



ORIGINAL ARTICLE

Determinants of Utilization of Healthcare Services among Older Adults in a Selected Local Government Area of Lagos, Nigeria: A Cross-Sectional Study

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ABSTRACT

Background: Population ageing has increased the demand for healthcare services, challenging fragile healthcare systems globally. In Nigeria, healthcare utilization rates by older adults remain low compared to other subgroups. This study aimed to identify the factors that influence healthcare use among older adults in a selected Local Government Area of Lagos, Nigeria.

Methods: A cross-sectional study design using interviewer-administered, semi-structured questionnaires was used to collect data from 250 respondents recruited by multistage sampling, from July to September 2023. Descriptive statistics, the Chi-square test and sequential logistic regression were employed to analyze associations and predictors of healthcare utilization.

Results: Of the 250 respondents, 132 (52.8%) were female, 127 (50.8%) were married, and 202 (80.8%) utilized healthcare services in the past year. Predisposing factors associated with utilization included Community of residence (Community C: 89.4% vs. A: 69.6%, $p < 0.01$) and religion (Christians: 87.7% vs. Traditionalists: 46.7%, $p < 0.01$). Enabling factors showed stronger associations: education (tertiary: 96.2% vs. none: 51.2%, $p < 0.001$), employment (Employed: 77.4% vs. Unemployed: 94.1%, $p < 0.01$), income ($\geq \text{N}40,000$: 94% vs. $< \text{N}20,000$: 65.4%, $p < 0.001$), and health insurance (insured: 89.1% vs. uninsured: 74.3%, $p < 0.01$). Chronic illnesses didn't significantly influence utilization. After adjustments, higher education (AOR = 1.92, 95% CI: 1.24–2.98) and income (AOR = 1.60, 95% CI: 1.03–2.49) were strong predictors of healthcare use.

Conclusion: Improving healthcare utilization among older adults will require effectively implementing age-responsive healthcare policies, strengthening enabling factors, and eliminating physical and financial barriers to healthcare access.

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INTRODUCTION

Population ageing is a demographic event occurring globally with significant socioeconomic and public health implications. The United Nations estimates that the population of those over 60 years is expected to more than double, from 791 million in 2021 to about 1.6 billion in 2050 globally.¹ The number of older persons is also forecasted to rise fastest in Africa, with a greater occurrence in low- and middle-income countries. This increased life expectancy is attributed to advances in medicine and improvements in standards of living.² While more people living longer is a positive development, providing healthcare and social services for a rapidly increasing ageing population is becoming a growing concern for developing countries like Nigeria.³ Non-communicable diseases such as hypertension, diabetes mellitus, cancers and cognitive decline are usually chronic in nature, require continued and specialized care and are more prevalent among older persons.⁴ Multimorbidity, which is associated with increased healthcare hospitalizations, increased healthcare costs, and poorer health outcomes, is also more common in older persons than in other age groups.^{4,5} These challenges are not unique to developing countries; however, the growing pressure on the healthcare system becomes more pronounced due to resource constraints and pre-existing inefficiencies in the health system.

An analysis of healthcare expenditure in Nigeria over the past five years reveals a reduction in government budget allocation and an increase in out-of-pocket spending by individuals, with Nigeria ranking among the countries with the highest out-of-pocket spending globally.⁶ Nigeria has a population of older persons above the age of 60 years estimated to be approximately 10.2 million people representing 4.78% of the population and projected to nearly

triple by the year 2050.⁷ Limited availability of comprehensive data on healthcare utilization patterns among older persons in Nigeria demonstrates the low priority accorded to equitable distribution of healthcare resources for older persons. Despite evidence showing that aging is associated with increased demand for healthcare services, healthcare and social welfare programs in Nigeria tend to focus heavily on infants, children, adolescents, and maternal health, giving scant attention to specific healthcare interventions targeting older adults and their unique health needs.^{8,9} Several efforts to expand access to healthcare for older persons such as the establishment of National Senior Citizens Coordination Centre tasked with the development and implementation of policy interventions directed at older persons; and designation of certain age groups of older persons as vulnerable groups in the National Health Insurance scheme making them eligible for free healthcare are currently in place. Despite these efforts, challenges persist in expanding coverage to this ever-increasing population, which continues to impact the utilization of healthcare services.¹⁰

Healthcare utilization is influenced by numerous factors. Andersen proposed a behavioural model that identified individuals' predisposition to use healthcare services (individual factors); factors facilitating or hindering the use of health services (enabling factors), and patients' health outcomes (need factors) as conditional factors influencing the use of healthcare services.^{11,12} Although some studies in Nigeria have researched the relationship between specific factors such as education, income, marital status, and employment on the use of healthcare services, there is a paucity of studies on the collective influence of these factors on the utilization of healthcare services among older adults. The goal of this study was to identify

and analyze the determinants of healthcare service utilization among older adults in a selected Local Government Area of Lagos, Nigeria. Understanding these determinants will

provide evidence to enable policymakers to design effective healthcare programmes to meet their healthcare needs.

Table 1: Demographic characteristics of respondents

Characteristics (n=250)	Frequency (n)	Percentage
Age Categories		
Mean $\pm$ SD	69.0 $\pm$ 5.0	
60-64	78	31.2
65-69	73	29.2
70-74	48	19.2
75-79	27	10.8
>80	24	9.6
Sex		
Male	118	47.2
Female	132	52.8
Residential status		
Lives Alone	35	14.0
Lives with Spouse	122	48.8
Others	93	37.2
Marital Status		
Single	33	13.2
Married	127	50.8
Divorced	14	5.6
Separated	19	7.6
Widowed	57	22.8
Religion		
Christianity	146	58.4
Muslim	87	34.8
Traditional	15	6.0
Others	2	0.8
Ethnicity		
Yoruba	121	48.4
Ibo	66	26.4
Hausa	41	16.4
Others	22	8.8

Methodology

This study was conducted in the Oshodi-Isolo Local Government Area (LGA) of Lagos State, Nigeria. Oshodi-Isolo LGA was selected due to its predominantly urban population and high concentration of older adults, making it a suitable setting to investigate healthcare service utilization among this demographic. Additionally, Oshodi-Isolo LGA has a heterogeneous mix of public and private healthcare facilities, providing an ideal setting for examining healthcare access and utilization patterns. For administrative purposes, Oshodi-Isolo LGA is divided into three Local Council Development Areas LCDAs, which are Oshodi, Isolo, and Ejigbo, and twenty-one political wards or communities. Oshodi-Isolo LGA has approximately one hundred and three (103) formal healthcare facilities across the three LCDAs, which include twenty (20) primary healthcare centers (PHC) and two general hospitals. Private healthcare facilities constitute the remainder, providing services to residents in the area. The study employed a descriptive cross-sectional design, using an interviewer-administered, semi-structured questionnaire to collect information from participants. Respondents included individuals aged 60 and older who had been residents of Oshodi-Isolo LGA for at least two years prior to the study. Exclusion criteria included individuals with severe cognitive or communication impairments that prevented them from providing informed consent or responding to the questionnaires. The study was conducted from July 2023 to September 2023. The minimum sample size was determined using the Cochran formula¹⁴:

$$n = z^2 pq / d^2$$

Where: n = the desired sample size, z is the standard deviation at 95% confidence interval which is taken as 1.96, p = 0.1778 (proportion of older persons utilizing healthcare services from a similar study in Ughelli), q = $1 - p$ and d = acceptable margin of error or degree of precision = 0.05. The calculated minimum sample size was 226.8

$$n = \frac{1.96^2 \times 0.18 \times 0.82}{0.05^2}$$

$$n = 226.8$$

To compensate for a 10% non-response rate, the sample size was increased to 252 respondents.

A multistage sampling approach was utilized to select study participants. In the first stage, four communities were selected using simple random sampling by balloting.

In the second stage, for each selected community, simple random sampling was done by balloting to select ten (10) streets in which households were selected.

In the third stage, a systematic sampling technique was used to select twenty-five (25) households on each street. Each street consisted of an average of one hundred (100) households, with a household selected after every fourth interval.

In the final stage, for each selected household, respondents who met the inclusion criteria were interviewed; if not, the interviewers moved to the next household where respondents met the criteria and were subsequently interviewed until the desired sample size was attained. Data were collected using a pre-tested, semi-structured, interviewer-administered questionnaire adapted from the reviewed literature.

Table 2: Socioeconomic characteristics of respondents

Characteristics (n=250)	Frequency (n)	Percentage
Education		
None	41	16.4
Primary	45	18.0
Secondary	85	34.0
Tertiary	79	31.6
Employment		
Unemployed	51	20.4
Employed	199	79.6
Occupation		
Self Employed	156	62.4
Civil Servant	22	8.8
Private Employed	26	10.4
Pensioner	42	16.8
No Response	4	1.6
Household Size		
1-3	124	49.6
4-6	94	37.6
>6	32	12.8
Monthly Income (₦)		
<20,000	81	32.4
20,001-40,000	73	29.2
40,001-120,000	56	22.4
>120,000	36	14.4
No Response	4	1.6
Health Insurance		
No	140	56.0
Yes	110	44.0
Financial Support (Family)		
No	84	33.6
Yes	166	66.4

The questionnaire was made up of four sections that assessed socio demographic characteristics, socioeconomic characteristics and healthcare service utilization of the study participants. The final section assessed factors that facilitated or hindered healthcare service utilization by respondents categorized under affordability, accessibility, availability, acceptability, adequacy, and satisfaction. Table 2 displays the socioeconomic characteristics, with the majority, approximately

32%, being tertiary educated, employed (79.6%), having a household size of 1-3 (49.6%), and a monthly income of less than 20000 naira (32.4%). More than half of the respondents (56.0%) had no health insurance, but the majority received financial support from family (66.4%). Table 3 presents the utilization of healthcare services by respondents. The results revealed nearly half (49.6%) reported having a chronic health condition.

The majority of respondents had utilized healthcare services within the past year (80.8%), used formal healthcare services (Public or private health facility as their main choice) for

healthcare needs (69.6%), and visited the hospital at least twice (40.8%) compared to others. The most common reasons for hospital visits were general check-up (27.2%) and to receive treatment (18.8%)

Table 3: Utilization of healthcare services by respondents

Characteristics (n=250)	Frequency (n)	Percentage
Chronic Illness		
No	126	50.4
Yes	124	49.6
Choice of Health Service		
Public/Private Hospital	174	69.6
PPMV	53	21.2
Self-medication	8	3.2
Traditional Medicine	13	5.2
Medicine Hawker	2	0.8
Hospital Visits in Past Year		
No	48	19.2
Yes	202	80.8
Frequency of Hospital Visits		
Zero	49	19.6
Once	81	32.4
Twice	102	40.8
>Twice	18	7.2
Reasons for Hospital Visit		
General Check up	68	27.2
Ill-health	30	12
Counselling	15	6
Follow-up	41	16.4
Treatment	47	18.8
No Response	49	19.6

Table 4: Perceived facilitators and barriers to healthcare use among respondents

Domain	Indicator	Positive responses (n, %)	Neutral responses (n, %)	Negative responses (n, %)
Physical Access	Hospital Distance	68 (27.2)	106 (42.4)	76 (30.4)
	Travel Time	90 (36.0)	83 (33.2)	77 (30.8)
Affordability	Transport Costs	55 (22.0)	151 (60.4)	44 (17.6)
	Consultation Cost	40 (16.0)	128 (51.2)	82 (32.8)
	Medication Cost	88 (36.7)	97 (40.4)	55 (22.9)
	Total Costs	90 (36.0)	95 (38.0)	65 (26.0)
Quality	Treatment Effectiveness	211 (84.4)	34 (13.6)	5 (2.0)
	Healthcare Workers Attitude	158 (63.2)	0 (0.0)	92 (36.8)
	Hospital Environment	178 (71.2)	0 (0.0)	72 (28.8)
	Convenient Working Hours	203 (81.2)	0 (0.0)	47 (18.8)
Acceptability	Language Barrier	200 (80.0)	0 (0.0)	50 (20.0)
	Gender Preference	191 (76.4)	0 (0.0)	59 (23.6)
Availability	Waiting Time	68 (27.2)	113 (45.2)	69 (27.6)
	Available Medicines	177 (70.8)	0 (0.0)	73 (29.2)
	Difficulty Seeing a Doctor	163 (65.2)	0 (0.0)	87 (34.8)
Satisfaction	Last Hospital Visit	210 (84.0)	34 (13.6)	6 (2.4)

Table 4 presents the distribution of perceived facilitators and barriers to healthcare utilization among respondents across six domains: Physical Access, Affordability, Quality, Acceptability, Availability, and Satisfaction. In terms of physical access, most respondents (42.4%) viewed hospital distance as moderate (neutral), suggesting facilities were neither too near nor too far from their homes, while 27.2% found distances short (positive). However, travel time was a notable barrier, with 36.0% perceiving it as long (negative), compared to 33.2% rating it

moderate and 30.8% short, reflecting challenges in transit.

For affordability, 60.4% considered transport costs affordable (neutral), and 51.2% found consultation fees affordable, indicating a moderate financial burden. Medication costs were perceived as low by 36.7% (positive), high by 22.9% (negative), with 40.4% rating them as affordable. Total healthcare costs were low for 36.0%, affordable for 38.0%, and high for 26.0%, highlighting varied cost perceptions in urban settings.

Table 5: Association between demographic, socioeconomic, health needs and utilization of healthcare service.

		Utilized hospital services in the past year				
Predisposing factors		No (n=48), n (%)	Yes (n=202), n (%)	<i>d</i> <i>f</i>	X ²	P-value
Age	60-64	22 (28.2)	56 (71.8)	4	7.42	0.12
	65-69	10 (13.7)	63 (86.3)			
	70-74	10 (20.8)	38 (79.2)			
	75-79	3 (11.1)	24 (88.9)			
	>80	3 (12.5)	21 (87.5)			
Sex	Male	28 (23.7)	90 (76.3)	1	2.96	0.09
	Female	20 (15.2)	112 (84.8)			
Community	Community A	14 (30.4)	32 (69.6)	3	12.2 1	<0.01 *
	Community B	7 (15.9)	37 (84.1)			
	Community C	11 (10.6)	93 (89.4)			
	Community D	16 (28.6)	40 (71.4)			
Residential status	Lives Alone	10 (28.6)	25 (71.4)	2	2.56	0.28
	Lives with Spouse	23 (18.9)	99 (81.1)			
	Others	15 (16.1)	78 (83.9)			
Marital status	Single	6 (18.2)	27 (81.8)	4	2.56	0.63
	Married	25 (19.7)	102 (80.3)			
	Divorced	2 (14.3)	12 (85.7)			
	Separated	6 (31.6)	13 (68.4)			
	Widowed	9 (15.8)	48 (84.2)			
Religion	Christianity	18 (12.3)	128 (87.7)	3	18.3	<0.01 *
	Muslim	21 (24.1)	66 (75.9)			
	Traditional	8 (53.3)	7 (46.7)			
	Others	1 (50.0)	1 (50.0)			
Ethnicity	Yoruba	23 (19.0)	98 (81.0)	3	1	0.8
	Ibo	11 (16.7)	55 (83.3)			
	Hausa	10 (24.4)	31 (75.6)			
	Others	4 (18.2)	18 (81.8)			

*p-value of <0.05 is statistically significant

The perception of quality of healthcare by respondents was generally positive, with 84.4% considering treatment as effective (positive), 13.6% moderately effective (neutral) and only 2.0% as ineffective (negative). Healthcare workers' attitudes were viewed favourably by 63.2% of respondents and 36.8% were negative, suggesting room for improvement in staff interactions. Hospital environments were clean or very clean for 71.2% (positive), and 81.2%

found working hours convenient (positive), with only 18.8% reporting inconvenience (negative).

Acceptability was high, with 80.0% experiencing no language barriers (positive) and 76.4% having no gender preference for doctors (positive). However, 20.0% and 23.6% reported these as barriers (negative), respectively, indicating cultural influences on utilization. For availability, 70.8% could access prescribed medicines (positive), but 29.2% could not

(negative). Waiting times were moderate for 45.2% (neutral), but 27.2% reported long waits (negative), with 27.6% finding them short (positive). The average waiting time before seeing a doctor at the health facility was 49 minutes. Difficulty seeing a doctor affected 34.8% (negative), while 65.2% reported no difficulty (positive). Satisfaction with the last hospital visit was high, with 84.0% satisfied or very satisfied (positive), 13.6% neutral, and only 2.4% dissatisfied (negative). No respondents reported extreme dissatisfaction.

Table 5 shows the association between demographic, socioeconomic, respondents health needs and use of healthcare services among study participants. Demographic factors significantly associated with utilization of hospital services were Community of residence and Religion, with Community C, and Christians utilizing healthcare services more frequently compared to other communities and religious groups. Use of hospital services was also higher among female respondents compared to males and highest among those in the 75-79 age categories; however, these associations were not significant.

Socioeconomic factors such as education, employment, monthly income, and health insurance were all significantly associated with the use of healthcare services among older adults. Respondents with tertiary education, health insurance, and those who were unemployed had higher healthcare utilization rates compared to other groups within their respective categories. Furthermore, individuals in the lowest income category (less than ₦ 20,000 per month) had lower utilization rates of healthcare services compared to those who earned higher incomes.

The presence of a self-reported chronic illness was not significantly associated with utilization of healthcare services among study participants,

with healthcare utilization rates almost similar between those who reported having a chronic health disease and those who did not.

A sequential logistic regression analysis was performed using chosen significant variables under the predisposing, enabling and perceived health needs (presence of chronic illness) to identify the predictors of healthcare utilization among the study respondents (Table 6). The results in Model 1 revealed that community of residence was significantly associated with healthcare use, with older adults in Community D, 3.14 times more likely to use healthcare services compared to Community A (AOR = 3.14, CI: 1.236-7.994). It also indicated that other religions were at least two times less likely to use healthcare services compared to Christians, with adherents of traditional religion the least likely to use healthcare services (AOR = 0.14, CI 0.044-0.450)

In Model 2, adjusting for predisposing factors, results indicated that predictors of healthcare use among respondents were Education (AOR=1.90, CI: 1.233-2.940) and Monthly income (AOR=1.63, CI: 1.062-2.492). The introduction of enabling factors nullified the significance between community of residence and healthcare use, and also diminished the significance between religion and healthcare use, with significance observed only among adherents of traditional religion (AOR = 0.27, CI: 0.075-0.962). The results in Model 3 indicated that variables such as Education and monthly income remained positive predictors of healthcare use among respondents, even after the introduction of health needs. Respondents with self-reported chronic health conditions were more likely to utilize healthcare services than those without such conditions, though the association was not statistically significant (AOR = 1.11, 95% CI: 0.510–2.402).

Table 5 (cont'd): Association between demographic, socioeconomic, health needs and utilization of healthcare services

		Utilized hospital services in the past year				
Socioeconomic factors		No (n=48), n (%)	Yes (n=202), n (%)	df	X ²	p-value
Education	None	20 (48.8)	21 (51.2)	3	37.66	<0.001*
	Primary	12 (26.7)	33 (73.3)			
	Secondary	13 (15.3)	72 (84.7)			
	Tertiary	3 (3.8)	76 (96.2)			
Employment	Unemployed	3 (5.9)	48 (94.1)	1	7.33	<0.01*
	Employed	45 (22.6)	154 (77.4)			
Household size	1-3	26 (21.0)	98 (79.0)	2	0.59	0.75
	3-6	17 (18.1)	77 (81.9)			
	>6	5 (15.6)	27 (84.4)			
Monthly income (₦)	<20,000	28 (34.6)	53 (65.4)	4	24.6	<0.001*
	20,001-40,000	15 (20.5)	58 (79.5)			
	40,001-120,000	3 (5.4)	53 (94.6)			
	>120,000	2 (5.6)	34 (94.4)			
	No response	0 (0)	4 (100)			
Health Insurance	No	36 (25.7)	104 (74.3)	1	8.7	<0.01*
	Yes	12 (10.9)	98 (89.1)			
Family support	No	19 (22.6)	65 (77.4)	1	0.95	0.33
	Yes	29 (17.5)	137 (82.5)			
Chronic illness	Yes	25 (19.8)	101 (80.2)	1	0.07	0.8
	No	23 (18.5)	101 (81.5)			

*p-value of <0.05 is statistically significant

DISCUSSION

This study assessed predisposing, enabling and needs factors and their impact on utilization of healthcare services among older adults in Oshodi-Isolo LGA in the past year. The main

findings revealed a high level of healthcare service utilization among older adults, consistent with other studies that have observed an increased demand for healthcare services with advancing age.^{8, 15-17} This could be explained by the high prevalence of self-reported chronic

disease among respondents, which may have necessitated more frequent clinic appointments among them. Higher utilization rates of healthcare services were also observed in females, which is consistent with other studies that have highlighted the differences in health-seeking behaviour between males and females.¹⁷ Predisposing factors that contributed significantly to the variance in healthcare utilization were community of residence and religion. Factors such as limited activities of daily living among older adults and differential access to healthcare that exists among these

communities may be responsible for this observation with studies showing that factors such as physical access, availability of health centres and cost of healthcare services, have an influence on healthcare utilization rates, particularly among the older adults.¹⁸⁻²¹ Equitable distribution of healthcare resources needs to be prioritized by situating healthcare centres in underserved areas as well as the institution of age-friendly primary healthcare facilities to eliminate the barriers to access that may hinder the use of healthcare services among older adults.

Table 6: Adjusted odds ratios for logistic regression of selected explanatory variables in use of healthcare services among respondents

	Model 1	<i>p</i> value	Model 2	<i>p</i> value	Model 3	<i>p</i> value
Characteristics	Adjusted OR (CI)		Adjusted OR (CI)		Adjusted OR (CI)	
<i>Predisposing factors</i>						
Community		0.040		0.135		0.133
Mafoluku*	1.00		1.00		1.00	
Ewu	1.92 (0.657-5.607)	0.233	1.10 (0.334-3.646)	0.871	1.13 (0.338-3.814)	0.838
Afariogun	3.14 (1.236-7.994)	0.016	2.49 (0.904-6.871)	0.078	2.57 (0.907-7.294)	0.076
Igbehinadun	1.03 (0.414-2.561)	0.949	0.86 (0.317-2.307)	0.758	0.87 (0.320-2.361)	0.783
Religion		0.006		0.122		0.128
Christianity*	1.00		1.00		1.00	
Muslim	0.49 (0.240-0.996)	0.049	0.52 (0.240-1.138)	0.102	0.52 (0.238-1.132)	0.099
Traditional	0.14 (0.044-0.450)	0.001	0.27 (0.075-0.962)	0.043	0.27 (0.076-0.990)	0.048
Others	0.25 (0.014-4.399)	0.342	0.21 (0.011-1.704)	0.300	0.22 (0.012-4.108)	0.309
<i>Enabling factors</i>						
Education			1.90 (1.233-2.940)	0.004	1.92 (1.238-2.980)	0.004
Employment			0.44 (0.111-1.704)	0.232	0.43 (0.110-1.690)	0.227
Monthly income			1.63 (1.062-2.492)	0.025	1.60 (1.033-2.489)	0.035
Health insurance			1.13 (0.483-2.651)	0.775	1.13 (0.480-2.637)	0.786
<i>Need factors</i>						
Chronic disease					1.11 (0.510-2.402)	0.798

The association between traditional religion and alternative medicine has been reported in several studies, suggesting that religious practices may

have a more significant impact on healthcare service utilization among older adults than previously thought.²² This presents an area for

further research and development into safe and effective alternative medical remedies and practices that can complement formal healthcare service provision.

Enabling factors such as education, income, employment, monthly income and health insurance were all significantly associated with healthcare utilization among older adults in this study. We also observed that enabling factors were the most dominant predictors of healthcare utilization, with education and monthly income contributing strongly to the effect seen in this study. The importance of socioeconomic factors in facilitating access to healthcare services has been established in previous studies, with education, higher income, and health insurance identified as positive predictors of health-seeking behaviour and use of healthcare services.^{15,23–26} While health insurance was identified as a predictor of healthcare use in other studies, this was not the case in the present study. Lack of awareness of the benefits of health insurance, poor coverage and affordability may be responsible, making health insurance less of an effective predictor of healthcare use among respondents. Creating awareness and education about the benefits of health insurance targeted at the elderly demographic, while designating older adults above a certain age as vulnerable groups and guaranteeing them free healthcare, may effectively expand insurance coverage and eliminate disparities resulting from income and other socioeconomic factors. Health needs were not significantly associated with the use of healthcare services in this study. Similar healthcare utilization rates were observed among respondents with a self-reported chronic health condition and those without one. This contradicts other studies, which identified Health needs as the main determinant of healthcare use among older adults.^{17,27} This may

be explained by respondents' use of alternative remedies instead of formal healthcare services due to existing barriers to healthcare access. Further research to determine the prevalence of alternative medicine use among older adults compared to formal healthcare may provide more insight into this finding. Comprehensive data collection systems tracking detailed healthcare utilization, reasons for visits and outcomes among older adults are necessary to identify specific barriers to utilization among older adults.

Strengths and Limitations

This is one of the few studies that have explored the predictors of utilization of healthcare services by older adults in Nigeria, an understudied but rapidly growing population. Additionally, this study examined a comprehensive assessment of factors that impact healthcare utilization in this group, providing insight for health policymakers to enhance their understanding of demographic, socioeconomic, and health-related factors influencing healthcare utilization among older adults. Despite this, the study has some limitations. The data on respondents' chronic health conditions was self-reported and may not precisely represent the true prevalence of chronic diseases among respondents. Additionally, causality could not be established between chronic disease and the use of healthcare services due to the study's cross-sectional nature. The study was conducted in only four communities across Oshodi-Isolo LGA, and although the results provide invaluable insight into the use of healthcare services among older adults, they must be interpreted and generalized with caution.

Conclusion

In this study, significant factors associated with healthcare use among older adults were primarily socioeconomic factors, with education

and Income as the most dominant predictors of healthcare utilization. Predisposing factors, such as community of residence and religion, were significantly associated with healthcare use to a lesser degree. In contrast, health needs were neither significantly associated with healthcare use nor were they a predictor of healthcare utilization. The findings in this study validate the need to expand access to healthcare among older adults, with a particular focus on addressing socioeconomic barriers that hinder healthcare service utilization among this population. The adoption of strategies such as expanding insurance coverage, community-based care, and establishing age-friendly primary healthcare facilities can ensure healthcare utilization and significantly improve the health of older adults.

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Conflicts of interest

The authors declare no conflicts of interest

Author's contribution

OEO supervised the research process, conceptualized the study, designed the data collection tools and critically reviewed the manuscript for publication.

OVC contributed to conceptualizing the study, conducted the literature review, developed the methodology, conducted data collection, performed statistical analysis and drafted the manuscript.

CAA contributed to the introduction, literature review search, editing and enriching the manuscript's background and contextualization. All authors reviewed and approved the final manuscript.

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