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Determinants of Rural Women's Accessibility to Primary Health Care Services in Iseyin Local Government Area, Oyo State

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ABSTRACT

The study assessed the determinants of rural women's accessibility to Primary Health Care services in Iseyin Local Government Area of Oyo State, Nigeria. A multistage sampling procedure was used to select 120 respondents. Data on respondents' socioeconomic characteristics, health challenges, and access to primary healthcare services and constraints to Primary Health Care services were collected using an interview schedule and analyzed using percentages, frequency, mean, weighted mean score, Pearson Moment Correlation, and Chi-square at α0.05. The results revealed that the respondents' mean age, monthly expenditure on health, and years of livelihood experience were 41.0 years, ₦5,215.5 and 7.03 years respectively; with monogamy marriage pattern (77.5%), and livelihood activities being farming (96.6%). The most common health challenges experienced by rural women were malaria (WMS=1.93), stomach upset (WMS=1.88), and arthritis (WMS=1.82). Also, immunisation against diseases (WMS=3.02), antenatal care (WMS=2.87), and postnatal care (WMS=2.46) were the most accessible primary health care services by the respondents, and was high for 53.3 %. In contrast, high cost of drug (WMS=1.03), inadequate health facilities (WMS=0.98), and unexpected charges (WMS=0.95) were the constraints to access the primary health care services by the respondents. The determinants of respondents' access to Primary Health Care services were age (r=0.250), years of education (r=0.246), household size (r=0.221), years of livelihood experience (r=0.243), constraints index (r=-0.256), and health challenges index (r=0.264). The determinants of respondents' access to the PHC services were their personal characteristics and the health challenges encountered.

Keywords: *Primary health care, rural women, health care accessibility, determinants of health utilisation, Nigeria*

Introduction

Rural women constitute a vital component of their communities, serving as primary caregivers and key contributors to both household sustenance and national economic development. The roles of women in rearing livestock and cultivating crops across the value chain cannot be overemphasized. Such agricultural roles are well noted in production, processing, warehousing, marketing, and in the preparation of food (Ogunlela & Mukhtar, 2021). Remarkably, women contribute almost 70% of labour in the agricultural setting of sub-Saharan Africa, significantly improving and enhancing food security and livelihoods of the rural dwellers (FAO, 2021). In Nigeria, rural women's involvement in both on-farm and off-farm livelihoods not only brings about economic growth to the nation but also fosters and enhances employment opportunities, which eventually turn out to sustain the supply of household food (UN Women, 2020). Considering the nature of

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women's roles at home, which are time-demanding and coupled with a lot of hours spent in their farming livelihoods, it is pertinent to prioritise their well-being and health. However, several rural women do not have adequate access to healthcare, which has been a great threat to their productivity and posing a significant barrier to their productivity and holistic quality of life (Adeniyi & Yekinni, 2023).

To salvage this, there is a pressing need to provide all-inclusive, accessible primary health care (PHC) services that focus on the specific needs of rural women. The PHC could be described as community-based, vital health services that target health promotion, the management of continuing ill health conditions, treatment of some common illnesses, and precautionary care (World Health Organisation [WHO], 2022; World Health Organisation [WHO], 2023 and Health Research Policy and Systems, 2024). The Federal Ministry of Health in Nigeria has strengthened efforts to reinforce the PHC operations, aligning it as the first entry point into the wider national health scheme (Federal Ministry of Health Nigeria [FMoH], 2021, and UHC2030, 2022). This deliberate prioritisation is intended to increase healthcare availability and affordability, especially for the vulnerable rural populations. Hence, empowering PHC service delivery in rural areas is crucial to increasing the effectiveness and resilience of women in rural communities, thereby strengthening their contributions to the nation's development.

Despite the important contributions of rural women to the development of their community in Nigeria, they continue to face great challenges in accessing healthcare. These problems are multifaceted and include poverty, inadequate transportation systems, patriarchal decision-making, geographic isolation, cultural norms, and a lack of health facilities that can meet the health needs of rural women (United Nations, 2020). In many rural communities, traditional health practices tend to prioritize men's health over women's as a result of the deep-rooted gender discrimination (Hossen and Westhues, 2022 & Frontiers, 2023). Rural women, unlike their counterparts in urban centers, encounter unique health issues related to their immediate environment and service inadequacies (World Bank, 2021). According to Aregbeshola & Khan (2021), the common sources of complaints about the accessibility of the PHC in rural areas include the introduction of user fees that limit affordability, poor quality of care, inconvenient clinic hours, and a consistent shortage of professional health personnel (doctors, nurses, and laboratory attendants) (Aregbeshola and Khan, 2021 & UHC2030, 2022).

In Nigeria, rural women are mostly hindered by a range of health challenges that they come across, both from the physical demands of their daily activities and their living conditions. Common diseases include gastrointestinal disorders, malaria, hypertension, arthritis, respiratory infections, diabetes, and injuries sustained during home and farm duties (Adebayo *et al*., 2021). The health situations of rural women, frequently untreated or not well managed, greatly affect their well-being and efficiency, particularly those in charge of caregiving and the breadwinners in their households. Nevertheless, rural women's access to PHC is a complicated issue as it is influenced by the type of care, availability of appropriate services, geographic proximity of facilities, financial barriers, and the cultural factors affecting their healthcare options (Ogunyomi & Adebayo, 2022). In response to these concerns, this study was set to assess the determinants of rural women's accessibility to primary health care services in Iseyin Local Government Area of Oyo State, Nigeria. Specifically, the study examined the socio-economic characteristics of rural women, identified the health challenges, evaluated the constraints faced by rural women in accessing primary health care services, and tested the significant relationships between selected variables and healthcare accessibility in the study area.

Methodology

The study was conducted in Iseyin, Oyo State, Nigeria, with Latitudes 7.3º and 9.12º north of the equator and longitudes 2.47º and 4.23º east of the

Prime Meridian. Agriculture is the main occupation of the rural people with the cultivation of crops like cocoa, millet, maize, yams, cassava, rice, plantain, palm produce, and cashew, among others. The area is known as the home of traditional wear called Aso-Oke among Yorubas**.** A multi-stage sampling technique was used to select 120 respondents, and data were collected through an interview schedule. The first stage involved a simple random sampling of 40% of the 11 Wards in the LGA (Ado-Awaye; Osoogun/Akinkunmi; Faramora and Ladogan/Oke Eyin). The second stage involved a Simple Random Sampling of three settlements in the selected wards, given 12 settlements (Ado-Awaye [Oke Ola, Oloore, and Aboriso]; Osoogun/Akinkunmi [Araromi, Aba Panu, Aba Agba]; Faramora [Ologunebi, Ido-Osa, Ode Ebu] and Ladogan/Oke Eyin [Akodudu, Olugbemi and Iyalode]); using a list obtained from the health department in the local government secretariat. While the third stage involved a systematic random sampling of 10 rural women from each of the selected settlements, giving a total of 120 respondents that constituted the sample size for the study.

The content and face validity of the instrument for data collection was attained through the interactions with the authors and other specialists in the Department of Agricultural Economics and Extension, Ajayi Crowther University, Oyo. Furthermore, the reliability of the research instrument was achieved using split-half techniques for the consistency of the instrument. Items of the tool were grouped into two halves. Even numbers were assigned to one half and odd numbers to the other half. The Pearson Product-Moment Correlation (PPMC) test was used. With the correlation coefficient (r) of 0.87, the instrument was adjudged dependable. Data were analysed with descriptive (frequency counts, percentages, mean) and Inferential statistics (Chi-square, PPMC at α 0.05). Respondents' socio-economic characteristics, such as age, primary occupation, years of livelihood experience, membership of a cooperative society, and annual income, were measured accordingly. The PHCs accessible for the respondents were captured with 15 accessible PHCs, with the response options 'Always' (4) 'Often' (3) 'Sometimes' (2) 'Rarely' (1) 'Never' (0). The respondents' level of access to PHCs was determined using the mean (WMS=2.16) criterion. All statements equal or above the mean were ranked as high, while statements below the mean were ranked as low. Thereafter, the weighted mean score was calculated to assign positions to the accessible PHCs in descending order. The health challenges faced by the respondents were captured with the 14 possible health challenges faced by the respondents in the study area, with the response options of 'Serious problem' (3) 'Moderate problem' (2) 'Minor problem' (1) 'Not a problem' (0). The weighted mean score was calculated to assign positions to the health challenges faced by the respondents in descending order. The constraints faced by the respondents to access the PHCs were captured with 14 possible constraints to the respondents' access to the PHCs, with the response options of severe constraint (2); 'Minor constraint' (1); and 'Not a constraint (0). The weighted mean score was calculated to assign positions to the respondents' constraints to access the PHCs in descending order

Socio-economic characteristics of the respondents

The results in Table 1 show that the respondents' average age, years of formal education, years of livelihood experience, household size, and health expenditure were 43.0 years, 10 years, 7.03 years, 11 persons, and ₦5,275.45, respectively. The respondents mostly practiced monogamous marriage (77.5%), relied on farming as their primary livelihood (50.0%), and were members of a religious group (58.3%). The average age of respondents indicates that they were in their economically and reproductively active years. This supports the assertion of Ameh *et al*. (2022) that women in their active age are primary caregivers and household health decision-makers, which drives their access to PHC for themselves and their household members. The result of formal education suggests that most of the respondents had a minimum level of secondary school education, which might enhance their access to the PHC services in their vicinity. However, women with higher educational accomplishments are more expected to be conscious

of health services, comprehend health information, and participate more confidently with healthcare systems (Ajayi *et al*., 2023).

The study's report on the main source of livelihood being farming underscores the job-related vulnerability of the respondents, as subsistence farmers are characterized by an unsTable source of

Table 1: Distribution of respondents according to their socio-economic characteristics

Variables	Frequency	Percentage (%)	Mean
Age			
20-29	15	79.2	43 years
30-39	37	20.8	
40-49	36	30.0	
50-59	17	14.2	
≥60	15	12.5	
Family pattern			
Monogamy	93	77.5	
Polygamy	27	22.5	
Year of formal education			
1-5	9	7.5	10 years
6-10	75	62.5	
≥11	36	40	
Household size			
1-10	76	71.7	
11-20	16	13.3	11 persons
21-30	16	13.3	
31-40	02	1.7	
Primary livelihood			
Farming	60	50.0	
Weaving	23	19.2	
Civil servant	13	10.8	
Trading	20	16.7	
Artisan	04	3.3	
Years of livelihood experience			
1-5			
6-10	52	43.3	
11-15	29	24.2	7.03 years
16-20	35	29.2	
	04	3.3	
Member of a Social Group			
Religious group	70	58.3	
Cooperative society	45	37.5	
Political group	05	4.2	
Income per Month			
1000-10000	50	41.7	
11000-20000	45	37.5	
>21000	25	20.8	
Expenditure on Health Care			
1000-5000	69	57.5	5275.42
6000-10,000	48	40	
≥11,000	3	2.5	

Source: Field survey, 2024

income that could obstruct women's capability to pay for healthcare-related expenditures (Elekeh *et al*., 2021). This aligns with the reported average health expenditure (₦5,275.45), which may constitute a significant financial burden in the absence of health insurance or social safety nets.

The average household size (11 persons) implies a notably large household and may pose a strain on household resources, as well as making the respondents bear the burden of domestic responsibilities. Furthermore, larger households with more dependents will consequently have greater healthcare demands and can reduce the per capita allocation of healthcare resources and therefore, hinder timely access to PHC services (Onwujekwe *et al.*, 2020). Martially, Table 1 further shows that respondents were in monogamous marriages (77.5%) and were affiliated with religious organisations (58.3%). This implies that sTable family structures have better health-seeking behavior, while religious groups can serve as support systems promoting health awareness and service utilisation.

Rural women's health challenges

The results in Table 2 show that malaria (WMS = 1.93) was the most common health issue among the respondents, followed by stomach upset (WMS = 1.88), arthritis (WMS = 1.82), and cough (WMS = 1.79). Eye defects (WMS = 1.23) were the least common. The result of this study aligns with wide-ranging epidemiological forms reported in sub-Saharan Africa, where malaria is the main public health issue, specifically among vulnerable sects

Table 2: Distribution of the respondents according to rural women's health challenges

Health challenges of women	Serious problem %	Moderate problem %	Minor problem %	Not a problem %	WMS	Rank
Malaria	35.0	31.7	24.2	9.2	1.93	1st
Stomach upset	22.5	22.5	51.7	9.2	1.88	2nd
Arthritis	26.7	26.7	39.2	10.0	1.82	3rd
Cough	26.7	26.7	37.5	11.7	1.79	4th
Fibroid	28.3	28.3	30.8	9.2	1.78	5th
Cholera	25.8	36.7	24.2	13.3	1.75	6th
High blood pressure	25.0	34.2	23.3	17.5	1.67	7th
Complications during childbirth	23.3	30.8	35.5	10.8	1.67	7th
Diabetes	25.0	32.5	25.8	16.7	1.66	9th
Tuberculosis	23.3	32.5	28.3	15.8	1.63	10th
Typhoid	20.0	30.0	41.7	8.3	1.62	11th
Diarrhea	22.5	30.8	30.8	15.8	1.60	12th
Cancer	20.0	31.7	35.0	13.3	1.58	13th
Eye defects	16.7	19.2	35.0	29.2	1.23	14th

Source: Field survey, 2024

like children and rural women (Nzoputam, *et al.*, 2024, and Okedo-Alex *et al*.,2022). Malaria has been reported to be the most occurring health illness in rural communities, which is a pointer to a gap in controlling the vector (mosquito); hence, preventive health information is needed in the area. The occurrence of stomach distress and cough may be attributed to insufficient access to drinkable water, poor cleanliness practices, and poor healthcare-seeking attitude (Okolie *et al.*, 2022). Furthermore, Arthritis was the third most prevalent health issue; this reflects the physical strain the rural women endured through routine domestic and agricultural labour. This is in line with the assertion of Uchenna and Nwankwo, (2021) that chronic musculoskeletal disorders reduce rural women's quality of life, especially where health services are limited or inaccessible. The relatively low reporting of eye defects could be due to underdiagnosis, low awareness, or cultural perceptions that de-emphasise the importance of eye health unless visual impairment becomes severe. Studies have found that many rural dwellers do not seek ophthalmic care until symptoms become debilitating, often due to cost, distance to facilities, and low health literacy (Ayanwale *et al.*, 2021).

Rural women's Access to Primary health care services

The results in Table 3 revealed that immunisation against infectious diseases ranked first (WMS = 3.02), followed by antenatal care (WMS = 2.87), postnatal care (WMS = 2.46), and nutrition education (WMS = 1.74), which ranked least. The prominence of immunisation in rural Nigeria reflects sustained national efforts by the National Primary Health Care Development Agency (NPHCDA), in delivering routine immunisation through both facility and outreach-based strategies (NPHCDA, 2025). Hence, the respondents' results on immunisation uptake might be influenced by their socio-demographic factors like maternal education, wealth index, and number of ANC visits (Population Medicine, 2023). The result in Table 3 further indicates that maternal healthcare utilisation, particularly for antenatal and postnatal, has been shown to significantly increase the odds of children being fully immunised as Antenatal Care (ANC) scores are above Postnatal Care (PNC) scores in service usage.

The outcome of this study is in line with the submissions of Population Medicine (2023) and Olajubu *et al*, (2020) that only a minority of rural women receive the recommended frequency of ANC visits, which might be due to access challenges to utilisation of ANC in rural communities. However, the Nutrition education being the list indicates that nutrition education fares poorest in rural communities, which might be a result of inadequate training and facility readiness at the PHCs, as affirmed by Adebulu (2024).

The level of access to the PHCs, as revealed by Table 3, was high for 53.3 % of the respondents, which shows that most of the respondents do get the type of health attention needed at the PHCs in their vicinity.

Constraints faced by rural women in accessing PHCs

The results in Table 4 revealed that the high cost of drugs ranked 1st (WMS = 1.03), while inadequate facilities in health centers ranked 2nd (WMS = 0.98), followed by unexpected charges (WMS = 0.95), with the least constraint being the non-availability of the needed service (WMS = 0.68). The results concerning the drug suggest that increasing pharmaceutical bills and unpredicTable drug purchases might have placed a great burden on the respondents. This was in line with Adebulu (2024); Frontiers (2023), and Bokinni's (2024) declaration that drugs with high cost have been one of the barriers for rural women to access PHC. The study's 2nd-ranked constraint results in Table 4 suggest that infrastructure and inadequate resource availability in rural PHCs persist. This corroborates a 2024 national assessment by Health Research Policy and Systems, which found great gaps in infrastructural facilities, medicine availability, and staffing in public PHC services across Nigeria. The constraint of unanticipated charges shows that, even though the official fees may be small, unexpected or illegal payments are still common, as affirmed by the

Table 3: Distribution of respondents by rural women's access to primary health care Services

Primary Health Care Services	Always %	Often %	Sometimes %	Rarely %	Never %	WMS	RANK
Immunization against diseases	47.5	22.5	20.0	4.2	5.8	3.02	1st
Ante-natal care	24.2	46.7	22.5	5.0	1.7	2.87	2nd
Post-natal care	11.7	34.2	45.0	6.7	2.5	2.46	3rd
Blood pressure check	17.5	30.0	29.2	20.0	3.3	2.38	4th
HIV testing and counseling	20.8	25.8	20.4	25.0	8.3	2.26	5th
Provision of essential drugs	13.3	28.3	31.7	22.5	4.2	2.24	6th
Maternal & child health care service	10.0	29.2	40.8	15.0	5.0	2.24	6th
Treatment of communicable & non-communicable diseases	17.5	15.8	37.5	23.3	5.8	2.16	8th
Normal delivery service	12.5	24.2	40.8	16.7	12.5	2.08	9th
Urine test	9.2	26.7	30.8	24.2	9.2	2.02	10th
Dental clinic service	12.5	19.2	29.2	29.2	10.0	1.95	11th
Routine check-up	11.7	16.7	29.2	33.3	9.2	1.88	12th
Family planning counseling	7.5	16.7	42.5	23.3	10.0	1.88	12th
Blood test	9.2	19.2	22.5	37.5	11.7	1.77	14th
Nutrition education	8.3	18.3	26.7	32.5	14.2	1.74	15th
Access level		**%**		**Mean**			
High		53.3		2.16			
Low		46.7					

Source: Field Survey, 2024

study report of Frontiers (2023). The least common constraints related to the non-availability of needed services suggest that most services expected by respondents are provided at PHCs; the unavailable ones may fall outside the PHC's mandate, as opined by (ThisDay Live, 2025, and Cable Foundation,

Table 4: Distribution of respondents according to the constraints faced in accessing primary health care.

Constraint	Severe Constraints %	Minor Constraints %	Not a constraint %	WMS	RANK
High cost of drugs	29.2	45.0	25.8	1.03	1st
Inadequate health facilities	32.5	33.3	34.2	0.98	2nd
Unexpected charges	25.8	43.3	30.8	0.95	3rd
Shortage of skilled/ qualified practitioners	24.2	45.0	30.8	0.93	4th
Poor access to healthcare officers	20.8	51.7	27.5	0.93	4th
Poor treatment	15.8	59.2	25.0	0.91	6th
Inadequate orientation on health issues	20.8	48.3	33.0	0.90	7th
Lack of communication skills	28.3	30.8	40.8	0.87	8th
Unfriendly opening hours	20.8	42.5	36.7	0.84	9th
Absence of doctors and nurses from duty	18.3	45.0	36.7	0.82	10th
Illiteracy of women	15.8	49.2	35.0	0.81	11th
Long distance to the health care center	20.0	40.8	39.2	0.81	11th
Self-medication due to custom and belief	13.3	50.8	35.2	0.78	13th
Non-availability of the needed service	14.2	40.0	45.8	0.68	14th

2023).

Test of the significant relationship between the selected variables and access to PHCs

The result in Table 5 shows significant positive associations between women's age (r = 0.250), years of formal education (r = 0.246), years of experience (r = 0.243), household size (r = 0.221), monthly healthcare expenditure (r = 0.270), and health challenges (r = 0.264) with access to PHCs. Conversely, a higher constraint index correlates negatively (r = –0.256) with access. This implies that in rural communities, older women and those with more education and accumulated experience may have an enhanced ability to navigate health systems and leverage social networks for health-seeking. Also, it is expected that rural women in their active and economic age seek health care services in their domain (Ameh *et al*., 2022). However, education, specifically, has been consistently linked to improved healthcare utilisation as formal education empowers women to recognise PHC benefits and access them more readily (Ajayi *et al*., 2023). The larger

Table 5: Relationship between the selected variables and access to primary health care

Variable	r- value
Age	0.250*
Year of formal education	0.246*
Household size	0.221*
Years of livelihood experience	0.243*
Expenditure on health care	0.270*
Constraint index	-0.256*
Health Challenges Index	0.264*

*Correlation is significant at 0.05 level (2-tailed)

households may imply more potential caregivers or shared resource pooling, increasing familiarity with PHC services and facilitating travel or cost-sharing. This corroborates a national-level study report in which households with more than five members had higher odds of incurring out-of-pocket spending on healthcare services (Aregbeshola and Khan, 2021). Furthermore, the higher monthly spending on health likely reflects greater utilistion of health services as personal expenditure has been a strong determinant of service usage, including the PHCs (Nairametrics, 2024). The significance of health challenges as revealed by Table 5, shows that households encountering frequent or severe illnesses are more likely to seek healthcare and possibly may repeat visits, and hence, increasing the rural women's PHC access (Larsen, 2025). However, it should be noted that the negative relationship of the constraints index to the PHCs access indicates that as perceived or objective constraints (cost, facility inadequacy, hidden fees) worsen, respondents' access to PHCs (Elekeh *et al*., 2024). Summarily, the results imply that all the above variables have a decisive influence on rural women's access to PHCs.

Conclusion and Recommendations

The study concludes that respondents' ailments and personal characteristics were the pull factors that positively influence the high access to PHCs, with an inverse proportion to the respondents' challenges to PHCs. Respondents' status of available infrastructure, staffing, and finance constraints their access to PHCs for nutrition education.

The study recommends that;

1. Stakeholders in the health sector and the affluent members of the community should provide adequate infrastructure and subsidise the drug bills at the PHCs.
2. The health personnel in PHCs should endeavour to integrate nutrition education into maternal care.
3. Respondents in their different social group should endeavor to embark on health scheme contribution for immediate access of funds to resolve health issues when need be.
4. Health practitioners should enlighten the respondents about the necessity to prevent mosquito bites rather than the control measures.
5. Motivations should be for healthcare professionals to live and work in rural areas for proper staffing and expertise.

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