

# Elderly Well-being in a Rural Community in North Central Nigeria, sub-Saharan Africa

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**Abstract** Globally, the population of elderly is increasing and their well-being is becoming a public health concern. In Nigeria, poverty is widespread and elderly persons are at higher risk. Unfortunately, Nigerian Government does not provide social security to elderly and the supports from the family are fading out. Therefore, the well-being of elderly is compromised. This study was designed to determine the prevalence and identify predictors of elderly well-being in a rural community in Nigeria. The study was cross-sectional in design and adopted multi-stage sampling procedures to select 1217 elderly aged 65+. Well-being was captured using scores from four domains; social, psychological, physical and environmental. Data were analysed using descriptive statistics, Chi-square and logistic regression models. Mean age of the elderly was 72.3±8.4 years and 65.2% were females. About 49.1% of the respondents have poor well-being. Poor well-being increases with age, but reduces as level of education increases. The identified predictors of poor well-being were; age ( $\beta=0.208$ ; S.E=0.056), children ever born ( $\beta=0.672$ ; S.E=0.079), children alive ( $\beta=-0.596$ ; S.E=0.275), marital status ( $\beta=0.260$ ; S.E=0.112), financial support from children ( $\beta=0.208$ ; S.E=0.056), children visit by gender (CV) ( $\beta=-0.545$ ; S.E=0.095), children living with elderly ( $\beta=-0.508$ ; S.E=0.169) and having enough money to meet daily needs (HDHN) (-1.357; S.E=0.179). Elderly who; do not receive any financial assistance from their children (FAC) (OR=2.4; C.I=1.7-3.2) and those who were separated (OR=6.2; C.I=1.3-30.0) were more likely to experience poor well-being than those who receive and those who never married respectively. The likelihood of poor well-being was lower among elderly who HDHN (OR=0.2; C.I=0.1-0.3) and those who don't have any of their children living with them (OR=0.7; C.I=0.5-0.9). Multiple logistic regression models were generated at 8<sup>th</sup> iterations. High proportion of the elderly in the community has poor well-being. While developing policies aim at improving elderly well-being in Nigeria, government should include; age, marital status, FAC, CV, children living with elderly and HDHN as part of their key variables.

**Keywords** Elderly Well-Being, Rural Community, Elderly Care, Rural Community

## 1. Introduction

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. It requires that basic needs are met, that individuals have a sense of purpose, and that they feel able to achieve important personal goals and participate in societal activities[1].

Globally, the population is aging rapidly. Both the number and proportion of people aged 65 years and above are increasing, although at different rates in different parts of the world. The number of older adults has risen more than threefold since 1950, from approximately 130 million to 419 million in 2000, with the elderly share of the population increasing from 4 percent to 7 percent during that period[2].

In Nigeria, those aged 65 years and above make up about 4.3 percent of the total population which was put at 140,431,790 million according to 2006 population exercise[3]. The population of elderly (age 65+) in Nigeria is on the increase as the crude mortality rates are gradually reducing[4-7]. Aging in Nigeria is occurring against the background of socio-economic hardship, wide spread poverty, the HIV/AIDS pandemic, and the rapid transformation of the traditional extended family structure.

The roles of elderly in nation building at the various stages of their life cannot be over-emphasized. They are the custodians of culture and tradition, mediators during conflict resolution and contributors in enforcing peace in their various communities[8]. The younger generation will no little or nothing about culture and tradition if the elderly who are to educate them are not been properly preserved. The elderly have served their motherland when they were young and active[9]. Many elderly reach retirement age after a lifetime of poverty and deprivation, poor access to health care and poor dietary intake. These situations leave them with insufficient personal savings to meet their daily needs[10,11].

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They are most at times denied of their right to receive their pension resulting on their poor well-being due to poverty and poor medical attention. Therefore, well-being of the elderly is of paramount importance.

Nigeria government devotes few resources to health care and primary health care concentrates more on maternal and child health and contagious diseases. The problems of an aging population have not been seen as important in Nigeria because the aged are such a small part of the population. In most developing countries, formal social security systems have only limited coverage and inadequate benefit payments[12,13]. As a result, the majority of older people depend on family support networks, a reality that is well appreciated in most parts of sub-Saharan Africa in the past[14-16]. However, it is recognized that traditional social security systems are evolving, attenuating and rapidly disappearing due to pressures from urbanization and industrialization[17]. Youths migrate to cities while the elderly move back to the rural areas. Elderly persons in Nigeria reside more in rural communities, particularly those who have retired from their place of work.

The health care system spends a small fraction of the budget on treating older adult illness and access to care is limited and not a policy priority in most developing countries[18,19]. The attitude of health care providers towards older people makes their situation even more difficult. Many older people do not access health services due to inability to prove their age, aggravated by the limited availability of health services, equipment and expertise.

In Nigeria, poverty is rife and elderly persons are more at risk since most of them are no longer in the economically active phase of life and there is no national social security to provide economic support in old age[20]. Access to health care is severely limited both by paucity of health facilities and manpower and by out-of-pocket payment arrangement. Social network is dwindling and traditional family support is decreasing as urbanization and migration take young members of the family away. Also, social changes are affecting the position of the elderly in the society and leading to a reduction in their social status and influence in the community[21].

The pattern of seeing elderly people's welfare as the responsibility of the family had made the government of Nigeria to do little or nothing to provide for their welfare. In many cases, when they are entitled to pension, this regrettably is not often paid on time. This is because of poor planning and management coupled with lack of interest in the general welfare of aged persons. Also, those who engaged in private sectors that do not have retirement benefits for their workers suffer after their retirement.

In Nigeria, poverty and poor infrastructural development which perpetrated rural communities where most elderly people reside constraint them from achieving good well-being. Traditionally, the elderly are expected to rely primarily on their families for economic and emotional support. At times if family support mechanism fails, community help may be available. However, the collapse in family ties and

structure also have negative effect on elders who are used to enjoy supports from extended joint families where traditionally the elders are respected and properly catered for[9,22].

Due to the youthful nature of Nigeria age structure, government believes that the health problems that manifest among children and youths need more attention than that of the elderly. As a result, very little consideration is given to elderly in Nigeria by both the research community and policymakers. Average household sizes are large and a substantial proportion of older adults live alone. The economies of the elderly (65 years and above) in Ijumu community where the current study was conducted are predominantly supported by subsistence agriculture, which provides little or no pension coverage and limited health care services.

Nigerians age 65 and over are an important and growing segment of Nigeria population, there remains a gap in knowledge. In Nigeria, there has been limited research on wellbeing of elderly, especially in rural settings where people are most beset by poverty and poor health conditions. This study was aimed at providing a better understanding of the well-being of older people in Ijumu community, a rural setting in North-Central Nigeria. The resulting information provides an insight into the mechanism for examining the relationship between socio-demographic factors and well-being of elderly. There is also dearth of information on determinants of elderly well-being in the rural communities in Nigeria. Therefore, this study was designed to fill these gaps.

The objectives of this study were to; examine socio-demographic differential in elderly well-being, determine the prevalence and identify the predictors of poor well-being among the elderly residence in the study area. The first objective was designed with the view to knowing the socio-demographic factors that are associated with elderly well-being. The prevalence and predictors of poor well-being among the elderly will assist the populace in knowing the true state of health of elderly in the community. The vision to advance the well-being of elderly informed the choice of the study objectives.

Studying the differential in well-being of the elderly is obligatory, as this will provide decisive information for planning and evaluating success of health services and interventions. It will help the planners and policy makers in their decisions and uphold existing framework on elderly care and supports in Nigeria.

## 2. Methods

### Study Area

The study area was Ijumu, a rural community in North-Central Nigeria with a population figure of 119,929[3]. The community is made up of three administrative districts that is, Gbede district in the North, Ijumu-central and Ogidi/Ijumu-Oke district in the south. There are 15 political wards in the area with 5 in Gbede district, 4 in Ijumu-central district and 6 in Ijumu Oke district. There are also 740 enumeration areas

(EAs) with 247 in Gbede district, 197 in Ijumu-Central and 296 in Ijumu-Oke. The elderly in the community are predominantly farmers who practice agriculture on subsistence scale. There are few health facilities in the area most of which are not well equipped to meet health care needs of its citizens.

### Study Design

The study was descriptive cross-sectional in design and focused mainly on elderly people (65 years and above) residing in the area for at least a year. The reason for limiting to a year is to reduce bias that could occur as a result of people who are visitors or who have enjoyed facilities in the city and just migrated to the community. A multi-stage sampling technique was used to select the eligible respondents. EAs were chosen proportionately from each of the districts. Thereafter, the households with at least one elderly person in each EAs were listed to constitute a sampling frame. Moreover, households were randomly picked from each of the selected EAs using systematic random sampling technique. However, in a household having more than one eligible respondent, the respondent was picked using lottery method.

Quantitative method of data collection was used to elicit research information. The questionnaire contained relevant questions that cover all the objectives of the study. Data were collected by trained interviewers after obtaining an informed consent from the respondents. The training of interviewers and translation of the contents of the questionnaire to local language provided opportunities for proper understanding, easy interpretation and administration of the questionnaire.

### Measures

The dependent variable that was measured was well-being of respondents. Well-being was assessed using World Health Organization quality of life brief (WHOQOL-Bref) questionnaire. The likert scale which measures well-being in the past few weeks prior the survey was used[23]. The questionnaire contains a total of 24 questions based on a 4-domain structure. The 4 domains are physical, psychological, social relationship, and environment. These domains consisted of 7, 6, 3, and 8 questions respectively. The questions were assessed on a five point scale ranging from 1 to 5. The domain scores were scaled in a positive direction. The overall well-being was dichotomized into poor or good based on WHO standard procedures.

The WHOQOL-Bref questionnaire has been shown to be a valid measure of QoL in the elderly[24]. The instrument was adapted by Gureje and colleagues in 2008 and showed that it has an excellent internal reliability (Cronbach alpha = 0.86)[20]. It was designed as a self-rating instrument that could also be interviewer-administered.

Descriptive statistics was used to describe the wellbeing domains, these are; physical, psychological, social relationship and environmental. Cross-tabulations were used in presenting frequency distribution of socio-demographic variables and well-being. Chi-square statistics was used to assess association between these factors and elderly well-being. Thereafter, significant variables from Chi-square

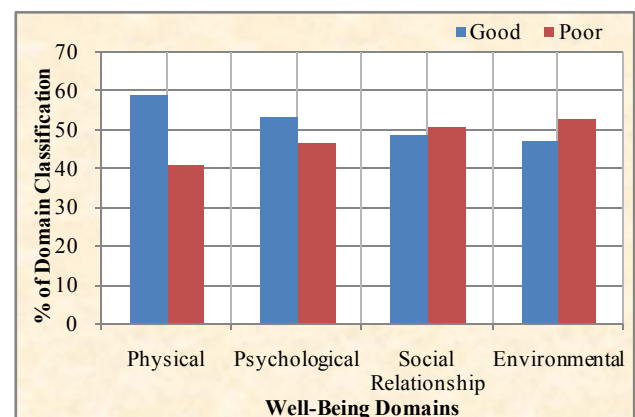
statistics were only considered for ordinary logistic regression. This was used to identify the socio-demographic variables that contribute to well-being. The logistic regression model is defined as;

$$\log\left(\frac{z}{1-z}\right) = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \dots + \beta_kx_k$$

Where  $z$  is the outcome measure which is wellbeing;  $z = 1$  for poor wellbeing;  $z = 0$  for good wellbeing.  $\beta_1, \beta_2, \beta_3,$  and so on, are the regression coefficients to be estimated,  $x_i$ 's are covariates such as gender, marital status, age of respondent, level of education, religion, current work status, occupation, family type, children ever born e.t.c. The identified variables relating to well-being were further considered for multiple regression analysis. These same set of variables were also used in generating eight different models based on their Wald statistics values beginning from the variable with highest value to the least. This was done for variables that were significantly related with well-being.

## 3. Results

Figure 1 shows the multiple bar chart of the percentage of domain classification (physical, psychological, social relationship and environmental) by well-being status of the respondents. Majority 59.0% of the respondents have physical well-being classified as good. The percentage of elderly who's psychological, social relationship and environmental well-being domain was good were 53.3%, 48.9% and 47.1% respectively.



**Figure 1.** The Multiple Bar Chart of the percentage of Domain Classification

Table 1 shows the frequency distribution of the respondents' well-being status by demographic variables. The data show that the mean age of the respondents was  $72.3 \pm 8.4$  years and 65.2% were females. About 51.9% of the respondents have good well-being. The state of well-being does not show any association with gender as no variation existed between the females and males elderly well-being ( $p=0.905$ ). There was a strong association between the age classified in group and well-being ( $p=0.000$ ). The prevalence of poor well-being was more pronounced among elderly eighty years and above (72.0%) than any other age intervals,

whereas it was least among those aged 65-69 years (40.9%).

In Table 1, the percentage of elderly classified as having poor well-being reduces with the increasing levels of education. It falls consistently from 54.1% among those with no education to 35.8% for those with higher level of education. The number of children previously born alive does not show a significant relationship with well-being ( $p=0.056$ ), however, the pattern shows an indication that higher children previously life born can inhibit good well-being of elderly. Also, variation of well-being existed among the subgroup of the respondents in terms of their marital status and this variation was statistically significant ( $p=0.001$ ). The elderly who were separated (76.2%) experienced higher poor well-being than those in any other marital groups. Poor well-being was also pronounced among divorced and separated elderly, 57.5% and 50.2% respectively.

Table 2 shows the frequency distribution of the respondents' well-being status by social variables. The data depict that there was a significant association between religion and well-being of elderly in the study area ( $p=0.044$ ) with respondents who belong to Islamic sect having higher proportion of poor well-being (53.4%) than the Christians (47.1%). No significant association existed between family type ( $p=0.250$ ) work history ( $p=0.742$ ) currently financing children needs ( $p=0.863$ ) and elderly well-being.

However, the current work status shows significant association with well-being, the proportion of poor well-being elderly among those who were not working (56.9%) was higher than their counterparts who were working (44.0%). Respondents who claimed that both males and females children visit more regularly had lower proportion of poor well-being (35.8%) elderly as against those who mentioned their males (62.3%) or females (62.9%) children respectively.

Elderly who were supported financially by both of their males and females children had a lower percentage of poor well-being (39.7%) as compared with those who were only supported by either their males (60.7%) or female (62.0%) children. There was significant association between well-being of elderly and those having children living together with them at their homes ( $p=0.006$ ). Those having their children living with them (52.8%) having higher proportion of poor well-being elders than those with no children living with them (44.8%). The percentage of elderly who have enough money to meet his or daily and health needs (20.5%) were experiencing lower poor well-being than those who do not (57.1%).

Table 3 shows ordinary logistic regression analysis of poor well-being by background characteristics. At this stage some of the variables such as education, religion and current work status who were significantly associated with elderly well-being using Chi-square test were not significantly related to poor well-being. Therefore, these set of variables were eliminated from further analysis.

In Table 3, number of children alive ( $\beta=-0.596$ ), which of your children visit you more regularly ( $\beta=-0.545$ ), are any of your children living with you ( $\beta=-0.508$ ), do you have

enough money to meet your daily and health needs ( $\beta=-1.357$ ), were negatively significantly related to poor well-being.

**Table 1.** Frequency Distribution of the Respondents Well-being Status by Demographic variables

Demographic Characteristics	WELLBEING		TOTAL
	GOOD	POOR	
TOTAL	50.9(620)	49.1(597)	100.0(1217)
Gender; $\chi^2=0.0142$			
Male	51.2(217)	48.8(207)	100.0(424)
Female	50.8(403)	49.2(390)	100.0(793)
Age Group*; $\chi^2=49.072$			
65-69	59.1(358)	40.9(248)	100.0(606)
70-74	46.9(114)	53.1(129)	100.0(243)
75-79	39.8(41)	60.2(62)	100.0(103)
80-84	51.4(72)	48.6(68)	100.0(140)
85+	28.0(35)	72.0(90)	100.0(125)
Levels of Education*; $\chi^2=17.845$			
None	45.9(294)	54.1(347)	100.0(641)
Primary	53.5(190)	46.5(165)	100.0(355)
Secondary	60.0(84)	40.0(56)	100.0(140)
Higher	64.2(52)	35.8(29)	100.0(81)
Children Ever Born; $\chi^2=7.563$			
1-2	64.9(48)	35.1(26)	100.0(74)
3-4	53.3(152)	46.7(133)	100.0(285)
5-6	50.0(214)	50.0(214)	100.0(428)
7+	48.5(205)	51.5(218)	100.0(423)
Marital Status**; $\chi^2=18.818$			
Never married	55.0(11)	45.0(9)	100.0(20)
Currently married	54.4(472)	45.6(396)	100.0(868)
Widowed	42.5(124)	57.5(168)	100.0(292)
Divorced	50.0(8)	50.0(8)	100.0(16)
Separated	23.8(5)	76.2(16)	100.0(21)

\*Significant at 0.1%; \*\*Significant at 1%

However, respondents' age ( $\beta=+0.208$ ), children ever born ( $\beta=+0.672$ ), marital status ( $\beta=+0.260$ ), financial support from children ( $\beta=+0.931$ ) were positively significantly related with poor well-being. The data further show that having enough money to meet daily and health needs (OR=0.26, C.I=0.18-0.37), children regular visit (OR=0.58, C.I=0.48-0.69) and financial support from children (OR=2.54, C.I=1.84-3.49), each contributed more to the strength of poor well-being of elderly than any other variables considered in the analysis.

Table 4 shows the multiple logistic regression analysis of poor well-being by background characteristics. The data show that the older elderly people were more at risk of poor well-being than the younger elderly. Elderly who were

within the age bracket 70-74, 75-79 and 85+ were 1.4 (C.I=1.0-2.0), 2.2 (C.I=1.3-3.5) and 4.9 (C.I=3.0-8.0) more likely to experience poor well-being than their counterparts in age group 65-69 years respectively. Elderly people who were no more in relationship with their spouses (separated) were 6.3 (C.I=1.3-30.0) more likely to have poor well-being than the unmarried elderly.

The higher risk of poor well-being was more pronounced among elderly who were only visited regularly by their male children than those often visited by both of their males and females children (OR=0.4, C.I=0.3-0.6). Receiving financial assistance from children was found to reduce the risk of poor well-being as those who do not receive any financial assistance from their children were twice (OR=2.4, C.I=1.7-3.2) more likely to experience poor well-being than those who receive. Children living with elderly inhibit poor well being. The likelihood of poor well-being was lower among Elderly who have enough money to meet their daily and health needs (OR=0.2, C.I=0.1-0.3) than those who do not.

Table 5 shows multiple logistic regression models of poor well-being according to background characteristics. The analysis that generated the results in table 5 was based on the strength of relationship of the variables with the poor well-being as shown by ordinary logistic regression in Table 3. The introduction of these variables which generated eight different models was based on the value of Wald statistic (WS). It is known that the higher the value of WS the more the strength of relationship, this could be seen in the generated probability value.

The eight analytical models of the regression analysis show in Table 5 point to the interaction effects of well-being and the variables such as having enough money to meet daily and health needs, children visit, financial support from children, age, children living with elderly, number of children ever born, marital status and number of children surviving.

When the logistic regression analysis was restricted to only the variable; financial ability to meet daily and health needs, elderly who do not have such ability were five times ( $p < 0.001$ ) more likely to experience poor well-being than those who have (Model 1). The extent of the risk was statistically significant and reduces as different variables were introduced into the logistic regression analysis. Children visit (added in the second model) reduces the effect of having enough money to meet daily and health needs. Receiving financial assistance from children (Model 3) does not change the effects of having enough money to meet daily and health needs or children visit.

Age does not affect the influence of the other variables considered (Model 4). Elderly having children living with them slightly reduces the effect of receiving financial support from children, children visit and having enough money to meet daily and health needs, but it is an important factor affecting the influence of age (Model 5). Number of children ever born, marital status and number of children surviving added as control individually do not change the effects of

variables considered in the previous models (Models 6, 7 and 8). The apparent significant relationship of well-being and given birth to seven or more children (7+), children living with the respondents, age group 80-84 disappeared when controlling for the effect of number of children surviving (Model 8).

**Table 2.** Frequency Distribution of the Respondents Well-being Status by Social variables

Social Characteristics	WELLBEING		TOTAL
	GOOD	POOR	
<b>Religion***; <math>\chi^2=4.068</math></b>			
Christianity	52.9(446)	47.1(397)	100.0(843)
Islam	46.6(172)	53.4(197)	100.0(369)
<b>Type of Family; <math>\chi^2=1.326</math></b>			
Monogamy	52.3(370)	47.7(338)	100.0(708)
Polygamy	48.9(239)	51.1(250)	100.0(489)
<b>Work History; <math>\chi^2=0.109</math></b>			
Ever Worked	50.8(583)	49.2(564)	100.0(1147)
Never Worked	52.9(37)	47.1(33)	100.0(70)
<b>Currently Work Status*; <math>\chi^2=19.395</math></b>			
Working	56.0(413)	44.0(324)	100.0(737)
Not Working	43.1(207)	56.9(273)	100.0(480)
<b>Which of your children visit you more regularly?*; <math>\chi^2=87.496</math></b>			
Male	37.7(66)	62.3(109)	100.0(175)
Female	37.1(152)	62.9(258)	100.0(410)
Both	64.2(401)	35.8(224)	100.0(625)
<b>Financial support from children*; <math>\chi^2=56.704</math></b>			
Male	39.3(72)	60.7(111)	100.0(183)
Female	38.0(128)	62.0(209)	100.0(337)
Both	60.3(420)	39.7(277)	100.0(697)
<b>Do you still spend for any of your children?; <math>\chi^2=0.030</math></b>			
Yes	50.9(330)	49.1(318)	100.0(648)
No	51.4(289)	48.6(273)	100.0(562)
<b>Are any of your children living with you?**; <math>\chi^2=7.658</math></b>			
Yes	47.2(288)	52.8(322)	100.0(610)
No	55.2(331)	44.8(269)	100.0(600)
<b>Do you receive financial assistance from your children*; <math>\chi^2=57.422</math></b>			
Yes	57.3(526)	42.7(392)	100.0(918)
No	31.8(93)	68.2(199)	100.0(292)
<b>Do you have Enough Money to meet your Daily and Health needs?; <math>\chi^2=111.959</math></b>			
Yes	79.5(213)	20.5(55)	100.0(268)
No	42.9(407)	57.1(542)	100.0(949)

\*Significant at 0.1%; \*\*Significant at 1%; \*\*\* Significant at 5%

**Table 3.** Ordinary Logistic Regression Analysis of Poor Well-being according to Background Characteristics

Background Characteristics	$\beta$	S.E	Wald	Sig.	Exp( $\beta$ )	95% C.I for Exp( $\beta$ )	
						Lower	Upper
Age	0.208	0.056	13.957	0.000	1.231*	1.104	1.372
Education	-0.134	0.079	2.869	0.090	0.874	0.748	1.021
Children Ever Born	0.672	0.276	5.930	0.015	1.958***	1.140	3.363
Children Alive	-0.596	0.275	4.682	0.030	0.551***	0.321	0.945
Marital Status	0.260	0.112	5.361	0.021	1.296***	1.041	1.615
Religion	0.264	0.145	3.312	0.069	1.301	0.980	1.729
Current Work Status	0.278	0.147	3.571	0.059	1.321	0.990	1.763
Which of your CV you more regularly?	-0.545	0.092	35.035	0.000	0.580*	0.484	0.694
Do you receive FA from your children	0.931	0.163	32.647	0.000	2.537*	1.844	3.492
Are any of your children living with you?	-0.508	0.169	9.029	0.003	0.602**	0.432	0.838
Do you have EM to meet your DHN?	-1.357	0.179	57.635	0.000	0.257*	0.181	0.365
<b>Constant</b>	<b>0.411</b>	<b>0.669</b>	<b>0.379</b>	<b>0.538</b>	<b>1.509</b>		

\* Significant at 0.1%, \*\* Significant at 1%; \*\*\*Significant at 5%; CV: Child visit; FA: Financial Assistance; EM: Enough Money; DHN: Daily and Health Needs

**Table 4.** Multiple Logistic Regression Analysis of Poor Well-being according to Background Characteristics

Background Characteristics	$\beta$	S.E	Wald	Sig.	Exp( $\beta$ )	95% C.I for Exp( $\beta$ )	
						Lower	Upper
<b>Age Group</b>							
65-69(R.F)	(R.F)	(R.F)	(R.F)	(R.F)	1.000	(R.F)	(R.F)
70-74	0.345	0.172	4.016	0.045	1.413***	1.008	1.980
75-79	0.770	0.247	9.742	0.002	2.159**	1.332	3.502
80-84	0.408	0.217	3.531	0.060	1.503	0.983	2.300
85+	1.590	0.248	41.091	0.000	4.906*	3.016	7.977
<b>Children Ever Born</b>							
1-2(R.F)	(R.F)	(R.F)	(R.F)	(R.F)	1.000	(R.F)	(R.F)
3-4	0.124	0.707	0.031	0.861	1.132	0.283	4.524
5-6	0.643	0.829	0.602	0.438	1.903	0.375	9.667
7+	1.564	0.879	3.165	0.075	4.780	0.853	26.791
<b>Children Surviving</b>							
1-2(R.F)	(R.F)	(R.F)	(R.F)	(R.F)	1.000	(R.F)	(R.F)
3-4	0.309	0.659	0.220	0.639	1.362	0.374	4.960
5-6	-0.136	0.787	0.030	0.863	0.873	0.187	4.084
7+	-1.093	0.844	1.679	0.195	0.335	0.064	1.752
<b>Marital Status</b>							
Never married	(R.F)	(R.F)	(R.F)	(R.F)	1.000	(R.F)	(R.F)
Currently married	0.450	0.579	0.605	0.437	1.568	0.505	4.875
Widowed	0.570	0.592	0.929	0.335	1.769	0.555	5.642
Divorced	0.866	0.794	1.192	0.275	2.378	0.502	11.268
Separated	1.830	0.803	5.192	0.023	6.232***	1.292	30.065
<b>Which of your children visit you more regularly?</b>							
Male	(R.F)	(R.F)	(R.F)	(R.F)	1.000	(R.F)	(R.F)
Female	0.122	0.202	0.363	0.547	1.130	0.760	1.680
Both	-0.867	0.194	20.015	0.000	0.420*	0.287	0.614
<b>Do you receive financial assistance from your children</b>							
Yes	(R.F)	(R.F)	(R.F)	(R.F)	1.000	(R.F)	(R.F)
No	0.856	0.161	28.159	0.000	2.354*	1.716	3.229
<b>Are any of your children living with you?</b>							
Yes	(R.F)	(R.F)	(R.F)	(R.F)	1.000	(R.F)	(R.F)
No	-0.359	0.140	6.534	0.011	0.699***	0.531	0.920
<b>Do you have Enough Money to meet your Daily and Health needs?</b>							
Yes	-1.440	0.182	62.427	0.000	0.237*	0.166	0.339
No	(R.F)	(R.F)	(R.F)	(R.F)	1.000	(R.F)	(R.F)
<b>Constant</b>	<b>-0.720</b>	<b>0.674</b>	<b>1.140</b>	<b>0.286</b>	<b>0.487</b>		

\* Significant at 0.1%; \*\*Significant at 1%; \*\*\*Significant at 5%

**Table 5.** Multiple Logistic Regression Models of Poor Well-being according to Background Characteristics

BACKGROUND	Model1	Model2	Model3	Model4	Model5	Model6	Model7	Model8
VARIABLES	N=1217	N=1210	N=1210	N=1210	N=1210	N=1210	N=1210	N=1206
<b>Do you have Enough Money to meet your Daily and Health needs?</b>								
Yes	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
No	5.157*	4.700*	4.342*	4.177*	4.111*	4.086*	4.106*	4.219*
<b>Which of your children visit you more regularly?</b>								
Male		1.000	1.000	1.000	1.000	1.000	1.000	1.000
Female		1.095	1.101	1.154	1.153	1.135	1.105	1.130
Both		0.381*	0.417*	0.441*	0.433*	0.423*	0.422*	0.420*
<b>Do you receive financial assistance from your children</b>								
Yes			1.000	1.000	1.000	1.000	1.000	1.000
No			2.101*	2.568*	2.412*	2.455*	2.452*	2.354*
<b>Age Group</b>								
65-69(R.F)				1.000	1.000	1.000	1.000	1.000
70-74				1.449**	1.477**	1.440**	1.429**	1.413**
75-79				1.988**	2.191**	2.162**	2.156**	2.159**
80-84				1.400	1.542**	1.520**	1.474	1.503
85+				4.710*	5.192*	5.120*	4.961*	4.906*
<b>Are any of your children living with you?</b>								
Yes					1.000	1.000	1.000	1.000
No					0.708**	0.736**	0.717**	0.699
<b>Children Ever Born</b>								
1-2(R.F)						1.000	1.000	1.000
3-4						1.659	1.631	1.132
5-6						1.766	1.786	1.903
7+						1.839**	1.868**	4.780
<b>Marital Status</b>								
Never Married							1.000	1.000
Currently Married							1.508	1.568
Widowed							1.811	1.769
Divorced							2.238	2.378
Separated							5.926**	6.232**
<b>Children Surviving</b>								
1-2(R.F)								1.000
3-4								1.362
5-6								0.873
7+								0.335
<b>Constant</b>	-1.354*	0.439*	0.374*	0.252*	0.299*	0.177*	0.112**	0.115**
<b>-2 Log likelihood</b>	1568.4	1490.7	1465.7	1415.1	1408.7	1404.4	1395.6	1382.1
<b>Cox &amp; Snell R<sup>2</sup></b>	0.093	0.143	0.160	0.194	0.199	0.202	0.207	0.213
<b>Nagelkerke R<sup>2</sup></b>	0.124	0.190	0.213	0.259	0.265	0.269	0.277	0.284

\* Significant at 0.1%, \*\*Significant at 5%

## 4. Discussion

This study was informed as a result of poor attitudes of government to elderly which are totally neglected thereby not bothered about their health and financial needs. In Nigeria, no policy or social security system has ever been put in place to care for people at their old age[9]. Also, the primary health care system has no special provision for providing health care for the elderly, and even the overall health policy show no special concern for the elderly. The retirees who served in public or private organization at their younger ages are often given gratuity and pension which were deducted from their monthly salary while in active service. Most at times, the dues are not received prior the death of the beneficiaries as a result of bureaucratic system in the organizations where they serviced[25].

Due to poverty and poor infrastructural development, elderly people living in Nigeria not only face lower life

expectancies but also live a higher proportion of their lives in poor health. Governments have lackadaisical stance to the health of the aged and family structure which have been known to give care to elderly are on the verge of collapse. All these have adverse effect on the health of elderly which transform to their well-being status[9, 26].

In the current study, our data show that majority of the respondents have good physical and psychological well-being. This is an indication that good well-being transition is beginning in Nigeria even among the non-privileged sectors of the population from which our sample was drawn. Therefore, it is worthwhile to know that the transition is beginning to appear among the remote rural population involved in our research. Approximately the same proportion of the respondents had good and poor well-being. The mean age of the respondents was seventy two years and higher proportion of the elderly was females. Higher proportion of elderly females reflects the age structure of Nigeria popula-

tion which has more women at its upper tail end[3].

The state of well-being does not show any association with gender. This is contrary to previous researches which show that women have longer life expectancy and spend a greater total number of years in good health than men; however, women spend a greater proportion of the older years in poor health than men[27, 28]. Another study found that elderly married males enjoy better health than the elderly females[29]. The study concluded that the traditional role that women play as the primary care givers, coupled with the lower status leave them with access to limited financial resources and health care for themselves.

Variables such as the age classified in group, education, marital status were associated with elderly well-being. The percentage of elderly classified as having poor well-being reduces with the increasing level of schooling attained. The difference is particularly marked among women with higher level of education. Education has a lot of positive influence on well-being; educated elderly are likely to receive higher monthly pension, more knowledgeable on means of preventing and treatment of diseases, live in a clean environment. Kabir and colleagues studied the relationship between incidence of disease and the socio-economic characteristics of the elderly respondents and found that education was inversely related to the incidence of disease among the elderly[30]. Their findings and that of another study further revealed that educational attainment influences socioeconomic status, which plays a role in well-being at older ages. Higher levels of education are usually associated with higher incomes, higher standards of living and above average health[9, 30].

The current study show that variation of well-being existed among the subgroup of women in terms of their marital status. This is consistent with the result of studies from other parts of the world. For instance, a study found marital status to be associated with health and survival outcomes among elderly[31]. The elderly who were separated experienced higher poor well-being than those in any other marital groups. In any rural part of Nigeria, either women or men who are separated and live alone do not accord respect and are often stigmatized and marginalized on things that can benefit their health. As a result, they go through psychological stress which can have serious effect on their well-being[21,22]. Unlike those who are married which tend to benefit from spousal supports and the widows/widowers do enjoy the concern, sympathy and support of the family and the community. Marital status can strongly affect one's emotional and economic well-being as it influences living provisions and the availability of caregivers for elderly with an illness or disability[32].

Significant association also existed between religion and well-being of elderly in the study area with Islamic sect having higher proportion of poor well-being elderly than the Christians. Often, the Muslims engage in polygamous, marry new wives at older ages, and bear many children thus the financial means of the family are spread across its members. The family resources that ought to be used to meeting the

daily and health needs of the elderly are concentrated on the care for younger children's needs and education. The finding is in accordance with the result from previous studies[20, 32-34].

The study further found that no significant association existed between family type, work history and elderly well-being. Some older people work as a result of economic necessity. Others may be attracted by the social contact, intellectual challenges, or sense of value that work often provides. The current work status shows significant association with well-being, the proportion of poor well-being elderly among those who are not working was higher than their counterparts who were working. The association disappeared when the variable was entered into ordinary logistic regression model.

Elderly who were only visited regularly by their male children have higher risk of poor well-being than those often visited by both males and females children. Studies have established that daughters give more care to their aged parents than the males[35,36]. Males get occupied with their job and their immediate family needs. Also, elderly who usually receive financial support from their children have better well-being than those who do not. This is because most elderly people do not have the strength to work; therefore any financial assistance from the children will go a long way at alleviating their health and financial needs.

Children living with elderly appear to bring greater vulnerability to poor well-being than those living alone. Such elderly can be those who still have young children or grandchildren to cater for. The diversion of care to meeting the needs of their young children can have negative impact on the health of the elderly[25].

## 5. Conclusions

Well-being considered to be poor is very common among the elderly in the study area. The identified major socio-demographic factors that are predictors of elderly poor well-being were; older age, being separated after marriage, visits by only male children, not receiving financial support from children, children living with elderly and not having enough money to meet daily and health needs. While developing policies aim at improving elderly well-being in Nigeria, government should include; age, marital status, financial assistance from children, children visit by gender, children living with elderly and having enough money to meet daily needs as part of their key variables.

Though Governments and individuals are not oblivious of the necessity for committed care for the elderly in Nigeria, however, not much has been done to ensure better well-being for the elderly. Government should develop health and financial policies aim at improving well-being of elderly in the study community. The aspect of the parent-child relationship still needs a great deal of research attention.



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