	46.1
20000 – 29000	70	16.2
30000 and above	51	11.8
Source of income		
Self	387	89.6
Friend	7	1.6
Family	13	3.0
Others	25	5.8
Do you live alone		
Yes	360	83.3
No	72	16.7
Elderly supportive centers in the areas		
Yes	8	1.9
No	424	98.1

The Characteristics of Social Networks and Social Support among the Elderly

The pie chart in Figure 2 shows the characteristics of social networks among the elderly in Osun State. More than two-fifths of the elderly had a high social network, representing a majority of the respondents, while just one-tenth had a low social network.

Figure 2: Characteristics of social networks

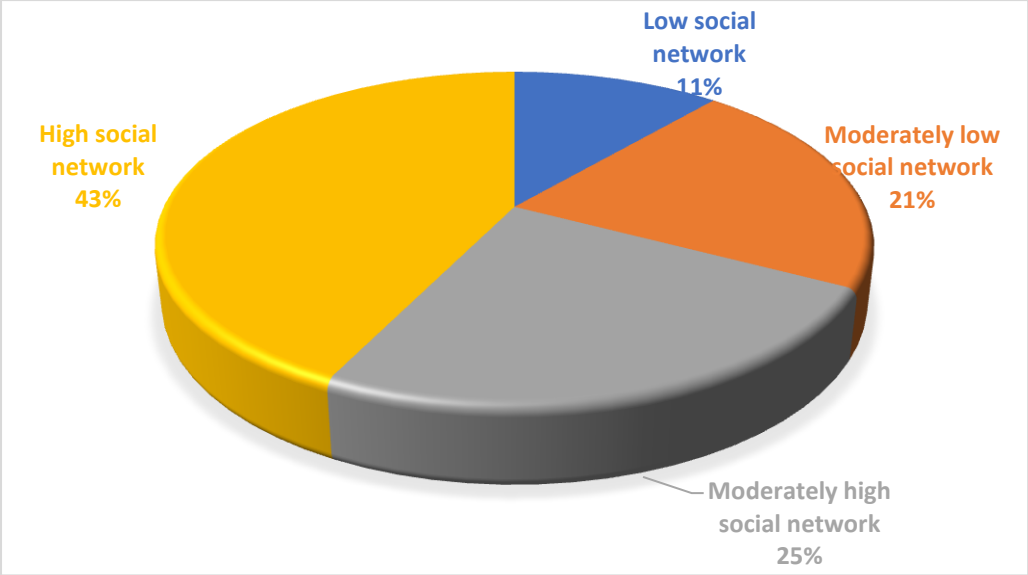


Table 2: Characteristics of Social Support among the Elderly

Social interaction (N = 432)	Frequency	Percentage
High	152	35.2
Low	280	64.8
Level of satisfaction		
High	151	35.0
Low	281	65.0

Table 2 shows the characteristics of social support (social interaction and satisfaction) of the elderly persons with people in the local area. The majority (64.8%) of the elderly had low social interaction and 65.0% had low social satisfaction with people close to them.

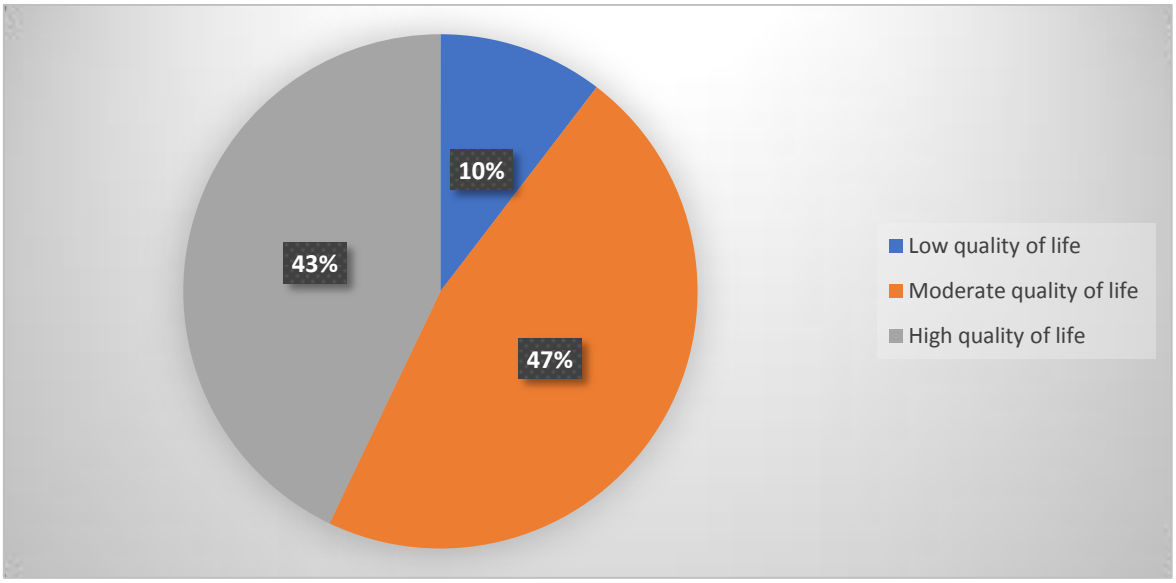
Quality of Life of the Respondents in the Selected Communities

Figure3 shows the distribution of respondents by the quality of life and it is evident that the majority (47%) of the respondents had a moderate quality of life, 43% had high/good quality life and just 10% were observed to have had poor/low quality of life. Furthermore, Table 3 shows the majority (61.4%) of the respondents had a high quality of life in the physical domain, 31.6% had a high quality of life in the psychological domain, more than half of the respondents (56.4%) had a moderate quality of life in the social relationship domain and 57.3% had a moderate quality of life in the environmental domain.

Table 3: Quality of Life of the Elderly by Domains

Variables	Frequency	Percentage	Mean ±SD
Physical domain			18.23±4.58
Low	26	5.9	
Moderate	141	32.7	
High	265	61.4	
Psychological domain			17.32±4.34
Low	37	8.6	
Moderate	258	59.8	
High	137	31.6	
Social relationship domain			8.84±2.64
Low	52	12.0	
Moderate	244	56.4	
High	136	31.6	
Environmental domain			23.58±7.06
Low	74	17.2	
Moderate	248	57.3	
High	110	25.5	
The overall quality of life			73.78±17.71
Low	45	10.4	
Moderate	202	46.7	
High	185	42.9	

Figure 3: Distribution of the overall Quality of Life of the Elderly



Influence of Social Networks and Support on the Quality of Life among the Elderly in the selected settings

Table 4 presents the result of multiple regression showing the influence of social support and social network as well as selected socio-demographic characteristics on quality of life among the elderly. The results in the model revealed that for a unit change in depression, social support, social network, age, religion, marital status and living arrangement there would be a corresponding decrease of 0.311, 0.652, 0.374, 0.187, 1.667, 4.826 and 4.598 respectively in the quality of life and for a unit change in loneliness, there would be a corresponding increase of 0.249 in the quality of life. It can be observed that there exists a statistically significant influence of risk of depression, loneliness, social support and social network on quality of life, $F(12,419) = 60.124$, $p \leq 0.000$, $R^2 = 0.633$. This simply means that as elderly persons have adequate social support and network, there would be a significant improvement in their quality of life.

Table 4: Multiple Regression showing the Influence of Social Support and Social Networks on Quality of Life

Quality of Life	coef.	T	p-value	Lower	Upper
Depression	-0.311	-2.517	0.007	-0.550	-0.081
Loneliness	1.837	12.315	0.002	1.530	2.143
Social Support	-0.652	-4.722	0.002	-0.947	-0.357
Social network	-0.374	-2.109	0.042	-0.734	-0.039
Age	-0.187	-2.901	0.012	-0.328	-0.042
Sex	0.138	0.102	0.903	-2.529	2.662
Education	0.944	1.732	0.097	-0.106	2.152
Religion	-1.667	-1.465	0.127	-3.870	0.574
Marital status	-4.826	-3.846	0.002	-7.140	-2.931
Occupation	0.541	1.903	0.044	0.025	1.058
Estimated monthly income	0.031	0.980	0.155	-1.057	7.0138
Living arrangement	-4.598	-2.660	0.009	-7.936	-0.920
Constant	82.669	11.548	0.002	69.358	97.488
F (12,419) =60.124, p-value ≤0.000, R-square = 0.633, Adj R-square = 0.622					

*Significant at 95% confidence interval

Hypothesis Testing

There is no significant difference in quality of life among the elderly with support and those without support in the selected areas in Osun state.

Table 5: Independent t-test Analysis showing the Mean Difference of Quality of Life among the Elderly with Support and without Support

Variables	Social support		p-value	95% Confidence Interval
	Support (n = 289)	No support (n = 143)		
	Mean (SD)	Mean (SD)		
Physical domain	16.7 (4.2)	21.2 (3.8)	0.000	16.148 – 21.836
Psychological domain	16.1 (3.7)	19.7 (4.4)	0.000	15.623 – 20.350
Social domain	8.3 (2.52)	9.8 (2.6)	0.000	7.965 – 10.2500
Environmental domain	21.8 (6.9)	26.9 (6.0)	0.000	20.827 – 27.785
Overall quality of life	67.8 (15.9)	84.7 (15.2)	0.000	65.756 – 87.059
Age	68.9 (8.1)	70.2 (9.7)	0.001	67.820 – 71.930
Number of children	4.2 (1.5)	4.3 (1.5)	0.004	4.030 – 4.560
Estimated monthly income	15615.9 (998.9)	21339.2 (2008.3)	0.000	13812.16 – 25477.86

Table 5 presents the results of an independent t-test analysis of mean difference of domains for quality of life as well as age, number of children and estimated monthly income of the elderly with social support and with no social support. It can be observed that there exists a statistically significant difference between quality of life, as well as other selected background characteristics of the elderly with social support and those with low social support as the p-values, are less than 0.05 ($p \leq 0.05$).

Discussion

Life expectancy is increasing generally and consequently increasing the population of the elderly. However, elderly populations are faced with some challenges which might, in turn, affect their quality of life. Furthermore, while it is true that some might have good social networks, they might not have enough support that would help them achieve a good quality of life. Thus, this study was conducted to investigate the influence of social networks and support on quality of life among the elderly in Osun State.

Socio-demographic Characteristics of the Elderly in Osun State

The elderly who participated in the study were mostly between 60-69 years of age. This means that the majority of the respondents were mainly represented by 'young old' following the categorization of the elderly population by the National Research Council in 2001. Moreover, as against the findings by WHO (2014) that sex composition of the elderly confirms that there are more males than females, the majority of the elderly that participated in this study were females. This corroborates the findings in a study carried out among the elderly in the Southwest region of Nigeria, there were 72.2% females and 27.8% males (Fakoya et al., 2018).Findings from this study further revealed that the majority of the respondents were married, which is consistent with the documentation of the National Population Commission (2003) that virtually all elderly persons had ever been married and this is furthermore supported by Fakoya et al. (2018) that the majority of the respondents in their study had been married for over 40 years, whilenone of the respondents were divorced. Also, the findings in this study showed that the majority of the elderly were living alone.This contradicts the findings from the study done among community-dwelling older adults in the United States of America by Kaplan and Berkman (2019) which statesthat nearly 29% of the 46 million of the elderly live alone. Heejung Kim *et al*. (2018) buttressed this by revealing that globally, the number of people aged at least 65 years old or older living alone was estimated to be approximately 1.38 million in 2015. The number is estimated to increase to 3.43 million over the next 20 years.

The Characteristics of Social Network and Social Support among the Elderly in Osun State

Findings from this study revealed that the majority of the respondents had a high social network. This is because the size of the network, frequency of contact with members of the network and quality of the network, which were all measures of the social network in this study, were all rated high among the respondents. This contradicts the findings in the study done by Igbokwe et al., (2020) that the retirees face numerous challenges, including disassociation from persons in their social networks

The findings show that the majority of the respondents go for religious meetings more than once a week. This corroborates the Croezen, Avendano, Burdorfand Lenthe (2015) study, which found that the participation of the elderly in religious activities was the only form of social engagement associated with a decline in depressive symptoms. Whereas, participation in a political or community organization was instead associated with an increase in depressive symptoms.

Regarding the relationship between the characteristics of social networks and wellbeing in old age, it has been observed that in general, the size of a social network has been positively associated with the well-being of elderly persons. Although some studies show that there is no association between these factors, overall, literature has found evidence that networks of friends contribute more to the well-being of elderly persons than those made up of family members, with the positive contribution of enjoying more than one type of relationship (Bahramnezhad *et al*., 2017).

The results also revealed that the majority of the respondents participated in a social or working group as well as in a religion-connected group. Also, more than half of the respondents participated in a community group and public services while a little less than half participated in a senior center and self-help group or charity. The results from Kim *et al*. (2017) study showed that the most common type of social network among LGBT older adults was the friend-centered/ restricted type (33%) and the diverse/no children network type (31%). Bahramnezhad *et al*., (2017) documented that the highest mean in social network dimensions was in the family (19.68%),

friends (12.01%) and the neighbours (9.90%), respectively.

The level of social support was arrived at by measuring the social interaction and social satisfaction of the respondents. It is obvious from this study that the majority of the respondents had low social interaction and satisfaction, and consequently, low social support. This is somewhat surprising given that the respondents reported good social networks. The results from Yates, Clare and Wood (2017) showed that social networks mediate the relationship between interventions that target social participation, and may have beneficial effects in reducing both cognitive decline and mood problems in older people.

Few of the respondents reported seeing seven or more close friends at least once a month. In general, frequency of contact is positively associated with the well-being of elderly persons. Although some studies indicate that there is no association between the variables, the literature indicates a positive association between emotional closeness with elements of social networks and the well-being of elderly persons (Bahramnezhad *et al*., 2017). Slightly above a tenth of the participants responded positively to having relatives they felt at ease with, and with whom they could discuss private matters; and Subramaniam *et al*. (2016) found out in their study that there is a relationship between social networks and mood problems in general, as people with fewer social interactions are more likely to report symptoms of anxiety or depression. Very few of the respondents reported that they had someone available whom they could count on to listen to the mas confidants. Less than a quarter of the participants agreed to having someone available to give them good advice on their problems. Few of the participants agreed to having someone available to show them love and affection. Less than a quarter of the respondents agreed that they had someone to provide them with emotional support, talking over problems with or helping them make difficult decisions. Also, having multiple social roles can help to promote self-esteem, which in turn may prevent depression. Some studies have indicated that people who experience greater levels of social interaction and support have better mental health outcomes and significantly decreased psychological distress (Bahramnezhad, Chalik, Bastani, Taherpour & Navab, 2017). Less than a quarter of the respondents agreed that they had relatives they had contact with, whom they felt close to, that they trusted and could confide in. The type of relationship also seems to influence well-being, with friendship and neighborhood networks documented as having a more positive effect than family networks, given the voluntary nature of the former in contrast to the latter (Khajebishak, Payahoo, Pourghassem & Asghari, 2014). In Nigeria, the retirees face numerous challenges, including disassociation from persons in their social networks. Perceived social isolation or loneliness could impair the quality of life in old age, and lead to mentaldis orders. However, it is uncertain whether perceived loneliness has an independent association with depressive and anxiety symptoms and comorbid conditions in Nigerian retirees (Igbokwe et al., 2020).

The Quality of Life among the elderly in Osun State

The study showed that physically and psychologically, the majority of the respondents had a high quality of life. However, regarding their social relationships and environmental domain, most of the respondents reported a moderate quality of life. Overall, slightly less than half of the respondents reported a moderate quality of life. This mirrors findings from Khaje-Bishak, Payahoo, Pourghasem and Jafarabadi's (2014), that the overall quality of life and overall health status in participants were at a moderate level (respectively, 3.61 (0.84) and 3.57 (0.81) where the range for the scoring of quality of life was between 1-5.

Findings from the current study also show that age, gender, marital status, religion, educational status, occupation and monthly income were

statistically significant with the quality of life of the respondents. This is in line with a study that assessed the predictors of elderly persons' quality of life and health practices in Nigeria, the study found out that the participants traditional life styles, educational status, having personal money in old age and gender were major predictors of quality of life and positive health behaviours among the elderly (Fajemilehin & Odebiyi, 2011). However, this is inconsistent with the findings of Khaje-Bishak *et al*. (2014) in which gender was not statistically significant with quality of life even though total score of quality of life in both genders in their study was 90.75 (13.37) with the range for the scoring between 26-130 and the male elderly having a slightly higher score of quality of life. Farzianpour *et al*. (2015) also surveyed the quality of life among 400 elderly people who were aged 60 years and above in Marivan City, Iran. The results showed that males had higher scores than females (P<0.001). Quality of life and age were also significant in this study, and in agreement with this, Heydari *et al*. (2015) showed that there was a significant correlation between the quality of life obtained and the age of the elderly in their study.

The Influence of Support on the Quality of Life among the Elderly

The study findings reveal that there exists a statistically significant influence of social support and social network on the quality of life of the elderly. This simply means that as the elderly persons get good social supports from their networks, their quality of life improves significantly. Bélanger *et al*. (2016) reported that the association between social support and health, mood and quality of life differed cross-culturally. Maria, Gouveia, Matos & Schouten (2016) stated that networks of friends have a greater impact on the quality of life of elderly persons than family networks. Also, the positive effect of the existence of more than one type of relationship was revealed. There is considerable evidence that the nature and extent of an individual's social network, such as quantity and quality of social relationships and frequency of contact, can have a significant impact on health (Rico-uribe *et al*., 2016). Bahramnezhad *et al*., (2017) also suggested a positive and significant relationship between social networks and quality of life among the elderly in their study. Quality of life in a study by Bélanger *et al*. (2016) was related to receiving high levels of support from the partner, and those with poor support from children appeared to have worse quality of life than those without children.

There is no significant difference in quality of life among the elderly with support and those without support in Osun State

The study findings showed the existence of a statistically significant difference between quality of life, as well as other selected background characteristics of the elderly with social support and those with low social support. With this, it can be stated that the null hypothesis is thus rejected. This corroborated the findings of Heejung Kim *et al*. (2018) in their study that those living alone reported higher levels of depressive symptoms than those living with others. Quality of life was related to receiving high levels of support from the partner, and those with poor support from children appeared to have worse quality of life than those without children (Bélanger *et al*., 2016).

Conclusion

In this study, we assessed the influence of social network and support on the quality of life of elderly people in Osun State, Nigeria. The result of this study influences point to the importance of creating efficient social relationships among the elderly and of emphasizing the need for support from the family, friends and neighbors which bring about an improved quality of life to elderly people. However, the study showed an acceptable level of quality of life. It is therefore important to plan policies and programs that would improve and promote quality of life and decrease the burden of elderly people's diseases through establishment of government or private elderly people's clubs and information services for

educating elderly people and the rest of the population in order to alleviate the loneliness and depression experienced by elderly people.

Implications

It is important to reflect on the characteristics of social support among the elderly, which was found to be low despite the elderly having moderate social networks, as well as on the possible causes that negatively affect the quality of life of the elderly. Worthy of note are environmental factors which can also lead to improvements. Nursing could be incorporated into the orbit of Family Health and could be used as an intervention strategy for home visits. This could provide better knowledge about the area of coverage and could result in intersectoral actions to minimize the impact of the environment on the quality of life of the elderly. Social support could be delivered by specialized healthcare professionals who focus on educating the elderly. The main aim of this intervention would be to provide and maintain a secure but not limited, environment that promotes the well-being of the elderly.

Social support has been correlated with lower comorbidity and mortality, as it prevents people from adopting unhealthy attitudes, while it promotes healthy ones such as working out and increases in general wellbeing. Furthermore, on the one hand, befriending and peer support interventions have been proven to have positive effects on addressing social isolation and emotional stress and, on the other hand, family interventions equally affect satisfaction from social support and network.

Recommendations

In line with the findings from this study and the reviewed literature, the researcher makes the following recommendations; Majority of the respondents had low social support, hence these findings suggest a need for exploring the promotion of social support as a useful tool in improving the quality of life of the elderly. Findings from this study showed that some proportion of the respondents still have low quality of life therefore it is important to plan policies and programs that would improve and promote quality of life and decrease the burden of elderly people's diseases through establishment of government or private elderly people's clubs and information services for educating elderly people and the rest of the population.

The results of this study provide important information regarding the predictors that influence the QOL of elderly people therefore there is and they need for government investment and action able strategies to guarantee an improvement in health promotion and the prevention of diseases, as well as improvements in the local infrastructure. The data presented in this study can be used to render direct care strategies for the most vulnerable elderly people, with particular attention to issues that affect their social life and quality of life.

Conflict of interest

Authors declare that no conflict of interest exist

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