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Access and Utilization of Primary Healthcare facilities in Peri-Urban Communities of Ibeju-Lekki, Lagos, Nigeria

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Abstract

This study investigates the access to and utilization of primary healthcare (PHC) services in peri-urban communities of Ibeju-Lekki LGAa, Lagos State, Nigeria. PHC is vital in achieving Universal Health Coverage (UHC), particularly in low and middle-income countries. The study adopted a survey design and collected data from 200 respondents using structured questionnaires supported by spatial mapping through ArcGIS. Descriptive statistics and the Relative Importance Index (RII) were used to analyse the data. Findings reveal high awareness (68.9%) and utilisation (93.4%) of PHC services among residents, particularly for child healthcare. 51.3% of respondents described PHC centres as very accessible, while 68.9% rated them as adequate. The most valued aspect of PHC service delivery was the friendliness of health workers (RII = 0.873), followed by effective child healthcare services and respectful treatment. However, long waiting times (RII = 0.510), distance from home (RII = 0.482), and high drug costs (RII = 0.476) were identified as key challenges. These results highlight the critical role of interpersonal care in promoting service uptake but also point to persistent access barriers. Addressing these challenges through investment in infrastructure, staff recruitment, and community outreach can enhance the performance of PHC, UHC, and the sustainable development goals.

Keywords: ***access, adequacy, peri-urban communities, primary healthcare and service satisfaction, utilization***

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Introduction

Encapsulated as the heartbeat of healthcare systems globally, Primary healthcare (PHC) underpins the realisation of accessible, affordable, and equitable services. The PHC services were established to help make health coverage more comprehensive for individuals, particularly those in rural and underserved communities, by considering services ranging from health promotion and disease prevention to treatment and palliative care. Identified as a "whole-of-society approach to health," PHC meets people where they are in everyday life and forms an essential foundation for Universal Health Coverage (UHC) (Kuehne *et al*., 2022). Strengthening PHC reflects service requirements within the SDGs, particularly Goal 3, which aims to ensure healthy lives and promote well-being for all (World Health Organization 2018).

In Nigeria, the evolution of the PHC system is marked by a series of reforms and policies intended to improve its performance. Major initiatives included the 1978 Alma-Ata Declaration of "Health for All" and the 1988 Bamako Initiative, focusing on essential drugs. The creation of the National Primary Health Care Development Agency (NPHCDA) in 1992 and the introduction of the Primary Health Care under One Roof (PHCUOR) policy in 2005 further solidified PHC in Nigeria (Adepoju *et al*., 2021; Awofeso *et al*., 2022; NPHCDA, 2020).

PHC facilities are vital in mitigating barriers, such as geographical distance, costs, and cultural context, that often impede access to health care, especially in rural communities (Betancourt et al., 2004). Recent evidence confirms that, in remote settings, PHC contributes to maternal and child health, prevention of diseases, and care for common conditions such as malaria and pneumonia. For instance, successful PHC systems have been shown to significantly reduce under-five mortality rates and increase immunisation coverage in low- and middle-income countries (Idris & Shingw, 2024). Integrating community health workers (CHWs) into PHC

frameworks has increased the scope of maternal and childcare service delivery in countries such as Indonesia and Brazil (Le Roux et al., 2020). Accordingly, improving PHC in Peri-Urban areas requires addressing health equity as a prerequisite for lowering healthcare expenditures and meeting the health-related SDGs.

However, despite these improvements, rural Nigeria still faces many challenges in accessing and utilising PHC services. Peri-urban areas are particularly disadvantaged due to long travel distances to healthcare facilities, poor transportation infrastructure, and an uneven distribution of qualified health personnel (Nwankwo et al., 2022). According to Nwankwo *et al*. (2022), rural populations only have access to 12% of doctors and 19% of nurses in Nigeria. In addition, poor healthcare infrastructure and limited in-service training for health workers contribute to these regions' low quality of care. These challenges are compounded by widespread poverty, which weakens residents' access to essential healthcare services. Socio-cultural factors, including reliance on traditional health personnel and myths about modern medicine, also limit healthcare utilisation in rural and peri-urban areas (Okojie & Lane, 2020).

These national-level challenges are also reflected at the state level. For instance, residents in rural Lagos State have major geographical hurdles to surmount before they can access healthcare services (Aregbeshola *et al*., 2017). In densely populated areas with poor transportation infrastructure, research has shown that over 80.3% of the respondents travel between 6 to 10 kilometres from their residence to access healthcare facilities, which is a far too long distance for people to access health facilities (Aregbeshola *et al*., 2017). Similarly, almost half of the respondents (46.8%) spend between 10% and 20% of their monthly household income on healthcare services (Aregbeshola *et al.,* 2017). Similarly, Ibeju-Lekki was considered as one of the locations needing help to deliver adequate public health infrastructure (Lagos State Government, 2024)

Despite the body of knowledge on barriers to PHC in rural Nigeria, there is a paucity of research specifically focusing on peri-urban regions such as Ibeju-Lekki, where rapid urbanisation further exacerbates healthcare accessibility. This research aims to address this gap by exploring the utilisation of PHC facilities in Ibeju-Lekki, a semi-urban area of Lagos State.

Peri-urban areas like Ibeju-Lekki present unique challenges for health service delivery due to their blend of urban and rural characteristics. These areas are also growing and undergoing rapid urbanisation concurrently, resulting in changes to population density, economic activities, and infrastructure development, all impacting healthcare access. Understanding how these dynamics affect healthcare delivery is fundamental to planning and infrastructural development. Hence, this study evaluates the access and utilisation of primary health care (PHC) services in peri-urban communities in Southwestern Nigeria to examine socioeconomic and geographical determinants of healthcare access.

By investigating residents' unique healthcare challenges in Ibeju-Lekki, this study provides insights that can inform policy decisions to enhance healthcare access in similar peri-urban areas across Nigeria. Addressing these challenges is essential for improving health outcomes, achieving national and global health targets, particularly those related to UHC, and reducing maternal and child mortality.

Methodology

Study area

The Ibeju Lekki is located on latitude 6°22'11.85" N and 4°16'56.54"E, 6°31'57.73"N, longitude 3°40'4.49"E. The LGA is a peri-urban settlement located along the coastline of Lagos state. It covers about 653 km^2 of land (Folorunso *et al*., 2024; Adedire & Adegbile, 2018). Epe LGA bounds the LGA in the east and north. It is flanked by the Atlantic Ocean in the south and in

the west by Eti-Osa LGA (Fig. 1). The area's climate reflects the general patterns of the climate experienced in Lagos and its environs. The climate of the LGA is characterised by dry and wet seasons. The dry season covers November and March, while the wet season spans from April to October (Akoteyon, 2014). The mean temperature is estimated at 27 C, with an average rainfall of about 1.532 mm (Adedeji & Babatunde, 2010). The drainage system is dominated by creeks, mangroves, marsh, swamps, sandy beaches, barrier islands, lagoons and waterways, and the Atlantic Ocean (Obiefuna *et al*., 2013; Adegun *et al.*, 2015). According to the NPC population figures, the LGA has a population of approximately 99,540 people with a population density of about 152.43 (NPC, 2006; LSBS, 2020). According to Ibeju-Lekki Local Government (2020), there are 17 PHCs and one hospital and health post each.

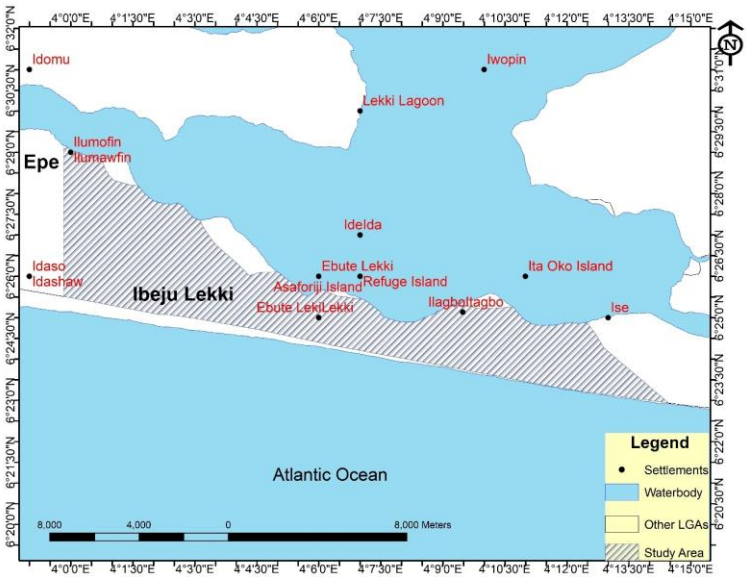

Fig. 1: ***Study area. Source: Authors (2023)***

Study design and sample size determination

The current study examined access and utilisation of Primary Health Care (PHC) facilities in Peri-urban communities of Ibeju-Lekki Local Government Area of Lagos, Nigeria. Based on the study's objective, a structured survey questionnaire was designed to obtain information on access and utilisation of PHC from respondents using random sampling techniques in the study area. A sample size of 320 was designed to yield a representative sample for the study area's population. However, 200 questionnaires, representing 80%, were recovered for the final analysis. The Yamane (1973) formula (Eq. 1) was employed to derive the study's sample size.

$$n = N/(1+N(e)2) \quad \text{.....1}$$

Where n = corrected sample size, N population size, e = Margin of error based on the research condition 5% (0.5).

Validity and reliability of the instrument

The questionnaire employed was validated according to Cronbach's alpha (1951) as a measure of the internal consistency or reliability of the survey items. The Cronbach's alpha value yielded a score of 0.78, indicating acceptable internal consistency. This measure minimised error and improved the instrument's accuracy in capturing data on access and utilisation to PHC facilities in the study area.

Sampling technique and data collection

A random sampling method was employed to administer the questionnaire to 200 respondents. Before the proper survey, a pilot study was conducted in August 2023 to test the questionnaire's clarity and relevance based on the objective. A survey instrument covered four sections: demographic and socioeconomic characteristics, access and utilisation of PHC facilities, perception of PHC services, and benefits and challenges of accessing PHC services. The data were coded using a mixed method. The five-point Likert

scale used indicates the range of 1 to 5, where 1= strongly disagree (SD), 2= disagree (D), 3= uncertain (U), 4= agree (A), and 5= strongly agree (SA).

Data Analysis and Techniques

Data derived from the social survey was coded and input into the IBM Statistical Package for Social Sciences (SPSS) version 22 software. The frequency and percentage techniques were employed to describe the data. The Excel software was used to plot the chart and present the results in tables for better virtual illustration. The study area map was generated using ArcGIS version 10.3.1

Computation of Relative Importance Index (RI)

The Relative Importance Index (RI), following Kassem *et al*. (2020), was used to assess the relative importance of specific benefits and challenges of accessing PHC services based on their likelihood of occurrence and impact using a five-point Likert scale. The RII is one of the most widely used methods with high accuracy for rating questionnaire variables (Genc, 2023). The larger the RII value, the higher the respondents' agreement on its cause or critical component. The RII was calculated using Equation II:

$$RII = \frac{\sum W}{(A*N)} \quad \text{.....2}$$

Where, RII – Relative Importance Index (RII). W - is the weight given to each factor by the respondents from 1, 2, 3, 4 and 5 for strongly disagree, disagree, undecided, agree and strongly agree, respectively.

A – is the highest weight (i.e., 5 in this case), and

N – is the total number of respondents.

Ethical consideration

Standard protocols were followed to obtain the respondent's consent. The confidentiality also ensured the anonymity and security of all personal data.

Results and Discussion

Results

Socio-demographic Characteristics of the respondents

A total of 200 adults were administered questionnaires in this study. As shown in Table 1, most respondents were female (77.0%), while 23.0% were male. Most respondents were married (93.5%), with 3.5% single, 1.5% widowed, and 1.5% divorced. Regarding education, 8.5% had tertiary education, 46.0% had secondary education, 39.5% had primary education, and 6.0% had no formal education. The most common occupation among respondents was trading (56.0%), followed by artisans (23.5%), fishing and farming (9.5%), unemployed (7.0%), and civil servants (4.0%). Regarding religion, 70.0% of respondents were Christians, 29.0% were Muslims, and 1.0% were traditional worshippers. Most respondents (82.5%) were Yoruba, with Hausa at 0.5%, Igbo at 4.0%, and other ethnic groups making up 13.0%.

Table 1: Socio-demographic characteristics of respondents

Variable options		Frequency	Percentage
Gender	Female	154	77.0
	Male	46	23.0
Marital status	Widow	3	1.5
	Divorced	3	1.5
	Single	7	3.5
	Married	187	93.5
Education	No Formal Education	12	6.0
	Primary	79	39.5
	Secondary	92	46.0
	Tertiary	17	8.5
Occupation	Unemployed	14	7.0

Variable options		Frequency	Percentage
	Fishing/farming	19	9.5
	Artisan	47	23.5
	Civil Servant	8	4.0
	Trading	112	56.0
Ethnicity	Yoruba	165	82.5
	Hausa	1	0.5
	Igbo	8	4.0
	Foreigners	26	13.0
Religion	Christianity	140	70.0
	Islam	58	29.0
	Traditional	2	1.0

Fieldwork (2023)

Awareness of PHC facility and usage in the study area

68.9% of Respondents' level of awareness of PHC facilities in the study area indicates that the majority affirms the presence of PHC facilities in the study area (Fig. 2). Regarding the usage, the result shows that a greater proportion of the respondents (93.4%) patronise the PHC facility for child-related healthcare needs (Fig. 2).

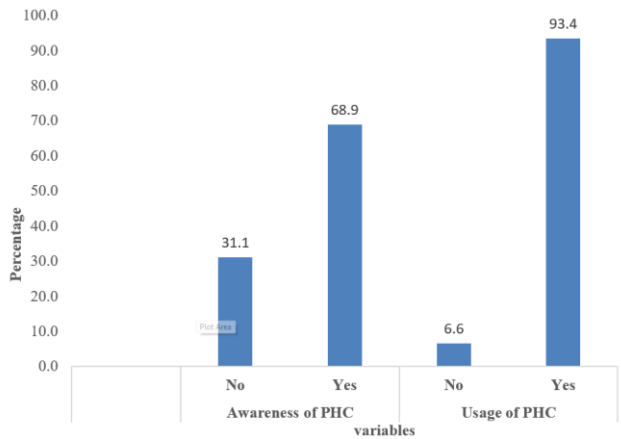

Fig. 2: ***Awareness of PHC facility and usage in the study area.***

Figure 3 presents the sources of awareness of PHC service in the study area. The result revealed that the significant source of information on the awareness of PHC service is through the various health centres, representing 38.3%, followed by radio and community town criers with approximately 25 respondents and 21.7%, respectively. Information through pamphlets and religious institutions was low, with just 1.7% and 0.8%, respectively.

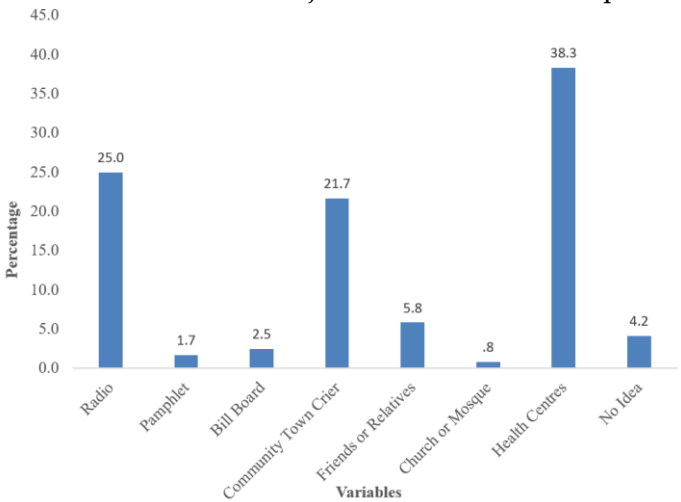

Fig. 3: ***Sources of awareness of PHC service in the study area***

Perception of PHC Services

The result of the respondent's perception of PHC services in the study area is presented in Table 2. The result indicated that the majority (51.3%) of respondents believed that, based on accessibility, the PHC facilities are very accessible. Regarding the adequacy of PHC facilities in the area, 68.9% of respondents believed that the available PHC facilities were very adequate for addressing the area's health care services. Respondents' satisfaction with the quality of PHC services revealed that about 41.3 38.3% rated it very satisfactory and satisfactory, respectively. Respondents' assessment of the competency of the PHC workers showed that the majority are above average.

Table 2: Perception of PHC services in the study area

Variables options		Frequency	Percentage
Accessibility	Not Accessible	26	13.2
	Difficult to access	21	10.7
	Accessible	49	24.9
	Very accessible	101	51.3
Adequacy	Inadequate	61	31.1
	Very adequate	135	68.9
Quality	Not satisfactory	10	5.1
	Fair	30	15.3
	Satisfactory	75	38.3
	Very satisfactory	81	41.3
Competence	Below average	11	5.7
	Above average	50	25.9
	Very good	86	44.6
	Excellent	46	23.8

Fieldwork (2023)

Relative importance index of benefits and challenges of accessing PHC services

Table 3 presents the results of the RI based on the benefits derived from accessing PHC services in the study area. The result revealed that the friendly nature of the health workers ranked highest at 0.873. The effectiveness in managing child health ranked second with 0.855, while the least variable (free services) ranked 0.733.

Table 3: Benefits of accessing PHC services in study area

Variable	.0	D	U	A	SA	Total	TN	A*N	RII	Rank
The staff in the PHC are friendly	2	8	42	316	505	873	200	1000	0.873	1
The staff treat patients well	2	14	45	368	420	849	200	1000	0.849	3

Variable	.0	D	U	A	SA	Total	TN	A*N	RII	Rank
Availability of drugs is always	1	20	105	452	205	783	200	1000	0.783	5
Free services	8	84	48	308	285	733	200	1000	0.733	6
Effectiveness in managing child health	2	12	30	396	415	855	200	1000	0.855	2
The environment of the PHC is always clean	3	16	36	440	335	830	200	1000	0.830	4

The results of households' challenges in accessing PHC services in the study area showed that long waiting time, distance from the House and high cost of buying drugs ranked first, second and third with RI values of 0.51, 0.482 and 0.476, respectively. The least variable (lack of experienced health workers) has a RI of 0.417 in the study area (Table 4).

Table 4: The challenges of accessing PHC services in the study area

Variables	SD	D	U	A	SA	Total	TN	A*N	RII	Rank
Poor attitude of health workers to patients	81	120	87	68	65	421	200	1000	0.421	8
High cost of buying drugs	57	136	69	184	30	476	200	1000	0.476	3
Distance from House	68	104	66	184	60	482	200	1000	0.482	2
High transportation cost	73	96	63	216	20	468	200	1000	0.468	4
Long waiting time	61	104	90	120	135	510	200	1000	0.510	1
High-cost of consultation charges in the health facility	81	104	114	88	35	422	200	1000	0.422	7
Lack of experienced health workers	68	158	93	48	50	417	200	1000	0.417	9
Lack of equipment	58	168	105	52	50	433	200	1000	0.433	6
Lack of drugs	55	170	102	80	30	437	200	1000	0.437	5

Discussion

The study examined access to and utilisation of Primary Health Care (PHC) services in peri-urban areas of Ibeju-Lekki and identified key socioeconomic and infrastructural factors influencing service delivery. Findings revealed

that 68.9% of respondents were aware of PHC facilities in their community, and 93.4% reported utilising PHC services. This high level of awareness and utilisation may be attributed to the physical presence of PHC centres in most communities and prior exposure through local outreach efforts.

However, this finding contrasts with several studies that report significantly lower levels of awareness and utilisation in other rural and peri-urban settings. For instance, Khatri *et al.* (2023) and De Morais Pinto *et al.* (2021) observed that inadequate health education, limited community outreach, and poor information flow often hinder PHC service uptake. Similarly, Warda *et al.* (2023) noted that socio-cultural factors, myths, and reliance on traditional healers in many low-resource communities continue to undermine formal healthcare utilization.

The relatively high awareness observed in Ibeju-Lekki may reflect the uniqueness of the study context, where ongoing urbanisation and proximity to urban Lagos may have enhanced health information dissemination and service access. Additionally, the finding that health centres were the most common source of PHC information reported by 38.3% of respondents suggests that facility-based interpersonal communication remains an effective awareness strategy in peri-urban settings. This result aligns with Fomba *et al*. (2007), who highlighted the role of health workers in driving community awareness.

The high levels of awareness and utilisation observed in Ibeju-Lekki suggest that scaling up physical access to PHC facilities, combined with sustained facility-based and community-driven outreach, can produce measurable improvements in healthcare engagement even in lower-income peri-urban settings. However, this also means that existing PHC systems must be prepared to accommodate growing demand through improved service quality, staffing, and resource availability to avoid overburdening facilities and losing public trust.

Radio was also a prominent source of awareness (25%), demonstrating its

effectiveness as a communication tool in rural areas. Additionally, town criers contributed to 21.7% of awareness efforts, emphasising the ongoing importance of traditional communication methods in rural and semi-urban settings. Smaller channels like friends or relatives (5.8%), billboards (2.5%), pamphlets (1.7%), and religious institutions had less of an impact on raising awareness. Lastly, 4.2% of respondents reported no clear source of PHC awareness.

These findings suggest the need for a broader communication strategy to promote PHC services effectively. While reliance on health centres ensures some outreach, it may not engage those who do not frequently visit these facilities. Enhancing the role of other communication channels, such as radio, traditional town criers, and religious institutions, could significantly broaden the reach of health information, especially in communities with low literacy levels or limited access to formal healthcare services. Restini *et al*. (2024) noted that community-based health education programs can play a critical role in increasing awareness and health literacy by leveraging informal social networks. Similarly, Fomba *et al*. (2007) observed that localised communication approaches rooted in trusted community structures often lead to higher engagement and trust in health initiatives.

The result of the respondent's perception of PHC services indicates that regarding accessibility, 51.3% of respondents found PHC services "very accessible," while 13.2% found them "not accessible." These findings align with the Gizaw *et al*. (2022) study, which highlighted that while many people find PHC services accessible, others still face barriers like geographical distance and financial challenges. Similarly, Peters *et al*. (2008) pointed out that transportation and distribution issues are significant hurdles to healthcare access. This finding highlights the urgent need for an improved access road to PHC infrastructure.

The responsiveness of the PHC facilities for meeting community health needs was considered very good by 68.9% but inadequate by 31.1%. The

result suggests that achieving Universal Health Coverage (UHC) and Sustainable Development Goals (SDGs) related to healthcare will only be possible by addressing these barriers. Similarly, Holmér *et al.* (2023) argued that resource constraints were one of the dominant factors impacting how communities perceived healthcare adequacy. Hence, this calls for strategies like investing in infrastructure upgrades, improving healthcare worker training, and expanding outreach programs for remote areas.

Similarly, 41.3% of respondents stated that their satisfaction with the PHC service "is very high", and only 5.1% declared dissatisfaction. The optimal model by Donabedian (1988) states that there is a relation between patient satisfaction, quality of interpersonal care and healthcare worker competency (Ghofrani *et al.*, 2024). Therefore, high satisfaction establishes the level of satisfaction of the patients with the physical and personnel services of the PHC facilities concerning the health care workers. At the same time, it reveals that only a limited number of people still need to be satisfied, indicating that there is still potential for development even in this area, for instance, regarding equal quality of service delivery across the entire region. Patient satisfaction is, therefore, a significant and critical aspect towards altering healthcare utilisation and improving the PHC system's credibility among the rural and peri-urban populations. Managing dissatisfaction is always important for decision-making in gaining and sustaining health equity and improving the quality of the PHC. Low patient satisfaction would, therefore, detract from the UN agenda of achieving UHC and, in turn, improved health for everyone.

Similarly, 23.8% of the respondents rated PHC workforce performance as "excellent" and 44.6% as "very good." Nevertheless, 5.7% rated performance as "below average," suggesting the need for ongoing training and capability strengthening. In a similar study, Endalamaw *et al*. (2024) argued the importance of continuous training to ensure good health practices.

Furthermore, this study explored the perceived benefits and challenges of

accessing Primary Health Care (PHC) services in the study area, using the Relative Importance Index (RII) to rank participants' responses. RII and similar tools are increasingly used to assess and prioritise service delivery issues in healthcare. For instance, Ramsaran-Fowdar (2008) used a weighted scoring method (PRIVHEALTHQUAL) to rank patients' expectations and perceptions in private healthcare, while Ogaji (2022) applied Importance–Performance Analysis (IPA) to identify priority service gaps in PHC centres in Nigeria—both of which, like RII, provide structured ways to evaluate service attributes from users' perspectives.

In this study, the RII results revealed that the most highly ranked benefit was the friendly nature of health workers (RII = 0.873), followed closely by the effectiveness in managing child health (RII = 0.855) and respectful treatment of patients (RII = 0.849). These findings highlight the growing understanding that interpersonal aspects of care strongly influence how people experience healthcare. Several studies have shown that health workers' communication skills, attitudes, and relationships with patients significantly affect patient satisfaction (Azmi *et al*., 2024; Soares & Farhangmehr, 2014; Xesfingi & Vozikis, 2016). In many Nigerian communities where economic and systemic barriers limit access to advanced care, the behaviour of frontline health workers can either encourage trust or drive people away from using PHC services.

The high rating given to PHCs' effectiveness in managing child health also points to the important role these centres play in immunisation, growth monitoring, and treating common childhood illnesses. This result supports WHO's (2008) position on the importance of PHC in reducing child mortality under the Millennium Development Goals and now under the Sustainable Development Goals. The community places considerable trust in PHCs regarding child-related care.

Environmental cleanliness (RII = 0.830) and drug availability (RII = 0.783) were also ranked positively, though slightly lower. Cleanliness helps prevent

infections and sends a strong visual message about the facility's overall quality. On the other hand, while drug availability is essential, its fifth-place ranking may reflect frequent shortages—something earlier observed by Abdulraheem *et al*. (2012) in Nigerian PHCs.

Interestingly, free services were ranked lowest (RII = 0.733). This result suggests that cost-related benefits may not be as important to respondents as service quality and staff conduct. This result could mean that PHC services are not perceived as truly free (perhaps due to hidden costs) or that users are willing to pay for something as long as they receive respectful and effective care. This finding aligns with Aboaba *et al.* (2023), who argue that while affordability matters, factors like proximity, quality, and provider attitude often carry more weight in influencing healthcare use in low-income settings.

The results of the Relative Importance Index (RII) analysis of Challenges in Accessing PHC Services show that the most pressing challenges affecting access to PHC services in the study area are long waiting time (RII = 0.510), distance from home (RII = 0.482), and the high cost of buying drugs (RII = 0.476). These challenges are common in peri-urban and rural settings, where healthcare systems often struggle to balance limited resources with growing demand.

The highest-ranked challenge, long waiting time, aligns with findings from Ogaji (2022), who identified extended waiting periods as a significant source of dissatisfaction among PHC users in Nigeria. Lengthy queues often signal understaffing, inefficient patient flow systems, or inadequate infrastructure, all contributing to service delays. In a context like Ibeju-Lekki, where residents may need to return quickly to work or household duties, long waits can discourage timely care-seeking or lead patients to bypass PHC entirely.

Distance to PHC centres was the second most significant challenge. This result reinforces earlier findings by Agyemang-Duah *et al.* (2023), who reported that physical proximity to health facilities significantly affects

utilisation, especially among lower-income or elderly populations. Although urbanisation is progressing in Ibeju-Lekki, infrastructure remains patchy in many areas, so people often have to travel several kilometres—sometimes on foot or via costly transport options—to reach care; this also ties into the fourth-ranked challenge: high transportation costs (RII = 0.468), which compound the access problem for those living further from facilities.

The third-ranked challenge—the high cost of drugs—is consistent with ongoing issues in Nigeria's PHC system. Despite the general perception that PHC services are affordable, frequent drug stockouts often force patients to purchase medicines from private pharmacies, where prices can be prohibitively high. This challenge, also highlighted by Abdulraheem *et al.* (2012), undermines trust in the system and places additional strain on households, especially those without health insurance.

Interestingly, while one might expect staff behaviour to rank higher, "poor attitude of health workers" ranked 8th (RII = 0.421). This result may reflect the generally positive perception of interpersonal care identified earlier in the benefits section, suggesting that health worker behaviour may not be a widespread deterrent in this specific case.

At the bottom of the list, "lack of experienced health workers" (RII = 0.417) and "lack of equipment" (RII = 0.433) were rated as less-pressing concerns by respondents. This result could be due to limited awareness of these systemic issues or a tendency for patients to evaluate their experience based on more immediate, visible barriers like waiting time and cost. It may also reflect that some PHC centres are well-staffed but still struggle with inefficiencies in drug supply and patient management.

These findings underscore the need for a multi-layered policy response addressing structural and financial barriers to PHC access. While improving staffing and equipment remains important, addressing more immediately felt issues—such as drug availability, travel distance, and wait times—may directly impact utilisation and patient satisfaction in the short term.

Conclusion

This study has attempted to underline some critical issues affecting access to and utilisation of Primary Health Care (PHC) services within peri-urban communities in Lagos State, Nigeria, with Ibeju-Lekki as a case study. The findings reveal a high awareness and utilisation of PHC services, especially for child health. Many respondents believed PHC services were physically within reach and perceived them as satisfactory, although a significant proportion still found them inadequate. These findings point to a need for improvements in both infrastructure and the quality of service delivery.

The analysis also showed that the friendliness of health workers was the most appreciated aspect of PHC services, followed by effectiveness in child healthcare and respectful treatment. However, challenges such as long waiting times, distance from home, and high drug costs continue to hinder optimal access. These findings have substantial implications for achieving Universal Health Coverage (UHC) and the Sustainable Development Goals (SDGs), particularly in growing peri-urban areas.

This study recommends combining structural and strategic interventions to address identified challenges. Beyond recruiting more health personnel and establishing additional PHC centres closer to residential areas, deploying mobile health units could significantly reduce access barriers in remote communities. Partnering with local NGOs can further support these mobile initiatives through funding, community engagement, and health education outreach. In addition, NGOs could help coordinate awareness campaigns and facilitate the provision of subsidised essential medications.

Such targeted, community-specific efforts would improve access and promote health equity, ensuring that the unique needs of peri-urban populations are met. These steps align with Nigeria's broader health sector goals and could serve as scalable models for similar regions nationwide.

Nevertheless, the study is not without limitations. Its findings are based on a relatively small and geographically constrained sample, which may

affect the generalisability of the results. The reliance on self-reported data also introduces potential response bias. Future research should cover larger and more diverse populations while incorporating objective healthcare access and utilisation measures.

Finally, to maximise the impact of PHC services, policymakers must prioritise investments in transport infrastructure, workforce expansion, and health literacy campaigns. Disseminating information through trusted community channels such as radio and town criers can also improve awareness and uptake of underutilised services. With sustained commitment, PHC systems in peri-urban areas like Ibeju-Lekki can be strengthened to deliver more equitable, responsive, and effective care.

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