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Assessing Quality of Life and its Predictors among Elderly Patients in a Tertiary Health Facility in Nigeria

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ABSTRACT

Background: The quality of life (QoL) among older adults is an important indicator of successful ageing, yet it remains underexplored in Nigeria's healthcare context. **Purpose**: This study assessed quality of life, its associated factors and challenges among geriatric patients attending the University of Benin Teaching Hospital, Benin City, Edo State. **Methods:** A hospital-based cross-sectional descriptive survey was conducted among 150 geriatric patients aged 60 years and above using a structured, interviewer-administered questionnaire adapted from the WHOQOL-BREF instrument. Data was analyzed using descriptive and inferential statistics, including multivariate logistic regression, to identify predictors of quality of life. **Results:** Findings revealed that 12.1% of participants reported good QoL, 53.4% moderate, and 34.5% poor. Overall, a moderate quality of life (grand mean = 3.0) was reported. The environmental (mean = 3.2) and psychological (mean = 3.1) domains recorded the highest scores, while physical health (mean = 2.9) scored lowest. Major factors associated with quality of life were chronic illness (3.6 ± 1.18), long-term management for over a year (3.7 ± 1.14), difficulty adhering to medications (3.8 ± 1.09) and physical limitations (3.4 ± 1.22). Multivariate analysis showed that educational attainment (OR = 4.57; 95% CI:1.16 – 18.02, p = 0.005) and income level (OR = 5.25; 95% 1.25 – 22.08; p = 0.003) were the strongest predictors of better quality of life, while age, gender, and religion were not statistically significant. Respondents reported notable challenges with health (3.6 ± 1.16), mobility (3.5 ± 1.19), finances (3.4 ± 1.24), and not following treatment or medication plan strictly (3.7 ± 1.11). **Conclusion:** Geriatric patients had an overall moderate quality of life, with physical health being the most affected domain. Chronic illness, physical limitations, and challenges with medication adherence significantly influenced quality of life, while higher education and income predicted better outcomes. **Implications for Nursing:** Targeted geriatric interventions focusing on physical health, medication adherence, and socio-economic support are needed to improve quality of life among older adults.

Keywords: Quality of life, Geriatric patients, Ageing, Education, Income, Nigeria, WHOQOL-BREF.

What does this paper add?

● Providing an updated evidence on geriatric quality of life in a Nigerian tertiary facility

1. The study provides recent, context-specific data on the quality of life of older adults in Benin City—a population that is under-represented in

QoL research within Nigeria and sub-Saharan Africa.

● Revealing domain-specific strengths and vulnerabilities

2. By analyzing WHOQOL-BREF domains, the study highlights which dimensions of life (physical, psychological, social, environmental) are more impacted, guiding targeted interventions rather than generalized approaches.

3. The study identifies education and income as the strongest predictors of better quality of life.

4. It highlights the significant impact of chronic illness, physical limitations, and medication adherence challenges on quality of life.

Introduction

The rapid growth of the global geriatric population has intensified concerns about the health, functionality, and overall quality of life (QoL) of older adults. By 2050, the population of individuals aged 60 years and above is projected to exceed 1.5 billion, with nearly two-thirds residing in low- and middle-income countries (LMICs) (WHO, 2023). This demographic transition poses significant challenges for healthcare systems, particularly in LMICs, such as Nigeria, where health infrastructure, social welfare schemes, and geriatric-focused services remain limited (Hossen et al., 2023; WHO, 2023). As longevity increases, ensuring not only survival, but also a satisfactory quality of life for older adults, has become a critical public health priority.

Quality of life is a multidimensional construct that reflects individuals' perception of their position in life within the context of their culture, value systems, goals, expectations, and concerns. It encompasses physical health, psychological well-being, social relationships, and environmental conditions (Chavez-Baldini et al., 2023). Among elderly populations, QoL is particularly salient, as ageing is frequently accompanied by declining physical capacity, chronic illness, functional dependence, social isolation, and economic vulnerability (Hariram et al., 2023; Veenhoven, 2024). Assessing QoL among older adults, therefore, provides a comprehensive understanding of their lived experiences and offers insights beyond traditional clinical outcomes, enabling the identification of domains requiring targeted interventions (Religioni et al., 2025).

Chronic diseases constitute a major determinant of QoL in old age. Conditions, such as hypertension, diabetes mellitus, arthritis, cardiovascular diseases, and neurodegenerative disorders are highly prevalent among older adults and are often associated with pain, disability, psychological distress, and increased healthcare utilization (Fong, 2019; Kudesia et al., 2021). The presence of multimorbidity—defined as two or more chronic conditions—further exacerbates functional limitations and negatively affects both physical and psychological well-being (Gadó et al., 2022). Evidence suggests that more than 80% of older adults live with at least one chronic illness, while over 60% experience multimorbidity, making chronic disease burden a critical factor influencing QoL (Hajat & Stein, 2018; WMA, 2024).

Beyond medical conditions, socio-demographic and psychosocial factors significantly shape QoL in older age. Educational attainment, income level, marital status, and social support have consistently been linked to variations in QoL outcomes (Morgan et al., 2017; Trivedi, 2023). Higher education and stable income enhance health literacy, access to care, and coping capacity, while poverty and low educational status limit healthcare access and exacerbate dependence. Empirical studies have also demonstrated that physical health and functional dependency are major contributors to reduced QoL among hospitalized elderly populations, highlighting the interaction between health status and functional ability (Ogunyemi et al., 2018). Similarly, studies from Cameroon and Turkey have shown that multimorbidity and cardiovascular conditions significantly reduce physical functioning and overall QoL (Ndobo-Koe et al., 2022; Ozkan & Kazancoglu, 2021). In Nigeria, Gureje et al. (2008) reported that higher income levels and active community participation improved QoL, whereas disability and poverty were associated with poorer outcomes. The World Health Organization Quality of Life-BREF (WHOQOL-BREF) instrument provides a validated and widely used framework for assessing QoL across physical, psychological, social, and environmental domains (Martin-Maria et al., 2021; WHO, 2023). Its application among geriatric populations enables the identification of specific domains most affected by ageing, chronic illness, and social circumstances, thereby guiding patient-centred care, resource allocation, and policy formulation (Hegde et al., 2022).

Despite growing global evidence, there remains a

notable paucity of empirical data on the quality of life and its predictors among elderly patients receiving care in Nigerian tertiary hospitals. Existing Nigerian studies have largely focused on general adult populations or community-dwelling older adults, with limited attention to hospitalized or clinic-attending geriatric patients who often present with complex, long-standing health conditions (Alanazi et al., 2024; Turnpenny et al., 2018). Consequently, clinical management in tertiary facilities tends to prioritize disease control while underemphasizing patient-reported outcomes, such as QoL, psychosocial well-being, and functional independence (Shaban et al., 2024; Xie et al., 2024).

The rationale for this study is, therefore, grounded in the need to generate context-specific evidence on the quality of life of elderly patients in a Nigerian tertiary healthcare setting and to identify key predictors and challenges influencing their well-being. Understanding these factors is essential for developing comprehensive, multidisciplinary, and person-centred geriatric care strategies that extend beyond disease management to encompass physical, psychological, social, and environmental needs. Such evidence is critical for informing clinical practice, guiding health policy, and improving the design of geriatric services in Nigeria.

Purpose of the Study

This study assessed the quality of life and its predictors among elderly patients attending a tertiary health facility in Benin City, Edo State, Nigeria.

Specific Objectives

1. To assess the overall quality of life among elderly geriatric patients attending the selected tertiary health facility.
2. To identify factors associated with the quality of life of elderly geriatric patients attending the selected tertiary health facility.
3. To examine challenges related to ageing and health as perceived by elderly geriatric patients in the selected tertiary health facility.

Materials and Methods
Research Design

This study adopted a cross-sectional descriptive survey design to assess quality of life, associated factors and challenges among elderly geriatric patients. The cross-sectional approach was appropriate, because it allows for the collection of data from participants at a single point of time, providing a snapshot of their health status, experiences, and perceptions (Setia, 2016).

Study Setting

The study was conducted at the University of Benin Teaching Hospital (UBTH) in Benin City, Edo State, Nigeria, selected due to its status as a premier tertiary healthcare institution in southern Nigeria and as a referral center serving both urban and rural populations across several states in the south-south and south-east regions. Data was collected from August 2025 to September 2025 during the recruitment period.

Sample Size/Sampling Technique

The study targeted a total of 150 geriatric patients aged 60 years and above who were receiving care at the University of Benin Teaching Hospital (UBTH), Benin City. These participants were drawn from various specialized wards and clinics within the hospital. Specifically, 49 patients were from the Geriatrics Clinic, 10 each from the Male and Female Medical Wards, 35 from the Cardiology Clinic, 35 from the Endocrine Clinic, and 11 from the Orthopaedic Unit, bringing the total to 150 respondents. Census sampling was employed, because the target population was small, and all eligible geriatric patients attending the facility during the study period were invited to participate.

A convenience sampling technique was used to select participants present at the facility during the study period. This approach is commonly applied in health research involving older adults, as it enables recruitment of participants who are readily accessible while attending outpatient clinics or wards, thereby optimizing response rates and feasibility (Etikan et al., 2016).

Instrument for Data Collection

Data was collected using a structured, interviewer-administered questionnaire, adapted from the WHO Quality of Life-BREF (WHOQOL-BREF) instrument. The WHOQOL-BREF, a validated tool for assessing subjective quality of life, originally consists of 26 items across four domains: physical health, psychological well-being, social relationships, and environmental factors.

For this study, the instrument was modified and expanded to suit the specific context of geriatric patients in a Nigerian tertiary hospital. Additional items were

developed by the authors based on literature review and expert input to capture socio-demographic, clinical, and psychosocial variables, as well as challenges related to ageing and health. The added items were pre-tested and refined to ensure clarity and relevance.

The questionnaire consisted of the following sections:

Section A: Socio-demographic information – included 9 items on age, sex, marital status, educational level, occupation, religion, ethnicity, household income, and place of residence. These items provided baseline characteristics of respondents.

Section B: Quality of life assessment (WHOQOL-BREF) – consisted of 15 items across four domains: physical health (4 items), psychological well-being (4 items), social relationships (3 items), and environmental factors (4 items).

Respondents rated each item on a 5-point Likert scale (1 = very poor / not at all, 5 = very good / completely), with higher scores indicating better quality of life. Domain scores were computed by calculating the mean of items within each domain. Overall QoL was categorized as: poor (0–49.9%), moderate (50-69.9%), and good (70–100%) based on percentage scores derived from the total possible points.

Section C: Factors associated with quality of life – included 10 items on socio-demographic, clinical (e.g. chronic illness, duration of disease, medication adherence), and psychosocial determinants (e.g. emotional support, community participation). These items were measured using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree), with higher scores indicating stronger influence on QoL.

Section D: Challenges related to ageing and health – included 5 items on perceived difficulties in physical functioning, financial constraints, healthcare access, mobility, and social participation. Items were rated on a 5-point Likert scale (1 = not at all difficult, 5 = extremely difficult). Higher mean scores indicated greater perceived challenges.

Validity/ Reliability of the Instrument

The questionnaire used in this study was adapted from the World Health Organization Quality of Life-BREF (WHOQOL-BREF) instrument, which has been widely validated across diverse cultural and clinical settings. The WHOQOL-BREF has demonstrated good psychometric properties, with Cronbach's alpha coefficients reported by the original authors ranging from 0.68 to 0.84 across domains, indicating acceptable to good internal consistency (Skevington et al., 2004; WHOQOL Group, 1998).

To ensure the validity of the adapted instrument, face, content, and construct validities were evaluated by two experts in geriatric nursing (MSc holders with ≥10 years of clinical and research experience in geriatric care) and two public health specialists (PhD holders with experience in survey research and instrument development). The instrument was reviewed for clarity, appropriateness, cultural relevance, and alignment with study objectives. Feedback from experts led to rewording of ambiguous items, removal of redundant questions, and inclusion of context-specific factors, ensuring that the instrument was suitable for the target population.

A pilot study was conducted with 10% of the sample (15 participants) drawn from a population similar to that of the main study, but not included in the final survey. This allowed the assessment of comprehensibility, timing, and feasibility of the questionnaire administration. Reliability was assessed using Cronbach's alpha to determine internal consistency. Values obtained were: Section B – 0.72, Section C – 0.85, and Section D – 0.86, indicating satisfactory reliability (Nunnally & Bernstein, 1994). These results confirm that the instrument was both valid and reliable for assessing quality of life, its associated factors, and challenges among elderly geriatric patients.

Data Collection Procedures

Data was collected through face-to-face interviews conducted by trained research assistants over a three-week period. Participants were approached individually in outpatient clinics and medical wards, where the study objectives were explained, and informed consent was obtained prior to participation. Questionnaire forms were administered in English or local dialects, according to the participant's preference, to ensure comprehension and accurate responses. Each interview lasted approximately 20-25 minutes, allowing sufficient time for explanation of items and clarification of participant responses. During the data collection period, the principal investigator monitored the interviews through regular supervision and random spot checks, and reviewed completed questionnaires forms daily to identify and correct inconsistencies or missing

information. Any discrepancies were discussed immediately with the research assistants to maintain high data quality and reliability throughout the study.

Methods of Data Analysis

Quantitative data was analyzed using descriptive and inferential statistics. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize participants' socio-demographic characteristics, clinical profiles, quality of life scores, associated factors, and challenges related to ageing and health. Inferential statistics, specifically multiple logistic regression, were conducted to examine associations between socio-demographic, clinical, and psychosocial factors and quality of life. Statistical significance was set at $p < 0.05$.

Missing data was addressed by performing listwise deletion for variables with missing responses, ensuring that only complete cases were included in the respective analyses. The proportion of missing data was minimal (<5%) and did not significantly affect the results.

Data processing and analysis were performed using IBM SPSS Statistics for Windows, version 28.0 (Armonk, NY: IBM Corp; 2021).

Ethical Considerations

Ethical approval with protocol number *ADM/E22/A/VOL.VII/148312114* was obtained from the Research Ethics Committee of the University of Benin Teaching Hospital. Informed consent was obtained from all participants after explaining the study purpose, procedures, benefits, risks, and participant rights, including the right to withdraw without any penalty. All study procedures adhered to the ethical principles of autonomy, beneficence, non-maleficence, and justice as outlined by the World Medical Association (2025). Autonomy was maintained by obtaining written informed consent from all participants after explaining the study objectives, procedures, and their right to withdraw at any time without any penalty. Beneficence and non-maleficence were ensured by minimizing risks, maintaining confidentiality, and providing participants with support or referrals when health concerns were identified during the study. Justice was upheld by recruiting participants equitably from both outpatient clinics and medical wards, ensuring fair selection without discrimination based on age, gender, ethnicity, or socio-economic status.

Results

Participants' Characteristics

Findings show that the 148 respondents had a mean age of 70.3 ± 13.3 years, with most of them aged 60–69 years (52.7%). Females constituted 55.4% of the sample. Most of them were married (43.2%) or widowed (39.9%). Educational levels ranged from no formal education (22.3%) to tertiary education (18.2%), with primary (31.8%) and secondary (27.7%) education most common. The majority were retired (77.7%), and many had limited income, as 36.5% reported no earnings and only 14.9% earned above ₦50,000 monthly. Over a half lived with family (53.4%), while 14.2% lived alone. Most respondents were Christians (73.6%), followed by Muslims (21.6%). (Table 1).

Table 1. Socio-demographic characteristics of geriatric respondents

Variable	Frequency (n = 148)	Percent (%)
Age		
60–64 years	41	27.7
65–69 years	37	25.0
70–74 years	28	18.9
75–79 years	19	12.8
80 years & above	23	15.5
Mean ± SD	70.3 ± 13.3	
Gender		
Male	66	43.9
Female	82	55.4
Marital Status		
Single	7	4.7
Married	64	43.2
Widowed/Widower	59	39.9
Divorced	18	12.2

Educational Level		
No formal education	33	22.3
Primary	47	31.8
Secondary	41	27.7
Tertiary	27	18.2
Employment Status		
Employed	6	4.1
Retired	115	77.7
Unemployed	27	18.2
Monthly Income		
None	54	36.5
< ₦20,000	29	19.6
₦20,000–₦50,000	43	29.1
> ₦50,000	22	14.9
Living Arrangement		
Alone	21	14.2
With spouse	56	25.0
With family	60	53.4
Other	11	7.4
Religion		
Christian	109	73.6
Muslim	32	21.6
Others	7	4.7

Participants' Quality of Life/ Overall Classification of Geriatric Patients' Quality of Life

WHOQOL-BREF domain responses assessing the quality of life among geriatric patients shows that the physical health domain recorded a sub mean of 2.9 ± 1.17, indicating a poor quality of life. The psychological health domain had a sub mean of 3.1 ± 1.18, reflecting a good quality of life. The social relationships domain showed a sub mean of 3.0 ± 1.17, indicating a moderate quality of life. The environmental domain recorded a sub mean of 3.2 ± 1.14, also indicating a good quality of life. The grand mean of 3.0 suggests an overall moderate quality of life among the geriatric respondents. (Table 2).

Table 2. WHOQOL-BREF domain responses of geriatric patients for quality of life

Item	Very Poor	Poor	Fair	Good	Very Good	Mean	Remark
Physical Health							
Ability to perform daily activities	18 (12.2)	24 (16.2)	43 (29.1)	41 (27.7)	22 (14.9)	3.2 ± 1.15	Good
Physical pain preventing activities	29 (19.6)	37 (25.0)	44 (29.7)	26 (17.6)	12 (8.1)	2.7 ± 1.21	Poor
Enough energy for daily life	21 (14.2)	36 (24.3)	47 (31.8)	29 (19.6)	15 (10.1)	2.9 ± 1.18	Poor
Satisfaction with sleep quality	28 (18.9)	39 (26.4)	40 (27.0)	27 (18.2)	14 (9.5)	2.7 ± 1.24	Poor
					Sub mean	**2.9 ±1.17**	**Poor**
Psychological Health							
Enjoyment of life	16 (10.8)	28 (18.9)	45 (30.4)	40 (27.0)	19 (12.8)	3.1 ± 1.13	Good
Feeling down/depressed/hopeless	24 (16.2)	33 (22.3)	42 (28.4)	34 (23.0)	15 (10.1)	2.9 ± 1.25	Poor
Ability to concentrate	14 (9.5)	29 (19.6)	44 (29.7)	41 (27.7)	20 (13.5)	3.2 ± 1.14	Good
Satisfaction with self	17 (11.5)	31 (20.9)	40 (27.0)	38 (25.7)	22 (14.9)	3.1 ± 1.19	Good
					Sub mean	**3.1±1.18**	**Good**
Social Relationships							
Satisfaction with personal relationships	12 (8.1)	26 (17.6)	47 (31.8)	43 (29.1)	20 (13.5)	3.2 ± 1.11	Good
Social support from family/friends	15 (10.1)	28 (18.9)	44 (29.7)	41 (27.7)	20 (13.5)	3.2 ± 1.15	Good

Satisfaction with sex life	37 (25.0)	42 (28.4)	38 (25.7)	21 (14.2)	10 (6.8)	2.5 ± 1.26	Poor
					Sub mean	**3.0 ±1.17**	**Moderate**
Environment							
Feeling safe in daily life	10 (6.8)	23 (15.5)	48 (32.4)	44 (29.7)	23 (15.5)	3.3 ± 1.09	Good
Satisfaction with access to healthcare	11 (7.4)	27 (18.2)	46 (31.1)	39 (26.4)	25 (16.9)	3.3 ± 1.12	Good
Satisfaction with living conditions	13 (8.8)	29 (19.6)	42 (28.4)	40 (27.0)	24 (16.2)	3.2 ± 1.15	Good
Opportunities for leisure activities	26 (17.6)	37 (25.0)	41 (27.7)	29 (19.6)	15 (10.1)	2.8 ± 1.21	Poor
					Sub mean	**3.2 ±1.14**	**Good**
					Grand Mean	**3.0**	**Moderate**

Mean cut-off = 3.0.

Findings show that only 18 (12.1%) responses from the respondents were rated as good. A larger portion of the responses, 79 (53.4%), were classified as moderate. Meanwhile, 51 (34.5%) were classified as poor, highlighting notable challenges and areas of dissatisfaction in the lives of older adults (Figure 1).
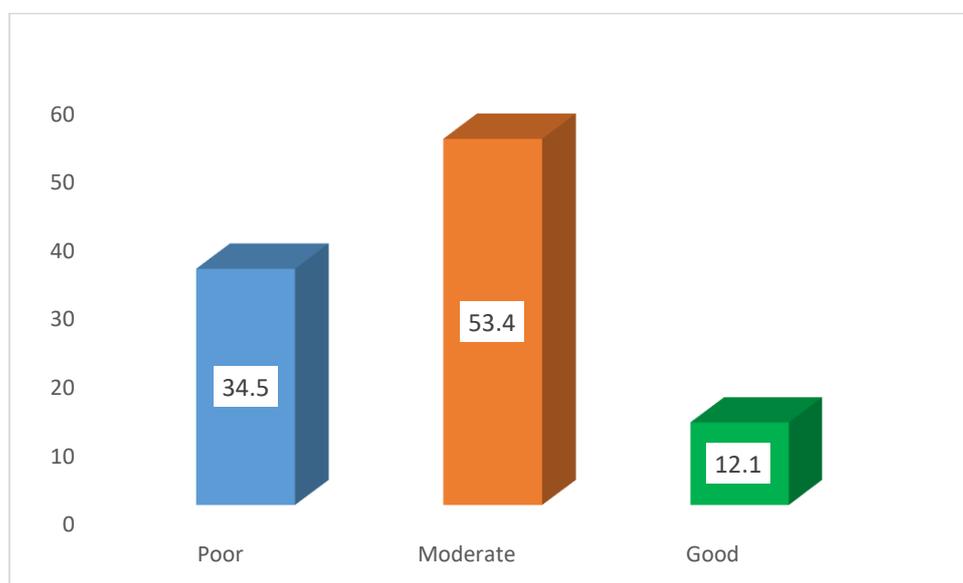
*0-40=Poor, 41-69= Moderate, 70-100=Good

Figure 1. Bar chart showing WHOQOL-BREF domain responses of geriatric patients' quality of life

Factors Associated with Participants' Quality of Life

Findings show that several factors strongly influence the quality of life of geriatric patients. Chronic illness is highly prevalent, with most respondents agreeing or strongly agreeing to having long-term conditions (mean = 3.6), managing them for over a year (3.7), and adhering to medications (3.8). Physical limitations moderately affected daily functioning (mean = 3.4), while hospitalization had a lesser, but notable, influence (mean = 3.0). Social and emotional factors were also important contributors. Respondents reported strong emotional support from family and friends (mean = 3.6), adequate help when being sick (3.6), and positive influence from religious or community participation (3.5). Feelings of loneliness had a moderate effect (mean = 3.2), while emotional satisfaction scored 3.4. Overall, the grand mean of 3.5 indicates that health status, social support, emotional well-being, and community engagement significantly shape the quality of life of older adults (Table 3).

Table 3. Factors associated with quality of life of geriatric patients

Item	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Remark
I have one or more chronic illnesses.	12 (8.1)	18 (12.2)	25 (16.9)	51 (34.5)	42 (28.4)	3.6 ± 1.18	Factors
I have been managing my illness (es) for more than one year.	9 (6.1)	14 (9.5)	28 (18.9)	54 (36.5)	43 (29.1)	3.7 ± 1.14	Factors
I take prescribed medication regularly.	7 (4.7)	13 (8.8)	29 (19.6)	52 (35.1)	47 (31.8)	3.8 ± 1.09	Factors
I find it difficult to perform some daily activities.	14 (9.5)	22 (14.9)	33 (22.3)	47 (31.8)	32 (21.6)	3.4 ± 1.22	Factors
I have been hospitalized at least once in the past year.	25 (16.9)	29 (19.6)	38 (25.7)	33 (22.3)	23 (15.5)	3.0 ± 1.31	Factors
I feel emotionally supported by my family or friends.	11 (7.4)	18 (12.2)	31 (20.9)	51 (34.5)	37 (25.0)	3.6 ± 1.15	Factors
I frequently feel lonely.	17 (11.5)	28 (18.9)	36 (24.3)	39 (26.4)	28 (18.9)	3.2 ± 1.27	Factors
I participate in religious or community-based social activities.	12 (8.1)	21 (14.2)	34 (23.0)	47 (31.8)	34 (23.0)	3.5 ± 1.20	Factors
I receive help when I am sick or in need.	10 (6.8)	19 (12.8)	30 (20.3)	52 (35.1)	37 (25.0)	3.6 ± 1.13	Factors
I am satisfied with the emotional aspects of my life.	13 (8.8)	24 (16.2)	35 (23.6)	44 (29.7)	32 (21.6)	3.4 ± 1.21	Factors
					Grand Mean	**3.5 ± 0.86**	

Mean cut-off = 3.0.

Challenges of Geriatric Patients

Findings show that geriatric patients experience significant challenges, with all items scoring above the 3.0 cut-off. Frequent age-related health problems had a mean of 3.6, while difficulty in accessing healthcare services scored 3.1, indicating moderate access challenges. Medication affordability was also a concern (mean = 3.4), and physical difficulties, such as mobility limitations, scored 3.5. Despite these challenges, adherence to treatment recorded the highest mean (3.7), reflecting strong commitment to prescribed care. The overall grand mean of 3.6 indicates that older adults face substantial health-related difficulties (Table 4).

Table 4. Challenges of geriatric patients

Item	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Remark
I experience frequent health problems related to aging.	11 (7.4)	18 (12.2)	32 (21.6)	49 (33.1)	38 (25.7)	3.6 ± 1.16	Challenges
I have difficulty accessing healthcare services when needed.	20 (13.5)	31 (20.9)	37 (25.0)	38 (25.7)	22 (14.9)	3.1 ± 1.28	Challenges
My medications are too expensive to afford regularly.	14 (9.5)	24 (16.2)	29 (19.6)	47 (31.8)	34 (23.0)	3.4 ± 1.24	Challenges
I face physical challenges, such as mobility issues.	12 (8.1)	21 (14.2)	35 (23.6)	44 (29.7)	36 (24.3)	3.5 ± 1.19	Challenges
I can follow my treatment or medication plan strictly.	9 (6.1)	15 (10.1)	28 (18.9)	52 (35.1)	44 (29.7)	3.7 ± 1.11	Challenges
					Grand Mean	**3.5 ± 0.92**	

Mean cut-off = 3.0.

Predictors of Quality of Life

Findings show that socio-demographic characteristics had varying associations with quality of life among geriatric patients. Increasing age was associated with lower odds of higher quality of life—ranging from 27% to 29% lower odds for those aged 65–79 years and 11% lower odds for those 80+, though none of these values was statistically significant (p > 0.05). Female respondents were also 19% less likely (OR = 0.81) to have better quality of life than males. Marital status showed mixed effects: married respondents were slightly more likely to report higher quality of life (OR = 1.20; p = 0.018), while widowed and divorced participants had lower odds, though not being significant. Education showed a strong positive gradient, with respondents who completed primary (OR = 1.41; p = 0.005), secondary (OR = 2.00; p = 0.005), and tertiary education (OR = 4.57; p = 0.005) more

likely to experience better quality of life compared to those with no schooling. Income level also had a significant effect. Those earning ₦20,000–₦50,000 (OR = 1.57; p = 0.003) and above ₦50,000 (OR = 5.25; p = 0.003) were more likely to report higher quality of life than respondents with no income. Employment status, living arrangement, and religion were not significant predictors (p > 0.05), although retirees and unemployed individuals showed lower odds of better quality of life compared to those who are still employed (Table 5).

Table 5. Multivariate logistic regression showing association between socio-demographic characteristics and quality-of-life levels

Variable	OR	p-value	95% CI for OR
Age Group			
60-64 years	-	1.00	-
65-69 years	0.730	0.73	0.20 – 2.68
70-74 years	0.720	0.72	0.17 – 3.09
75-79 years	0.710	0.71	0.12 – 4.20
80+ years	0.890	0.89	0.20 – 3.95
Gender			
Male	-	1.00	-
Female	0.810	0.81	0.31 – 2.12
Marital Status			
Single	-	1.00	-
Married	1.20	0.018	0.12 – 11.98
Widowed	0.480	0.48	0.05 – 4.89
Divorced	0.770	0.77	0.06 – 10.14
Educational Level			
No formal education	-	1.00	-
Primary	1.41	0.005	0.24 – 8.26
Secondary	2.00	0.005	0.36 – 11.23
Tertiary	4.57	0.005	1.16 – 18.02
Employment Status			
Employed	-	1.00	-
Retired	0.340	0.34	0.06 – 1.84
Unemployed	0.330	0.33	0.04 – 2.52
Monthly Income			
None	-	1.00	-
< ₦20,000	0.930	0.93	0.17 – 5.02
₦20,000–₦50,000	1.57	0.003	0.41 – 6.02
> ₦50,000	5.25	0.003	1.25 – 22.08
Living Arrangement			
Alone	-	1.00	-
With spouse	2.98	0.243	0.55 – 16.24
With family	2.78	0.243	0.51 – 15.16
Other	1.90	0.243	0.16 – 22.36
Religion			
Christian	-	1.00	-
Muslim	0.730	0.73	0.19 – 2.78
Other	1.12	0.870	0.11 – 11.23

Discussion

This study examined the quality of life among geriatric patients attending a tertiary hospital in Benin City, Edo State, considering the contextual distribution of participants from rural and urban areas. Most respondents (52.7%) were aged 60–69 years, suggesting that younger elderly individuals are more likely to access hospital care, while the oldest may face barriers, such as poor mobility, financial constraints, or limited access to healthcare facilities (Morgan et al., 2017).

Females slightly outnumbered males, reflecting women's longer life expectancy and the presence of gender-specific health challenges (Solé-Auró et al., 2022). Nearly a half of the respondents were married, and about one-third of them were widowed, highlighting the potential influence of marital status on social support and emotional well-being, which are important determinants of quality of life (Oluwatuyi et al., 2024).

Educational levels varied, with higher education linked to better health literacy, understanding of self-care, and navigation of healthcare services, which likely contributed to improved quality of life (Kondeth et al., 2024). Most participants were retired, and a substantial proportion reported low or no income, underscoring economic vulnerability as a factor influencing physical and psychological well-being (Soepding et al., 2021). More than a half of the participants lived with family members, highlighting the role of family support and living arrangements in promoting emotional stability and maintaining overall quality of life (Rao et al., 2024). The findings also revealed differences based on rural and urban residence. Urban participants tended to report higher quality of life scores, likely due to better access to healthcare, social services, and infrastructure, whereas rural participants faced challenges, such as distance to healthcare facilities and limited availability of specialized geriatric care, which may negatively affect their overall well-being. Overall, these results indicate that age, gender, marital status, education, income, living arrangements, and place of residence collectively influence quality of life among older adults. Considering these contextual and demographic factors is crucial for designing targeted interventions and policies aimed at improving geriatric well-being in both urban and rural settings.

The study revealed that less than one-quarter of respondents reported good quality of life, over a half had moderate quality, and more than one-quarter experienced poor quality of life. This indicates that most elderly patients face varying degrees of limitation in their well-being, consistent with Kondeth et al. (2024) and Soepding et al. (2021), who attributed such outcomes to financial insecurity, chronic illness, and weak social support. Among the WHOQOL-BREF domains, the environmental domain scored highest, with satisfaction in healthcare access and safety (mean = 3.3). This contrasts with lower outcomes in rural or resource-poor settings (Gumikiriza-Onoria et al., 2022; Tuttle et

al., 2022), likely reflecting the advantages of an urban tertiary healthcare environment. The physical health domain showed mixed outcomes—moderate ability to perform daily tasks (mean = 3.2), but low energy, pain control, and sleep quality scores (means = 2.7–2.9). This aligns with findings from Mobolaji and Akinyemi (2022) and Hariram et al. (2023), confirming that physical limitations are a global concern in ageing populations. In the psychological domain, enjoyment of life, self-satisfaction, and concentration were moderately good (means ≈ 3.1–3.2), though depressive symptoms persisted (mean = 2.9). These relatively positive scores may reflect cultural resilience and family support structures, contrasting with higher depression-related impairments reported by Martínez-Martín and Cazorla (2019). The social relationships domain performed strongly, with good satisfaction in personal relationships and family support (mean = 3.2), consistent with Ogunyemi et al. (2018) and Hariram et al. (2023), who identified social connectedness as a protective factor for elderly well-being. However, satisfaction with sex life remained low (mean = 2.5), echoing global patterns influenced by health limitations and cultural taboos (Fernández et al., 2021).

Overall, the moderate composite quality of life score (mean = 3.0) aligns with Nigerian trends (Gureje et al., 2008), but contrasts with more positive results from Morgan et al. (2017), likely due to differences in health status between tertiary and outpatient populations. Compared to international data (Kondeth et al., 2024; Trivedi, 2023), the findings suggest that while Nigerian elderly patients face similar physical and economic challenges as their peers in other developing countries, they benefit somewhat from stronger environmental and social support systems.

The study revealed that multiple interrelated factors—chronic illness, medication adherence, functional limitations, healthcare utilization, social support, loneliness, religious engagement, availability of help, and emotional satisfaction—significantly shaped the quality of life among geriatric patients. Chronic illness emerged as the dominant determinant, with most participants managing long-term conditions, mirroring global findings by Hajat and Stein (2018), Fong (2019), and Ndobo-Koe et al. (2022), who demonstrated that multimorbidity markedly diminishes physical and psychological well-being regardless of setting. High medication adherence, though indicative

of therapeutic compliance, also reflected the burden of lifelong treatment, aligning with Mukherjee et al. (2024), who noted that prolonged disease management can erode quality of life through treatment fatigue. Functional limitations and declining physical capacity, as observed by Sacitharan (2019) and Ozkan and Kazancoglu (2021), similarly constrained independence and daily functioning, reinforcing the universality of physical decline as an ageing challenge. While healthcare utilization was moderate, the prevalence of chronic conditions highlighted unmet health needs comparable to those reported in other low-resource contexts. Strong social support and family connectedness positively influenced well-being, corroborating Lindert et al, (2025), yet the persistence of loneliness, despite such networks, echoed Ojagbemi et al. (2021), suggesting that the emotional depth rather than the quantity of relationships determines satisfaction. Religious and community participation further enhanced psychological stability and social integration, as also observed by Hossen et al. (2023), reflecting the cultural centrality of communal engagement in Nigeria. Similarly, the availability of help during illness reinforced the protective role of instrumental support systems, consistent with Schultz et al. (2022). Nonetheless, moderate emotional satisfaction indicated that despite strong social structures, many elderly individuals struggle with inner well-being, highlighting the need for psychosocial interventions. Overall, the synthesis suggests that while Nigerian elderly patients share universal challenges of chronic illness and functional decline found globally, the buffering effects of faith, family, and community engagement appear more pronounced, offering culturally grounded resilience against the adversities of ageing.

The study revealed that more than a half of geriatric patients faced substantial challenges, with a grand mean of 3.5, indicating multidimensional difficulties spanning health, mobility, finances, and access to care. Frequent age-related health problems (mean = 3.6) emerged as the most pressing issue, consistent with global evidence that chronic pain and illness dominate the ageing experience (Hedge et al., 2022; Mefteh, 2022). Physical and mobility limitations (mean = 3.5) similarly reflected universal patterns of functional decline, aligning with findings by Sacitharan (2019) in the UK and Ozkan and Kazancoglu (2021) in Turkey, which underscore

mobility loss as a core challenge of geriatric health across settings. Financial barriers also featured prominently (mean = 3.4), highlighting the intersection of economic insecurity and healthcare affordability—an issue amplified in Nigeria's limited insurance landscape and echoed in Soepding et al. (2021), where most elderly participants reported persistent financial distress. Although healthcare accessibility challenges recorded the lowest mean score (3.1), difficulties remained notable, with about two-fifths of respondents experiencing service delays or limitations. This comparatively lower score may reflect the relative advantage of tertiary healthcare access, contrasting with poorer outcomes in community-based settings, such as those reported by Senkoro et al. (2024) in Uganda. Overall, the findings underscore that while health, mobility, and financial difficulties remain universal ageing challenges, access to institutional care can moderately buffer their impact in urban Nigerian contexts.

Although females slightly outnumbered males and older participants tended to have slightly lower odds of reporting better quality of life, multivariate analysis showed that age and gender were not statistically significant predictors in this study. This finding is consistent with Hossen et al. (2023) and Zhang et al. (2021), who reported that age-related decline and gender disparities may influence well-being, but their effects can be moderated by factors, such as access to healthcare, social support, and socio-economic resources. These results suggest that while demographic characteristics provide context, they may not directly determine quality of life outcomes among geriatric patients when other socio-economic and clinical factors are considered.

Marital status showed a modest positive association, with married respondents more likely to experience better quality of life than singles, reflecting findings by Yaya et al. (2020) that marital companionship enhances social and emotional support in later life. Educational attainment and income were the strongest predictors. Respondents with tertiary education (OR = 4.57; p = 0.005) and higher income (OR = 5.25; p = 0.003) were significantly more likely to report good quality of life. Similar results by Adejumo and Adejumo (2021) and Zaninotto et al. (2020) highlight that education improves health literacy and coping ability, while financial stability enhances access to healthcare and social

participation. Although employment status, living arrangement, and religion were not statistically significant, retirees and unemployed individuals showed lower odds of good quality of life. Overall, the findings underscore that education and economic security are key determinants of quality of life among older adults, emphasizing the need for socio-economic empowerment and accessible geriatric care programs.

Implications for Nursing

The findings of this study have several important implications for nursing practice in geriatric care. First, the moderate overall quality of life and the particularly low scores in the physical health domain highlight the need for nurses to prioritize interventions that address mobility limitations, chronic disease management, and functional independence among older adults. Nursing care plans should include regular assessment of physical function, individualized exercise or mobility programs, and monitoring of chronic conditions to enhance patients' physical well-being. Second, the study identified difficulty adhering to medications as a significant factor affecting quality of life. Nurses play a key role in patient education, counseling, and follow-up, ensuring that geriatric patients understand their treatment regimens and are supported in overcoming barriers to adherence, such as forgetfulness, side effects, or financial constraints.

Third, the findings that educational attainment and income are strong predictors of better quality of life suggest that nurses should consider patients' socio-economic and educational backgrounds when planning care. Tailored health education and support interventions may be necessary for patients with lower literacy or limited resources to empower them to manage their health effectively. Additionally, the study highlights challenges related to mobility, finances, and chronic illness, emphasizing the need for nurses to adopt a holistic, person-centered approach. This includes coordinating with multidisciplinary teams, social workers, and community resources to address social and environmental factors that influence quality of life. Finally, nursing practice should incorporate regular assessment of psychological and environmental domains, given that these were among the highest-rated QoL domains. Interventions that promote social engagement, family involvement, and supportive environments can further enhance overall well-being. In summary, nurses caring for geriatric patients should focus not only on clinical management, but also on comprehensive, individualized care that addresses physical, psychological, social, and environmental factors to improve the quality of life for older adults in hospital and community settings.

Conclusion

This study found that geriatric patients in Benin City had a moderate overall quality of life. The environmental and psychological domains were relatively better, while physical health scored lowest due to fatigue, pain, and poor sleep. Chronic illness, mobility issues, and financial challenges were major determinants, though strong family and community support enhanced coping. Multivariate analysis showed that education and income were the most significant predictors of quality of life, while age, gender, and religion were not. Overall, improving geriatric quality of life in Nigeria requires better healthcare access, economic support, health education, and strengthened family and community networks to promote healthy ageing.

Limitations of the Study

1. **Cross-sectional Design**: The study captured data at a single point of time, which limits the ability to establish causal relationships between predictors and quality of life.
2. **Hospital-based Sample**: Participants were recruited from a single tertiary hospital, which may limit the generalizability of the findings to other regions or to elderly individuals living in the community who do not regularly access hospital services.
3. **Self-reported Data**: Although data was collected through face-to-face interviews to clarify questions and minimize misunderstandings, responses relied on participants' self-assessment and could still be influenced by recall bias or social desirability bias.

Therefore, future research should adopt longitudinal, multi-center, and mixed-method approaches to enhance generalizability and capture broader psychosocial dimensions of ageing.

Author's Contributions

Study Design: **TAE, RO**. Data Collection: **RO**. Data Analysis: **TAE**. Study Supervision: **TAE**. Manuscript Writing: **RO**. Critical Revision for Important Intellectual Content: **TAE, RO**.

Conflict of Interests

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