

Knowledge And Attitude on The Utilization of Primary Health Care Services in Oka Community, Ondo West Local Government Area, Ondo State, Nigeria

Ibrahim Dawud Oyedemi¹, Akinniyi Rotimi Jacob², Oladejo Oluwatoyin Temitope³ Oladiran Isdaiah Olagunju⁴, Wokoma Victoria Eleba⁵, Omolere Olakorode Olabosede⁶, OjoAbel Adeniji⁷

^{1,2,3}*Department of Health promotion and behavioural science, University of Medical Sciences, Ondo, Ondo State, Nigeria*

⁴*Department of School of Community Health, Obafemi Awolowo University Teaching Hospital Complex (OAUTHC), Ile-Ife, Osun State, Nigeria*

⁵*Department of Community Health, College of Community Health Sciences, Wesley University, Ondo State.*

⁶*College of Health Sciences and Technology, Ile-Abiye Hospital, Ado Ekiti, Ekiti State, Nigeria*

⁷*Department of Community Health, Betsida College of Health, Ogbomosho, Oyo State, Nigeria*

Abstract—Background: Underutilization of Primary Health Care (PHC) services remains a persistent public health challenge in Nigeria. Despite the presence of PHC infrastructure in many communities, knowledge and attitudinal barriers continue to prevent residents from accessing essential primary care services. This study assessed the level of knowledge and attitudes of Oka community residents toward the utilization of PHC services in Ondo West Local Government Area, Ondo State, Nigeria.

Methods: A descriptive cross-sectional community-based design was adopted. Using a multi-stage sampling technique, 419 respondents were approached, of whom 352 participated (response rate: 84.01%). Data were collected with a structured, pretested questionnaire divided into four sections covering socio-demographics, knowledge, attitude, and factors influencing PHC utilization. Analysis was performed using IBM SPSS Version 27, employing descriptive statistics (frequencies, percentages, means, and standard deviations).

Results: While 80% (n=282) of respondents demonstrated good knowledge of PHC services, particularly regarding malaria treatment (mean=1.86±0.35), immunization (mean=1.83±0.37), and health education (mean=1.85±0.36), attitudes toward PHC utilization were predominantly poor, with 78.4% (n=276) exhibiting negative attitudes. Key negative attitudinal drivers included a perception that PHC centers are under-equipped (mean=3.71±0.45) and low confidence in service quality (mean=1.56±0.89). Critical barriers to utilization were drug shortages (67.3%),

preference for hospitals (58.0%), and limited services (61.9%). Only 31.5% (n=111) had ever visited a PHC center in the community.

Conclusion: A significant knowledge–attitude–utilisation gap characterizes the PHC landscape in the Oka community. High knowledge does not translate into positive attitudes or consistent utilization. Systemic improvements, including drug supply, staff training, infrastructure upgrades, and community engagement, are urgently needed to reverse the negative perception cycle and strengthen uptake of PHC services.

Index Terms—Primary Health Care, Knowledge, Attitude, Utilization, Oka Community, Nigeria, Health-seeking behavior, PHC barriers

I. INTRODUCTION

Primary Health Care (PHC) constitutes the bedrock of any well-functioning healthcare system. As the first point of contact between individuals, families, communities, and the national health system, PHC is uniquely positioned to address the majority of a population's health needs, spanning preventive, promotive, curative, and rehabilitative care, in a manner that is geographically proximate, affordable, and culturally responsive (World Health Organization, 2019). The foundational declaration of Alma-Ata in 1978 articulated this vision unequivocally, defining

PHC as 'essential health care based on practical, scientifically sound, and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford' (Rifkin, 2018). Four and a half decades later, this vision, noble in its ambition, remains profoundly unrealized across much of sub-Saharan Africa, and Nigeria is a compelling case in point.

Nigeria, the most populous nation on the African continent with an estimated 200 million citizens and a projected population exceeding 440 million by 2050, operates a three-tier healthcare delivery system in which PHC services are nominally under the purview of Local Government Areas (Vitalis & Oruonye, 2021; Bello & Sa'adu, 2024). The first comprehensive government health strategy premised on PHC was introduced in Nigeria in 1988, emphasizing 'health for all' through community participation, multisectoral inputs, and engagement with non-governmental health providers (Aregbeshola & Khan, 2017). The National Health Act of 2014 subsequently established the Basic Healthcare Provision Fund (BHCPF), intended to inject substantial financial resources into the PHC tier by drawing from at least 1% of the Federal Government's Consolidated Revenue Fund (Ilesanmi et al., 2023). However, despite these policy provisions, the performance of the Nigerian PHC system remains among the most inadequate globally.

The scale of PHC dysfunction in Nigeria is difficult to overstate. Of approximately 30,000 PHC centers distributed across the 774 Local Government Areas, only an estimated 20% are fully operational (Alonge, 2024). The remaining centers are hobbled by chronic inadequacies in staffing, infrastructure, essential drug supply, and equipment, deficiencies that collectively undermine the centers' capacity to deliver even basic healthcare to their catchment populations (Oluwadare et al., 2023). Nigeria's universal health service coverage index stands at a dismal 39%, far below comparable nations at similar income levels (Bello & Sa'adu, 2024). The consequences of this failure are borne most acutely by the most vulnerable: Nigeria currently records the second-highest number of maternal deaths globally, with a maternal mortality ratio of 1,047 deaths per 100,000 live births (World Bank Group, 2023). Approximately 64 babies are born alive for every 76 maternal fatalities, and 68.6% of

children born in Nigeria do not survive to their fifth year, a sobering statistic that reflects the cumulative toll of a dysfunctional primary care system (Ekwuazi et al., 2023).

The financial architecture underlying Nigeria's healthcare crisis is equally revealing. In 2022, just 4.2% of Nigeria's national budget was earmarked for health, translating to an average healthcare expenditure of approximately 3,510 Naira (US\$ 8.37) per citizen annually (Hanson et al., 2022). This allocation stands in stark contrast to the 15% annual budget commitment pledged by African Union member states in the 2001 Abuja Declaration and falls far short of the WHO's recommended minimum. Critically, the bulk of Nigeria's health spending is concentrated at the federal level in tertiary and secondary facilities, with the PHC tier, despite serving the largest proportion of the population, receiving the least (Alonge, 2024). The BHCPF, a statutory instrument for PHC financing under the National Health Act, was conspicuously absent from both the 2015 and 2016 federal budgets, signaling a structural failure of political will to prioritize primary healthcare (Tarun et al., 2021).

The consequences of this underfunding cascade through the healthcare system with devastating effects. PHC facilities in Nigeria are plagued by an acute shortage of skilled human resources: in the Egor Local Government Area of Benin City, for instance, only 10% of assessed PHC centers had a medical officer, and none had a medical record officer or a pharmacy technician (Adam & Nwaogwugwu, 2020). Essential drugs were not regularly available in any of the facilities assessed, and basic examination equipment was present in only 30% of centers. These deficiencies, compounded by poor road networks, high user fees, and negative patient experiences, create a cycle of disengagement whereby communities increasingly bypass PHC in favor of secondary and tertiary facilities or turn to self-medication and traditional healers, further overburdening higher-tier facilities and perpetuating poor health outcomes (Nwokoro et al., 2022). Less than half of Nigeria's rural residents have access to modern healthcare, and the under-resourced PHC sector offers little prospect for improvement under current trajectories (Olasehinde, 2018).

The intersection of knowledge and attitude with PHC utilization is a critical yet underexplored dimension of

this challenge. Research consistently demonstrates that individuals are more likely to use PHC services when they have adequate knowledge of available services and positive attitudes toward them (Tarun et al., 2021). Knowledge gaps lead to an underestimation of PHC's scope. Many community members are unaware that PHC centers offer services beyond immunization and simple ailment treatment, including HIV counseling, family planning, and antenatal care. Equally important, negative attitudes, shaped by experiences of poor service quality, long waiting times, rude staff, and persistent drug stock-outs, can deter utilization even when services are technically accessible, and individuals have adequate knowledge of their availability (Dawkins et al., 2021). This knowledge-attitude-practice gap is particularly acute in semi-urban and peri-urban communities like Oka, which straddle the divide between urban healthcare access and rural health behavior patterns.

The theoretical lens of the Health Belief Model (HBM), originally developed in the 1950s by Hochbaum, Rosenstock, and Kegels, offers a robust framework for understanding why communities with demonstrated knowledge of PHC services may nonetheless exhibit poor utilization (Green et al., 2020). The model's constructs, perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy, collectively explain how individuals weigh the anticipated benefits of healthcare-seeking against anticipated obstacles. A resident who perceives PHC centers as inadequately staffed, perennially drug-deficient, and unlikely to resolve their health concern is likely to perceive the barriers as outweighing the benefits, regardless of their level of knowledge about PHC services. Andersen's Behavioral Model of Health Services Utilization complements this perspective by situating individual health-seeking decisions within a broader sociostructural context, acknowledging that predisposing factors (demographics, beliefs), enabling resources (income, transport), and perceived need collectively shape utilization patterns (Alkhalwaldeh et al., 2023).

The global evidence base on PHC knowledge and utilization is both extensive and instructive. A multinational survey by Juarez-Medel et al. (2024) across healthcare workers in Mexico found a mean knowledge score of 6.58 (SD=1.70), with prior PHC

training and duration of service as significant predictors. In Saudi Arabia, Aldhamadi and Alzahrani (2019) found that only 54% of respondents preferred PHC as their first point of care, with 72.3% rating emergency departments as more important, a pattern mirrored in Nigerian communities. In Nigeria, Esene et al. (2025) found that while 95.3% of respondents in Edo State were aware of PHC centers, only 24.5% preferred them, with affordability emerging as the dominant enabling factor. Iyinbor et al. (2024) documented that fewer than half (46.1%) of urban residents in Egor, Benin City had utilized PHC services, with sex, religion, and occupation as statistically significant predictors.

In Ondo State, evidence on PHC utilization is nascent. Faisal (2025) emphasizes that PHC is the foundation of health services. However, its realization across the state, particularly in semi-urban communities like Oka, is constrained by a familiar constellation of systemic, financial, and attitudinal barriers. Oka community, situated within the Ondo West Local Government Area of Ondo City, presents a compelling case study: a semi-urban settlement with existing PHC infrastructure but with reported inconsistencies in utilization, shaped by the convergent influences of cultural beliefs, perceptions of service quality, educational heterogeneity, and income constraints. The absence of community-level empirical evidence on PHC knowledge and attitudes in this specific context represents a gap with direct policy relevance, both for local health programming and for the broader agenda of strengthening PHC systems in Ondo State and South-Western Nigeria. Despite the documented presence of Primary Health Care centres in Oka community and the broader national policy framework supporting PHC delivery in Ondo West Local Government Area, a paradoxical and clinically significant pattern persists: community residents demonstrate awareness of PHC services yet exhibit predominantly negative attitudes toward their utilization, resulting in low uptake rates that compromise health outcomes, overburden secondary and tertiary facilities, and impede the realization of universal health coverage at the grassroots level. The broad objective of this study was to assess the knowledge and attitudes regarding the use of Primary Health Care services among residents of the Oka community in the Ondo West Local Government Area, Ondo State, Nigeria. The specific objectives

were: (i) to assess the level of knowledge of Oka community residents about PHC services; (ii) to examine the attitudes of Oka community residents toward the utilization of PHC services; and (iii) to identify the factors influencing the utilization of PHC services among residents of Oka community.

II. REVIEW

Empirical evidence on PHC knowledge, attitudes, and utilization reveals consistently mixed patterns across geographic contexts, underscoring the complex interplay of structural, perceptual, and sociocultural determinants. Several studies provide a useful comparative backdrop for the present investigation.

Emmanuel (2017) conducted a cross-sectional study among 120 patients accessing care at Supreme Faith Hospital, Ado-Ekiti, Nigeria, finding that 81.7% ($n=98$) were aware of PHC services—a high prevalence of awareness that nonetheless failed to translate into PHC preference, with a significant proportion of participants favoring secondary facilities over PHC centers. This awareness–utilization disconnect is a recurring theme in the Nigerian literature. Nwokah and Amadi (2022), in a descriptive study of 539 rural women in Rivers East Senatorial District, found that only 21.8% had good knowledge of PHC services overall, despite high awareness of specific components: 88.7% knew about nutritional practices, 73.2% about maternal healthcare, and 64.0% about infectious disease reduction through PHC. Esene et al. (2025) documented a high prevalence of awareness (95.3%) among 380 participants in Ovia North East LGA, Edo State, with vaccination (74.0%) and maternal health services (70.4%) as the most recognized services. However, only 24.5% expressed PHC preference, and cancer screening awareness was a strikingly low 3.3%. These patterns confirm that awareness of specific high-profile PHC services does not imply comprehensive knowledge of the scope of PHC, and that neither awareness nor knowledge guarantees utilization.

Regarding attitudes, Khattak et al. (2022) assessed medical students in Pakistan. They reported a mean attitude score of 71.12 ($SD = 4.38$), with female students and students at private medical schools exhibiting significantly more positive attitudes. The attitudinal dimension is equally nuanced in community settings: Aldhamadi and Alzahrani (2019)

found in Saudi Arabia that 72.3% of respondents rated emergency departments as more important healthcare providers than PHC centers, with only 54% willing to attend PHC as their first point of care, reflecting structural distrust rooted in perceptions of limited-service scope and quality. The factors that structure utilization patterns are well cataloged. Iyinbor et al. (2024), in an urban South-South Nigerian study, found that 46.1% had used PHC services, with immunization (26.3%), child health (22.8%), and maternal care (18.7%) the most commonly accessed services. Sex, religion, and occupation were statistically significant predictors of utilization. Critically, only 24.6% of users found the services satisfactory, a finding that helps contextualize the low repeat utilization observed across the region. Oluwadare et al. (2023), in a rural Ekiti State study, found that only 45.7% had ever utilized PHC centers, with knowledge of PHC location and 24-hour operation emerging as significant predictors. Adam and Nwaogwugwu (2020) documented systemic infrastructure deficits across 10 public PHC centers in Egor LGA: none had a pharmacy technician, only one had a medical officer, and essential drugs were irregularly available in all facilities, confirming that structural inadequacy, not merely attitudinal resistance, drives underutilization. Lin et al. (2020), examining 1,544 elderly internal migrants in China, found that social contacts, age, and medical insurance were positively associated with PHC use, emphasizing the enabling role of social capital in facilitating access to healthcare. Taken together, these studies establish that closing the PHC utilization gap requires simultaneous attention to knowledge quality, attitudinal transformation, and structural service improvements, all of which are operationalized in the present study's design and findings.

III. METHODS

Research Design

A descriptive cross-sectional community-based research design was adopted. This design is appropriate for capturing a contemporaneous snapshot of community knowledge, attitudes, and behavioral patterns related to PHC utilization without requiring longitudinal follow-up. It permits the simultaneous assessment of multiple variables across a diverse

sample within a defined time frame (Oluwadare et al., 2023).

Study Area

The study was conducted in the Oka community, within the Ondo West Local Government Area (LGA) of Ondo City, Ondo State, Nigeria. Ondo City, situated at latitude 6°30'N and longitude 4°45'E, is the second-largest urban center in Ondo State and had a population of 288,868 at the 2006 National Population Census (Olatunji et al., 2023). Ondo West LGA is one of 18 LGAs in the state and is home to 43 Primary Healthcare Centers providing essential maternal and child health services. The Oka community is a semi-urban settlement with a heterogeneous socioeconomic composition and is served by a PHC center. Its mixed urban-rural characteristics make it an analytically valuable site for exploring PHC utilization dynamics in comparable communities across Ondo State and South-Western Nigeria.

Study Population, Inclusion, and Exclusion Criteria

The target population comprised adult residents aged 18 years and above who were domiciled in the Oka community at the time of the study. Inclusion criteria required willingness to provide informed consent and ability to comprehend and respond meaningfully to the questionnaire. Individuals under 18 years of age and those with cognitive or developmental impairments that prevent informed consent were excluded.

Sample Size Determination

Sample size was calculated using the Leslie Kish (1965) formula: $n = Z^2pq/d^2$, where $Z = 1.96$ (95% confidence level), $p = 0.457$ (prevalence of PHC utilization from Oluwadare et al., 2023), $q = 1 - p = 0.543$, and $d = 0.05$ (margin of error). This yielded $n = 381$. A 10% non-response correction produced a final target sample of 419 respondents.

Sampling Technique

A three-stage multi-stage sampling procedure was employed. In Stage 1, five settlements were selected from the Oka community's 56 settlements using simple random sampling (Ewumi, Alafiatayo, Agunbiade, Jerusalem, and Akinboyewa). In Stage 2, households within each settlement were selected using systematic random sampling, with a sampling interval derived by dividing the total settlement households by

the required quota. In Stage 3, within each selected household, the oldest adult meeting the inclusion criteria was approached for participation.

Data Collection Instrument

A semi-structured, pre-tested questionnaire adapted from Oluwadare et al. (2023) was used. It comprised four sections: Section A (socio-demographic characteristics), Section B (knowledge of PHC services, 11 dichotomous Yes/No items scored to classify respondents as having good [$\geq 50\%$] or poor [$< 50\%$] knowledge), Section C (attitudes toward PHC utilization, 11 Likert-scale items with four response options: Strongly Agree, Agree, Disagree, Strongly Disagree), and Section D (factors influencing PHC utilization, 11 Likert-scale items). The questionnaire was administered in English, with Yoruba translation available for participants with limited English proficiency.

Validity and Reliability

Content validity was assured through expert review by a senior public health professional and the study supervisor. Face validity was assessed through pre-testing with 42 respondents (approximately 10% of the target sample) in the Lipakala community, a neighboring settlement with similar demographic characteristics. Instrument reliability was established via a test-retest method administered two weeks apart to a subset of respondents; the Pearson correlation coefficient yielded a Cronbach's alpha of 0.75, indicative of good internal consistency.

Ethical Considerations

Ethical approval was obtained from the University of Medical Sciences Ethics Committee (Approval No.: UNIMED-HREC/Apv/2025/259). Written informed consent was obtained from all participants prior to data collection. Respondents were assured of the voluntary nature of their participation, their right to withdraw at any time without consequence, and the confidentiality of all responses. The principles of beneficence, non-maleficence, respect for persons, and justice were upheld throughout the study.

Data Analysis

Data were coded, cleaned, and entered into IBM SPSS Version 27. Descriptive statistics, including frequencies, percentages, means, and standard

deviations, were used to summarise all variables. Knowledge was classified as good ($\geq 50\%$ of items correctly answered) or poor ($< 50\%$). Attitude was categorized as positive or negative based on the aggregate Likert score relative to the midpoint. For the knowledge items, mean scores approaching 2.00 indicated higher awareness (maximum score = 2 for Yes responses). For Likert items, higher mean scores on positive statements indicated more positive attitudes, while higher mean scores on negative statements indicated more negative attitudes. Findings are presented in structured tables with accompanying narrative interpretation.

IV. RESULTS

Of the 419 questionnaires distributed, 352 were completed and returned, yielding a response rate of 84.01%. All 352 questionnaires were included in the analysis. Results are presented sequentially across four domains: socio-demographic characteristics, knowledge of PHC services, attitudes toward PHC utilization, and factors influencing PHC utilization.

4.1. Socio-Demographic Characteristics of Respondents

Table 1: Socio-Demographic Characteristics of Respondents (n=352) — Fieldwork, 2025

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	147	41.8%
	Female	205	58.2%
Age	18–21 years	39	11.1%
	22–28 years	73	20.7%
	29–35 years	91	25.9%
	36–42 years	61	17.3%
	43 years and above	88	25.0%
Marital Status	Single	109	31.0%
	Married	193	54.8%
	Divorced	25	7.1%
	Widowed	25	7.1%
Educational Level	No formal education	39	11.1%
	Primary	69	19.6%
	Secondary	123	35.0%
	Tertiary	121	34.4%
Religion	Christianity	203	57.7%
	Islam	131	37.2%
	Traditional	18	5.1%
Ethnicity	Yoruba	286	81.3%
	Igbo	23	6.5%
	Hausa	15	4.3%
	Others	28	8.0%
Occupation	Self-Employed	107	30.4%
	Students	81	23.0%
	Civil Service	63	17.9%
	Artisan	56	15.9%
	Farming	45	12.8%
Monthly Income	Below ₦10,000	91	25.9%
	₦10,000–₦29,999	113	32.1%
	₦30,000–₦49,999	83	23.6%
	₦50,000 and above	65	18.5%
Distance to PHC	Less than 1 km	57	16.2%

	1–5 km	133	37.8%
	6–10 km	93	26.4%
	Above 10 km	69	19.6%
Duration of Stay	Less than 1 year	29	8.2%
	1–5 years	71	20.2%
	6–10 years	109	31.0%
	More than 10 years	143	40.6%
Ever visited PHC?	Yes	111	31.5%
	No	241	68.5%
Frequently use PHC?	Yes	97	27.6%
	No	255	72.4%

Table 1 presents the socio-demographic profile of the 352 respondents. Females constituted the majority (58.2%, n=205), while males accounted for 41.8% (n=147). The most represented age group was 29–35 years (25.9%, n=91), closely followed by those aged 43 years and above (25.0%, n=88). Those aged 22–28 years represented 20.7% (n=73), while the youngest cohort (18–21 years) accounted for 11.1% (n=39). Regarding marital status, 54.8% (n=193) were married, 31.0% (n=109) were single, and 7.1% each were divorced or widowed. Secondary education was the most common attainment (35.0%, n=123), followed by tertiary (34.4%, n=121), primary (19.6%, n=69), and no formal education (11.1%, n=39). Christianity was the predominant religion (57.7%, n=203), followed by Islam (37.2%, n=131) and

traditional religion (5.1%, n=18). The Yoruba ethnicity was the most prevalent, at 81.3% (n=286). Occupationally, 30.4% (n=107) were self-employed and 23.0% (n=81) were students. Income distribution revealed that 32.1% (n=113) earned between ₦10,000 and ₦29,999 monthly, and 25.9% (n=91) earned below ₦10,000, reflecting a predominantly low-income population. Most respondents lived 1–5 km from the nearest PHC (37.8%, n=133), and 40.6% (n=143) had resided in the community for more than 10 years. Critically, 68.5% (n=241) had never visited a PHC center in the community, and 72.4% (n=255) reported that they did not frequently use PHC services.

4.2 Knowledge of Primary Health Care Services

Table 2: Respondents' Knowledge of Primary Health Care Services (n=352) — Fieldwork, 2025

S/N	Item / Statement	Yes n(%)	No n(%)	Mean	SD
1	Do PHC centers provide treatment for common illnesses such as malaria?	301 (85.5%)	51 (14.5%)	1.86	0.35
2	Do PHC centers offer immunization services for children?	294 (83.5%)	58 (16.5%)	1.83	0.37
3	Are antenatal and postnatal care services available at PHC centers?	287 (81.5%)	65 (18.5%)	1.81	0.39
4	Do PHC centers provide family planning services?	276 (78.4%)	76 (21.6%)	1.78	0.42
5	Do PHC centers provide health education or counseling?	298 (84.7%)	54 (15.3%)	1.85	0.36
6	Do PHC centers offer HIV testing and counseling services?	283 (80.4%)	69 (19.6%)	1.80	0.40
7	Are PHC centers involved in controlling infectious disease outbreaks?	184 (52.3%)	168 (47.7%)	1.52	0.50
8	Do you know if they have drugs to administer when people are sick?	79 (22.4%)	273 (77.6%)	1.22	0.41
9	Do you know the level of health challenges they treat before referral?	66 (18.8%)	286 (81.2%)	1.19	0.39

10	Are there community health workers or volunteers attached to PHCs?	352 (100.0%)	0 (0.0%)	2.00	0.00
11	Do PHC centers offer 24-hour services in this community?	68 (19.3%)	284 (80.7%)	1.19	0.39

Table 2 presents knowledge levels across 11 items. The highest mean scores were recorded for awareness of PHC centres providing treatment for common illnesses like malaria (mean=1.86±0.35, 85.5% Yes), health education or counseling (mean=1.85±0.36, 84.7% Yes), immunization services for children (mean=1.83±0.37, 83.5% Yes), antenatal and postnatal care (mean=1.81±0.39, 81.5% Yes), HIV testing and counseling (mean=1.80±0.40, 80.4% Yes), and family planning services (mean=1.78±0.42, 78.4% Yes). A notably perfect mean score of 2.00±0.00 was recorded for awareness that community health workers or volunteers are attached to PHCs,

indicating unanimous recognition. Moderate awareness was observed regarding PHC involvement in controlling infectious disease outbreaks (mean=1.52±0.50; 52.3% Yes). Knowledge deficits were most pronounced regarding drug availability at PHCs (mean=1.22±0.41; only 22.4% Yes), the scope of care PHCs can provide before referral (mean=1.19±0.39; 18.8% Yes), and 24-hour service availability (mean=1.19±0.39; 19.3% Yes). Overall, 80% (n=282) were classified as having good knowledge, while 20% (n=70) had poor knowledge.

4.3 Attitudes of Respondents toward PHC Utilization

Table 3: Attitudes of Respondents toward PHC Utilization Using Likert Scale (n=352) [SA=Strongly Agree; A=Agree; D=Disagree; SD=Strongly Disagree] — Fieldwork, 2025

S/N	Statement	SA n(%)	A n(%)	D n(%)	SD n(%)	Mean	SD
1	I believe PHC centers offer quality healthcare services	31 (8.8%)	39 (11.1%)	47 (13.4%)	235 (66.8%)	1.62	0.93
2	I feel confident seeking care from a PHC center	27 (7.7%)	35 (10.0%)	44 (12.5%)	246 (69.9%)	1.56	0.89
3	I think PHC staff are friendly and approachable	43 (12.2%)	37 (10.5%)	34 (9.7%)	238 (67.6%)	1.67	1.01
4	I trust the medical advice given at PHC centers	71 (20.2%)	64 (18.2%)	49 (13.9%)	168 (47.7%)	2.11	1.13
5	I prefer PHC centers to hospitals for minor health issues	0 (0.0%)	41 (11.6%)	33 (9.4%)	278 (79.0%)	1.33	0.63
6	I feel PHC centers are accessible and easy to locate	196 (55.7%)	48 (13.6%)	37 (10.5%)	71 (20.2%)	3.05	1.03
7	I am willing to recommend PHC services to friends or family	39 (11.1%)	35 (10.0%)	41 (11.6%)	237 (67.3%)	1.65	0.95
8	I think community involvement improves PHC service delivery	221 (62.8%)	43 (12.2%)	35 (10.0%)	53 (15.1%)	3.23	0.94
9	I believe most PHC staff are not well-trained	128 (36.4%)	91 (25.9%)	66 (18.8%)	67 (19.0%)	2.80	1.11
10	I feel PHC centers are mostly under-equipped	251 (71.3%)	101 (28.7%)	0 (0.0%)	0 (0.0%)	3.71	0.45
11	I prefer to self-medicate rather than go to a PHC center	143 (40.6%)	97 (27.6%)	48 (13.6%)	64 (18.2%)	2.91	1.14

Table 3 presents attitudinal responses across 11 Likert-scale items. The highest-rated negative statement, that PHC centers are mostly under-equipped, yielded the highest overall mean (mean=3.71±0.45), with all 352 respondents (100%) agreeing or strongly agreeing.

The belief that community involvement improves PHC service delivery attracted the second-highest mean (mean=3.23±0.94), with 62.8% strongly agreeing. Perceived PHC accessibility was moderate (mean=3.05±1.03), with 55.7% strongly agreeing.

Self-medication preference over PHC visits had a mean score of 2.91 ± 1.14 , with 40.6% strongly agreeing. The perception that most PHC staff are not well-trained had a mean of 2.80 ± 1.11 , while trust in PHC medical advice, the most favorable trust indicator, had a mean of only 2.11 ± 1.13 . Attitudes reflecting direct quality-of-care perceptions were uniformly low: quality of healthcare services (mean= 1.62 ± 0.93), staff friendliness (mean= 1.67 ± 1.01), willingness to recommend PHC

(mean= 1.65 ± 0.95), confidence in seeking care (mean= 1.56 ± 0.89), and preference for PHC over hospitals for minor ailments (mean= 1.33 ± 0.63). Aggregated attitudinal scoring classified 78.4% (n=276) as having a poor attitude and only 21.6% (n=76) as having a good attitude toward PHC utilization.

4.4 Factors Influencing PHC Utilization

Table 4: Factors Influencing PHC Utilization Among Respondents (n=352) [SA=Strongly Agree; A=Agree; D=Disagree; SD=Strongly Disagree] — Fieldwork, 2025

S/N	Statement	SA n(%)	A n(%)	D n(%)	SD n(%)	Mean	SD
1	Limited services at PHC centers affect my usage	218 (61.9%)	41 (11.6%)	29 (8.2%)	64 (18.2%)	3.19	0.98
2	PHC centers in my area are not clean or sanitary	36 (10.2%)	39 (11.1%)	47 (13.4%)	230 (65.3%)	1.65	0.91
3	PHC centers lack qualified personnel (e.g., doctors)	109 (31.0%)	38 (10.8%)	33 (9.4%)	172 (48.9%)	2.24	1.22
4	The attitude of health workers discourages me from visiting	133 (37.8%)	74 (21.0%)	67 (19.0%)	78 (22.2%)	2.74	1.09
5	Shortage of drugs or medical supplies influences my decision	237 (67.3%)	47 (13.4%)	31 (8.8%)	0 (0.0%)	3.42	0.76
6	Distance to the PHC center affects my likelihood of going	189 (53.7%)	32 (9.1%)	27 (7.7%)	104 (29.5%)	2.87	1.16
7	I prefer general/teaching hospitals to PHC centers	204 (58.0%)	69 (19.6%)	79 (22.4%)	0 (0.0%)	3.36	0.83
8	I often rely on self-medication rather than visiting the PHC	192 (54.5%)	44 (12.5%)	46 (13.1%)	70 (19.9%)	3.01	1.08
9	I am not aware of any PHC center in my community	87 (24.7%)	89 (25.3%)	91 (25.9%)	85 (24.1%)	2.51	1.09
10	I do not see any reason to use PHC services	176 (50.0%)	45 (12.8%)	0 (0.0%)	131 (37.2%)	2.76	1.32
11	Community participation in PHC encourages me to utilize services	147 (41.8%)	83 (23.6%)	66 (18.8%)	56 (15.9%)	2.91	1.04

Table 4 documents factors influencing PHC utilization. The most strongly endorsed barrier was the shortage of drugs or medical supplies (mean= 3.42 ± 0.76), with 67.3% strongly agreeing that this influenced their PHC decisions. Preference for general or teaching hospitals over PHC centers was the second-highest factor (mean= 3.36 ± 0.83 ; 58.0% strongly agreed). Limited services at PHC centers significantly affected usage (mean= 3.19 ± 0.98 ; 61.9% strongly agreed). Self-medication as an alternative to PHC visits was moderately endorsed (mean = $3.01 \pm$

1.08 ; 54.5% strongly agreed). Community participation was recognized as a positive factor (mean = 2.91 ± 1.04 ; 41.8% strongly agreed). Distance to PHC centers was a notable deterrent (mean= 2.87 ± 1.16 ; 53.7% strongly agreed). Poor health worker attitude discouraged utilization (mean= 2.74 ± 1.09 ; 37.8% strongly agreed), while the perception of having no reason to use PHC services had a mean of 2.76 ± 1.32 (50.0% strongly agreed). Perceived lack of qualified personnel recorded mean= 2.24 ± 1.22 . Awareness of PHC centers showed

a near-neutral mean of 2.51 ± 1.09 . The cleanliness of PHC centers was not identified as a major deterrent (mean = 1.65 ± 0.91 ; 65.3% strongly disagreed).

V. DISCUSSION

Knowledge of PHC Services

The finding that 80% of respondents demonstrated good knowledge of PHC services is encouraging and broadly consistent with prevailing literature from similar Nigerian communities. Emmanuel (2017) in Ado-Ekiti and Esene et al. (2025) in Edo State both reported high awareness of PHC (81.7% and 95.3%, respectively). However, the latter also noted that awareness did not translate into service preference or utilization. The elevated knowledge levels in the current study likely reflect the long-standing public health campaigns and national PHC programs, particularly in immunization, antenatal care, and malaria management, that have maintained a visible presence in communities across South-Western Nigeria (Kress et al., 2016; Piwowar-Sulej, 2021).

The highest-scoring knowledge items (malaria treatment, immunization, health education, antenatal care, HIV testing, and family planning) correspond precisely to the services most heavily promoted through national health advocacy and the Basic Health Care Provision Fund framework. The universal recognition of community health workers (mean = 2.00 ± 0.00) reflects the visibility and community embeddedness of frontline health cadres—a pattern documented by Gizaw et al. (2022) as critical to bridging the gap between PHC facilities and underserved populations. Conversely, the stark knowledge deficits regarding drug availability (22.4% awareness), referral thresholds (18.8%), and 24-hour service provision (19.3%) reveal meaningful information asymmetries: residents may know PHC exists and what basic services it offers in theory, but they lack operational knowledge about what they can concretely expect on any given visit. This gap between theoretical service knowledge and practical service competence knowledge is particularly significant because it shapes utilization decisions. Freijser et al. (2023) observed that irregular service hours and poor service communication lead residents to assume facilities are unavailable during emergencies, driving them to secondary facilities by default. Haldane et al. (2019) similarly noted that perceptions of limited drug

availability constitute a critical deterrent to PHC attendance even among otherwise knowledgeable community members.

Attitudes toward PHC Utilization

The finding that 78.4% of respondents held poor attitudes toward PHC utilization is the most alarming result of this study and has profound implications for health service planning. This widespread negative attitude coexists paradoxically with a high level of factual knowledge, confirming the frequently documented knowledge-attitude-practice gap in healthcare research (Ogundunmade et al., 2024; van Weel & Kidd, 2018). The most powerful attitudinal finding, universal agreement (100%) that PHC centers are under-equipped (mean = 3.71 ± 0.45), reflects a structural reality corroborated by facility-level assessments across Nigeria (Adam & Nwaogwugwu, 2020; Alonge, 2024). Equipment deficiency is not merely a symbolic complaint; it represents a concrete barrier that prevents PHC workers from conducting basic physical examinations, laboratory tests, and minor surgical procedures, rendering visits unproductive and eroding community trust.

The low scores for quality-of-care perception (mean = 1.62 ± 0.93), confidence in seeking care (mean = 1.56 ± 0.89), and staff friendliness (mean = 1.67 ± 1.01) are particularly telling. They suggest that beyond infrastructure, the relational dimension of care, how patients are treated by staff, is a dominant driver of negative attitudes. Madu and Osborne (2023) identify poor patient-provider relationships as a recurring determinant of PHC disengagement in Nigeria. Kraef et al. (2020) establish that user satisfaction, which is directly shaped by staff competence and interaction quality, is a primary predictor of repeat utilization. The trust dimension is further illuminated by the low preference for PHC over hospitals for minor ailments (mean = 1.33 ± 0.63). When residents do not trust PHC centers to handle even minor conditions effectively, the foundational justification for a tiered healthcare system collapses. This preference reversal, choosing secondary or tertiary care for conditions manageable at the primary level, is the behavioral expression of attitudinal distrust, and its consequences are systemic: it clogs higher-level facilities, increases out-of-pocket expenditure, and delays care for genuinely complex conditions (Sacks et al., 2020a).

Interestingly, the relatively high mean for PHC accessibility (mean=3.05±1.03) confirms that geographic proximity is not the primary barrier in the Oka community; rather, service quality and trust drive underutilization. This finding aligns with Andersen's Behavioral Model: access is a necessary but not sufficient condition for utilization (Alkhawaldeh et al., 2023). The strong endorsement of community involvement as an improvement mechanism (mean=3.23±0.94) is encouraging; it indicates that residents are not disengaged from the idea of improving PHC but recognize that participatory governance and accountability structures are essential enablers. This finding aligns with global evidence showing that community ownership and co-design of PHC services significantly enhance satisfaction and utilization (Haldane et al., 2019; WHO, 2019).

Factors Influencing PHC Utilization

The factor most strongly associated with underutilization was drug shortage (mean=3.42±0.76; 67.3% strongly agreed). This finding is consistent with Adam and Nwaogwugwu (2020), who documented irregular availability of essential drugs as a systemic failure across all 10 PHC centers assessed in Benin City. Binagwaho and Mathewos (2023) similarly identified drug stockouts as a primary driver of PHC disengagement in southeastern Nigerian communities. The practical logic is straightforward: a patient who travels to a PHC center and discovers that the necessary medications are unavailable will not return for a repeat visit. Chronic drug unavailability thus creates a self-reinforcing cycle of distrust and non-utilization.

The strong preference for general and teaching hospitals over PHC centers (mean=3.36±0.83; 58.0% strongly agreed) reflects the deeply ingrained perception that higher-tier facilities offer superior care, an intuition partially grounded in structural reality (more personnel, equipment, and diagnostic capacity) but also in cultural narratives about quality that have been reinforced by poor PHC service experiences (Sacks et al., 2020a). Faisal (2025) argues that this preference pattern directly undermines Nigeria's referral system and, paradoxically, reduces the quality of care at secondary and tertiary levels by overwhelming their capacity. The endorsement of limited services as a barrier (mean=3.19±0.98; 61.9%) echoes findings from Iyinbor et al. (2024), who

documented that the narrow scope of services at many PHC centers, concentrated on immunization and maternal care, fails to address the diverse health needs of adult community members.

Self-medication as a PHC alternative (mean=3.01±1.08; 54.5%) represents both a utilization barrier and a public health risk. Chotchoungchatchai et al. (2020) and Ogah et al. (2024) identify self-medication as widespread in Nigerian communities due to cost considerations, limited accessibility, and distrust of institutions. It propagates antimicrobial resistance, delays diagnosis of serious conditions, and permits preventable morbidity and mortality. Community participation as an enabling factor (mean=2.91±1.04) and distance as a deterrent (mean=2.87±1.16) highlight the enabling and constraining roles of social capital and physical infrastructure, respectively, findings well-established in the international literature (Lin et al., 2020; Yang et al., 2020). The moderate concern about poor staff attitudes (mean=2.74±1.09) and the perception of no need for PHC (mean=2.76±1.32) further illustrate how motivational deficits, rooted in poor service history, become self-sustaining barriers. Rai et al. (2024) emphasize that rebuilding the motivation to use PHC requires demonstrable improvements in service responsiveness, not merely information campaigns.

VI. CONCLUSION

This study reveals a striking and clinically significant knowledge–attitude–utilization gap in the Oka community in the Ondo West Local Government Area. While 80% of residents demonstrated good factual knowledge of PHC services, particularly those involving immunization, maternal care, and disease treatment, this knowledge has not translated into positive attitudes or consistent service utilization. An overwhelming 78.4% held negative attitudes toward PHC utilization, driven by deep-seated distrust stemming from perceptions of inadequate equipment, drug shortages, poor staff competence and patient-centered care, as well as a preference for higher-tier facilities. The finding that only 31.5% had ever visited a PHC center in the community and merely 27.6% used PHC services regularly situates Oka firmly within the pattern of systematic PHC underutilization documented across Nigeria. The results affirm that knowledge of PHC services, while necessary, is

insufficient on its own to drive utilization; structural quality, trust, and community engagement are equally important, if not more so, determinants of utilization. These findings have direct implications for health policy, service delivery planning, and community health promotion in Ondo West LGA and comparable communities across Ondo State and South-Western Nigeria. Closing the utilization gap requires a comprehensive, multilevel strategy that simultaneously addresses systemic infrastructure deficits, strengthens the human dimensions of care, empowers communities as active partners in PHC governance, and provides accurate, context-sensitive health education on the full scope and quality of PHC services.

VII. RECOMMENDATIONS

Based on the study findings, the following evidence-based recommendations are proposed. First, the State Ministry of Health and the Ondo West LGA health department should urgently prioritize supply chain reforms to ensure the consistent availability of essential drugs and medical supplies at PHC centers, including real-time inventory monitoring and procurement accountability mechanisms. Second, periodic, mandatory training and retraining programs for PHC staff, encompassing clinical competence, patient communication, and interpersonal skills, should be institutionalized and tied to performance appraisal frameworks to improve staff-patient interactions and rebuild community trust. Third, PHC infrastructure and equipment should be systematically upgraded in line with minimum national standards, with dedicated capital budgets protected from diversion. Fourth, Community Health Committees should be formally established and empowered in each PHC catchment area to promote community ownership, accountability, and co-design of service improvement strategies. Fifth, targeted community health education campaigns, delivered through local community leaders, religious institutions, and community health extension workers, should be designed to inform residents about the full spectrum of PHC services, including 24-hour availability where applicable, and to actively discourage self-medication. Sixth, the LGA should explore expanding and improving the enforcement of the National Health Insurance Scheme to reduce out-of-pocket costs and

enhance PHC financial accessibility, particularly for low-income households.

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