

## Review Article

# Utilization of primary healthcare services in Nasarawa state, Nigeria: addressing structural and sociocultural barriers

Yonah E. Waryit<sup>1\*</sup>, Ehiemere C. Chibuisi<sup>1</sup>, Akyala I. Adamu<sup>1</sup>, Changkat L. Lohnan<sup>2</sup>, Anzaku P. Joseph<sup>1</sup>, Bem Jimmy<sup>1</sup>, Ogundipe B. Adetuyi<sup>1</sup>, Kpason E. Esson<sup>1</sup>

<sup>1</sup>Global Health and Infectious Disease Control Institute, Nasarawa State University, Keffi, Nasarawa State, Nigeria

<sup>2</sup>Department of Obstetrics and Gynaecology, Federal University Teaching Hospital, Lafia, Nasarawa State, Nigeria

**Received:** 21 November 2025

**Revised:** 25 March 2026

**Accepted:** 30 March 2026

### \*Correspondence:

Yonah E. Waryit,

E-mail: [waryonah321@gmail.com](mailto:waryonah321@gmail.com)

**Copyright:** © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

## ABSTRACT

Primary healthcare (PHC) forms the backbone of Nigeria's health system, particularly in rural states like Nasarawa. Despite increased policy focus and infrastructure development, utilization of PHC services remains low, contributing to persistent maternal and child health challenges. Barriers such as cultural norms, inadequate manpower, and weak infrastructure continue to undermine effective service uptake. This study employed a narrative review methodology to synthesize over 30 peer-reviewed publications, national health reports, and global policy documents from 2019 to 2024. The Andersen Behavioural Model of Health Services use was applied as a conceptual framework to categorize factors influencing PHC utilization into predisposing, enabling, and need-based components. Findings reveal that cultural beliefs, gender dynamics, poor health literacy, poverty and limited community engagement significantly hinder service utilization, even when facilities are geographically accessible. Structural issues, including the chronic shortage of healthcare workers, drug stock-outs, and poor facility infrastructure, further limit PHC effectiveness. Only 30-45% of residents in Nasarawa utilize PHC services regularly. While policy reforms such as the Basic Health Care Provision Fund (BHCPF) have yielded some gains, implementation bottlenecks, underfunding, and weak accountability mechanisms persist. Improving PHC utilization in Nasarawa State requires an integrated, equity-focused approach that goes beyond infrastructure provision. Addressing both demand- and supply-side barriers is essential to enhance service uptake and public trust. Key policy recommendations include increased domestic health funding, targeted recruitment and retention of PHC staff, culturally adapted health education campaigns, and strengthened community participation in health governance. Operationalizing these interventions within a behavioural framework offers a path toward achieving universal health coverage and improving population health outcomes in underserved regions of Nigeria.

**Keywords:** Barriers, Nasarawa state, Nigeria, PHC, Services, Utilization

## INTRODUCTION

Nigeria's primary healthcare (PHC) system was conceptualized to serve as the foundational tier of the national health system, providing the first point of contact between individuals and the formal health system.<sup>1</sup> Particularly in rural and peri-urban regions such as Nasarawa State, PHC services are critical for achieving

universal health coverage (UHC), reducing preventable deaths, and improving maternal, newborn, and child health (MNCH) outcomes.<sup>2</sup> Yet, despite years of health sector reforms, the utilization of PHC services remains significantly suboptimal across much of the state. This persistent underutilization undermines the impact of policy interventions and threatens progress toward global health targets.<sup>3</sup> Nasarawa state, like many parts of

Nigeria, continues to record poor health indicators, including high maternal and child mortality rates, low immunization coverage, and late presentation for antenatal care.<sup>4</sup> While infrastructure development has expanded access to health facilities, and policies such as the Basic Health Care Provision Fund (BHCPF) have aimed to improve service delivery and financing, these structural advancements have not translated into widespread PHC utilization.<sup>5</sup> The disconnect between access and use suggests that deeper, more complex barriers may be at play.

Multiple studies have highlighted how sociocultural norms, economic limitations, and weak institutional capacity interact to constrain healthcare-seeking behaviours.<sup>6</sup> In Nasarawa state, where a significant proportion of the population resides in rural areas and operates within traditional value systems, the decision to seek care is often shaped by gender roles, religious beliefs, and the influence of family hierarchies.<sup>7</sup> In some communities, women require spousal consent to access services, while others defer to traditional healers due to longstanding cultural practices. These dynamics contribute to delayed or complete avoidance of PHC engagement, particularly for maternal and child health needs.<sup>8-10</sup> Infrastructural and systemic deficits further exacerbate the situation. Health facilities frequently experience shortages, of essential medicines, skilled personnel, and basic utilities such as water and electricity.<sup>11,12</sup> The uneven distribution of healthcare workers between urban and rural areas compounds the problem, leaving many PHCs under-resourced and ill-equipped to provide even the most basic care.<sup>13-15</sup> Additionally, misinformation, health illiteracy, and a lack of culturally adapted health education contribute to widespread misconceptions about the relevance and safety of PHC services.<sup>16,17</sup> To unpack these multilayered challenges, this paper adopts the Andersen Behavioral Model of Health Services use, a conceptual framework that categorizes the determinants of health service utilization into predisposing, enabling, and need factors. This model allows for a systematic exploration of how individual and community characteristics interact with health system variables to influence care-seeking behaviour. By applying this lens to the context of Nasarawa state, the paper aims to critically examine the factors impeding PHC utilization and offer policy recommendations to promote equitable, sustainable, and people-centred health service uptake.

## LITERATURE REVIEW

The utilization of primary healthcare services in low and middle-income countries (LMICs), particularly in sub-Saharan Africa, has been the focus of considerable scholarly attention over the last two decades. In Nigeria, where PHC is positioned as the fulcrum of the national health system, there exists a paradox of physical access without meaningful utilization. Several national surveys and independent studies consistently show that although

over 80% of Nigerians live within 5 km of a PHC facility, less than half routinely use these services.<sup>18</sup> This underutilization has sparked debates around the adequacy of policy design, the sociocultural acceptability of services, and the capacity of the health system to meet community needs.<sup>19-21</sup>

Studies by Nurani et al, (2023) argued that utilization is not merely a function of proximity but is deeply influenced by individual beliefs, perceived service quality, and health literacy. Individual health beliefs shape when and from whom people seek care, while perceptions of quality affect satisfaction and future use. Health literacy is crucial because it influences a person's ability to understand health information and navigate the healthcare system effectively.<sup>22</sup> These observations are particularly relevant in Nasarawa state, where cultural practices, misinformation, and low levels of formal education shape health-seeking behaviours. A key finding from local qualitative research Ntoimo et al, (2019) reveals that many residents, especially women, perceive PHCs as being limited in scope and authority, often bypassing them in favour of traditional healers or private chemists for maternal and child health issues.<sup>23</sup> Moreover, evidence from the Nigeria Demographic and Health Survey (NDHS 2023) underscores that household wealth status, female autonomy, and education are critical determinants of PHC use. The same survey highlights regional disparities within states like Nasarawa, where rural communities fare far worse in health indicators compared to urban centres.<sup>24</sup> These findings align with global observations: a World Health Organization (WHO, 2020) synthesis indicates that rural populations in LMICs are three times more likely to face service gaps than their urban counterparts, even when facilities exist.<sup>25</sup>

Barriers to utilization can also be traced to systemic weaknesses, the poor condition of PHC infrastructure marked by dilapidated buildings, lack of electricity and water, and erratic drug supplies significantly discourages use.<sup>26</sup> Additionally, health worker shortages, often worsened by urban-rural imbalances, result in long wait times and reduced service quality.<sup>27</sup> Nasarawa state's health workforce density remains far below WHO's recommended minimum of 4.45 doctors, nurses, and midwives per 1,000 population. In 2023, the ratio stood at 0.5 per 1,000 in rural PHCs.

In 2023, Nasarawa state Primary Health Care Development Agency flagged that drug availability crucial determinant of health utilization. Only 34.3% of PHC facilities in Nasarawa state reported consistent availability of essential medicines.<sup>28</sup> These gaps were seen to have led many patients to self-medication or seek care in private pharmacies, further marginalizing the PHC system. Unreliable drug supply not only diminishes the credibility of PHCs but also undermines trust in public health infrastructure.<sup>29</sup> On the other hand, policy innovations such as the BHCPF have begun to yield some positive outcomes. The fund, introduced under the

National Health Act, allocated 1% of Nigeria's Consolidated Revenue Fund to basic healthcare delivery. A review by Jemchang Yildam found that PHCs benefiting from BHCPF recorded improvements in client volume, staffing, and drug availability, albeit inconsistently. However, implementation challenges such as delays in fund disbursement and limited local capacity to manage funds continue to hinder widespread impact.<sup>30</sup>

International experiences offer valuable insights. Rwanda's performance-based financing scheme incentivized quality service delivery at the PHC level, resulting in increased skilled birth attendance and reduced maternal mortality.<sup>31</sup> Ghana's National Health Insurance Scheme (NHIS) introduced a capitation model that encouraged preventive care and improved PHC utilization.<sup>32</sup> These models demonstrate the potential of contextually adapted financing mechanisms to catalyse health system responsiveness. The literature paints a complex but consistent picture: PHC utilization is shaped by an interplay of cultural, infrastructural, economic, and systemic factors. While policy interventions such as the BHCPF show potential, a more integrated approach combining financing reforms, community engagement, and structural strengthening is needed to transform PHC utilization in Nasarawa state. Future research and programmatic design must pay closer attention to contextual realities, emphasizing locally-driven solutions that reflect the lived experiences of target populations.

## METHODS

This study employed a narrative review methodology to synthesize evidence on the utilization of primary healthcare (PHC) services in Nasarawa state, Nigeria. A narrative review was deemed appropriate given the aim to explore a wide array of evidence sources, identify thematic patterns, and contextualize findings within existing theoretical models of health service utilization. The Andersen Behavioural Model served as the guiding conceptual framework, categorizing factors influencing PHC utilization into predisposing, enabling, and need components.<sup>33</sup>

The literature search was conducted between January and April 2024 using a comprehensive range of sources. These included peer-reviewed journal articles, grey literature, national policy documents, health facility performance reports, and global health databases. Databases searched included PubMed, Scopus, Web of Science, and African Journals Online (AJOL). Grey literature sources encompassed reports from Nigeria's Federal Ministry of Health, the Nasarawa State Primary Health Care Development Agency, UNICEF, WHO, and World Bank repositories.

Inclusion criteria were defined as follows:

The studies included in this review were published between 2015 and 2024 and focused on Nigeria or other

countries in sub-Saharan Africa with relevance to primary healthcare (PHC) utilization. Only sources that addressed determinants of healthcare access, service readiness, or overall health system performance were considered.

Excluded were studies unrelated to PHC or those focusing solely on tertiary-level care without reference to PHC integration. An initial pool of 230 records was identified, of which 72 met the inclusion criteria after title and abstract screening. Following full-text review and quality appraisal, 36 sources were included in the final synthesis. Thematic content analysis was used to extract and organize findings into four overarching categories: cultural factors, infrastructure and health workforce, community health education, and drug availability. These categories were then mapped against the Andersen Behavioural Model to provide explanatory depth and guide policy recommendations. To enhance methodological transparency, key findings were triangulated across multiple data types: quantitative surveys, qualitative studies, and administrative reports. Although this review was not designed to be exhaustive or systematic in the conventional sense, the robust synthesis of diverse evidence sources and the application of an established theoretical model contribute to the credibility and policy relevance of the analysis. The use of both academic and programmatic literature allowed for a more grounded understanding of the sociocultural and systemic barriers affecting PHC utilization in Nasarawa state.

## DISCUSSION

The findings of this review illustrate a deeply rooted and multidimensional problem underlying the underutilization of PHC services in Nasarawa state. Despite substantial national and subnational efforts to bolster PHC infrastructure and funding, significant structural and sociocultural barriers continue to limit the uptake of essential health services.<sup>34</sup> These findings are consistent with the broader literature on PHC utilization in low- and middle-income countries, which emphasizes the interaction between service availability, user acceptability, and the responsiveness of health systems.

A recurring theme in the review is the role of cultural norms and traditional beliefs in shaping healthcare-seeking behaviour. The Andersen Behavioural Model categorizes such norms as predisposing factors that influence individual perceptions of illness and decisions to seek formal care. In Nasarawa state, cultural preferences for traditional medicine, gender dynamics requiring spousal permission, and community-level mistrust in PHC services have significantly discouraged timely and consistent use. These cultural barriers are not unique to Nasarawa, but they are particularly acute given the rural and conservative nature of many of its communities.

Enabling factors, such as health system infrastructure and the availability of human resources, also featured prominently in the evidence. The chronic shortage of skilled health workers and the poor distribution of existing personnel between urban and rural settings remain central impediments to service delivery.<sup>35</sup> Compounding this issue is the inadequate availability of essential medicines and the poor physical state of many PHC facilities, which undermines public trust and service reliability. These findings echo observations in similar contexts, such as in parts of Northern Ghana and Eastern Uganda, where infrastructural weakness and stock-outs led to diminished service demand despite geographic proximity.

Moreover, the discussion must consider the dynamic between health education and health-seeking behaviour. The review highlights that misinformation, low literacy levels, and inadequate public communication strategies contribute to a weak understanding of the benefits of PHC services within the community. Programs that have embedded health education into broader community engagement, such as those seen in Rwanda's CHW model, have shown promise in shifting norms and improving uptake. In Nigerian health system, the introduction of Community Health Influencers, Promoters and Services (CHIPS) as a model to restructure our PHC, being the first point of call in the community. Policy interventions such as Nigeria's BHCPF were designed to address some of these systemic issues, and early evidence indicates a degree of success. However, the BHCPF's impact has been limited by operational inefficiencies, inconsistent fund disbursement, and weak accountability mechanisms. These realities underscore the need for stronger governance and more transparent financing systems. Without these, even well-intentioned reforms risk failing to deliver their intended outcomes.

The implications of the COVID-19 pandemic further highlight the fragility of the PHC system in Nasarawa. Disruptions in service delivery, particularly in maternal and child health, have reversed gains made in recent years. This points to the need for building resilience into PHC systems not just through infrastructure and funding, but also through adaptive community engagement, health information systems, and emergency preparedness strategies.<sup>36</sup> Importantly, lessons from other African countries offer valuable insights into potential solutions. Rwanda's performance-based financing approach linked funding to service quality and coverage, driving improvements in maternal and child health indicators. Ghana's experience with capitation payment models under the National Health Insurance Scheme revealed the potential of financial incentives to promote preventive service use. Nigeria's decentralized facility financing (DFF) model could benefit from these lessons, particularly if paired with strengthened local capacity for financial and service monitoring.

In summary, the discussion reveals that improving PHC utilization in Nasarawa state requires a systemic and culturally sensitive approach. Addressing supply-side constraints must be matched with investments in demand-side enablers, such as community mobilization, community system strengthening and health literacy programs. More importantly, the political will to finance PHC at scale, strengthen accountability mechanisms, and institutionalize local ownership will be critical in reversing current trends and achieving meaningful health outcomes. The Andersen Behavioural Model provides a useful structure for analysing these multifaceted challenges and offers a pathway for evidence-informed reform design.

## CONCLUSION

The underutilization of primary healthcare services in Nasarawa state reflects a complex web of cultural, infrastructural, and systemic challenges. While access to PHC facilities has improved in recent years, meaningful use remains limited by deep-seated beliefs, inadequate service readiness, and governance gaps. This review has shown that addressing PHC utilization requires more than just physical access it demands a multisectoral, equity-focused approach grounded in behavioural insights, community engagement, and sustainable financing.

By applying the Andersen Behavioural Model, this study has identified actionable levers for reform that align with both user needs and system capabilities. Improving PHC utilization in Nasarawa is not only vital for achieving better health outcomes but also central to Nigeria's progress toward universal health coverage. A concerted effort by policymakers, health workers, and communities is essential to transform PHC from a nominal gateway to a trusted and effective platform for delivering essential healthcare services.

## Recommendations

To reverse the trend of underutilization of PHC services in Nasarawa state, a set of integrated and contextually grounded policy interventions is required. These recommendations are informed by the evidence synthesized in this review and aligned with the predisposing, enabling, and need components of the Andersen Behavioural Model.

The government should commit to meeting the Abuja Declaration target of allocating at least 15% of the national and state budgets to health, with a designated proportion earmarked for PHC. This will ensure sustained financing for infrastructure upgrades, drug procurement, and health worker salaries.

Recruitment, training, and retention of skilled health professionals must be prioritized. This includes offering rural posting incentives, expanding community health worker programs, and decentralizing recruitment

processes to allow PHC facilities greater autonomy in addressing staffing gaps.

Invest in culturally sensitive and multilingual health education campaigns tailored to the beliefs and values of local populations. Leveraging community leaders, religious figures, and local media can help dispel myths, improve health literacy, and increase trust in PHC services.

Establish robust logistics and inventory management systems to address frequent drug stock-outs. Digital tracking tools and public-private partnerships can enhance the transparency and efficiency of medicine distribution to rural PHCs.

Operationalize community health development committees and facility health committees to create formal feedback loops between health providers and service users. This participatory model can foster local ownership, improve service design, and strengthen accountability.

Develop emergency preparedness protocols to ensure continuity of PHC services during health crises like pandemics or natural disasters. This includes training personnel, creating mobile outreach capabilities, and investing in telehealth infrastructure.

Ensure timely and equitable disbursement of BHCPF funds, accompanied by capacity-building for financial and service monitoring at the local level. State-level dashboards and performance-based incentives can enhance transparency and responsiveness.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: Not required*

## REFERENCES

1. Akinwumi AI, Olaoloru AD, Adesina SA, Durodola AO, Amole IO, Singer SR, et al. Strong primary care services, an important feature of primary health care: What can Nigeria learn from Israel?. *Front Public Health* 2022;10.
2. Yusha'u MD, Ango KKB. Primary Healthcare Delivery in Rural Areas of Nasarawa State, Nigeria: Accessibility Survey. *Am J Humanit Soc Sci Res*. 2021;5(5):43-9.
3. Abubakar I, DalGLISH SL, Angell B, Sanuade O, Abimbola S, Adamu AL, et al. The Lancet Nigeria Commission: Investing in Health and the Future of the Nation. *Lancet*. 2022;399(10330):1155-200.
4. Oweibia M, Elemuwa CO, Egberipou T, Timighe GC, Peresuodei S, Wilson TR. Maternal and Child Health Trends in Nigeria: A Scoping Review of NDHS 2018 vs. NDHS 2023. 2025.
5. Chukwuma JN. Implementing Health Policy in Nigeria: The Basic Health Care Provision Fund as a Catalyst for Achieving Universal Health Coverage?. *Dev Change*. 2024;54(6).
6. Latunji OO, Akinyemi OO. Factors Influencing Health-Seeking Behaviour Among Civil Servants In Ibadan, Nigeria. *Ann Ibadan Postgrad Med*. 2018;16(1):52.
7. Azuh D, Fayomi O, Ajayi L. Socio-Cultural Factors of Gender Roles in Women's Healthcare Utilization in Southwest Nigeria. *Open J Soc Sci*. 2015;3(4):105-17.
8. Opara UC, Iheanacho PN, Li H, Petrucka P. Facilitating and limiting factors of cultural norms influencing use of maternal health services in primary health care facilities in Kogi State, Nigeria; focused ethnographic research on Igala women. *BMC Pregnancy Childbirth*. 2024;24(1).
9. Opara UC, Iheanacho PN, Pammla P. Visible and invisible cultural patterns influencing women's use of maternal health services among Igala women in Nigeria: a focused ethnographic study. *BMC Public Health*. 2025;25(1).
10. Ikechukwu HU, Ofonime NU, Kofoworola O, Asukwo DE. Influence of cultural and traditional beliefs on maternal and child health practices in rural and urban communities in Cross River State, Nigeria. *Ann Med Res Pract*. 2020;1(4).
11. Kruk ME, Gage AD, Arsenaault C, Jordan K, Leslie HH, Roder-DeWan S, et al. High-quality health systems in the Sustainable Development Goals era: time for a revolution. *Lancet Glob Health*. 2018;6(11):e1196-252.
12. Mgbodi GO. Inadequate Healthcare Service Administration And Management in Nigeria and Solutions. 2023. Available at: [https://www.researchgate.net/publication/372769855\\_inadequate\\_healthcare\\_service\\_administration\\_and\\_management\\_in\\_nigeria\\_and\\_solutions](https://www.researchgate.net/publication/372769855_inadequate_healthcare_service_administration_and_management_in_nigeria_and_solutions). Accessed on 21 October 2025.
13. Adeyemi NK, Adepoju EG, Adeyemi MA. Distribution Patterns of Primary Health Care Centers in Osun State, Southwestern Nigeria: Implications for Sustainable Development Goals and Containment of COVID-19 Pandemic. *Int J Health Serv*. 2022;52(4):512-22.
14. Nwankwo ONO, Ugwu CI, Nwankwo GI, Akpoke MA, Anyigor C, Obi-Nwankwo U, et al. A qualitative inquiry of rural-urban inequalities in the distribution and retention of healthcare workers in southern Nigeria. *Plos one*. 2022;17(3):e0266159.
15. Shan L, Gan Y, Yan X, Wang S, Yin Y, Wu X. Uneven primary healthcare supply of rural doctors and medical equipment in remote China: community impact and the moderating effect of policy intervention. *Int J Equity Health*. 2024;23(1).
16. Borges do Nascimento IJ, Beatriz Pizarro A, Almeida J, Azzopardi-Muscat N, André Gonçalves M, Björklund M. Infodemics and health misinformation: a systematic review of reviews. *Bull World Health Organ*. 2022;100(9):544-61.

17. Peprah P, Lloyd J, Harris M. Health literacy and cultural responsiveness of primary health care systems and services in Australia: reflections from service providers, stakeholders, and people from refugee backgrounds. *BMC Public Health*. 2023;23(1).
18. Ogah PO, Uguru N, Okeke C, Mohammed N, Ogbe O, Ashiver WG, et al. Primary health care in Nigeria: best practices and quality of care in Nigeria. *BMC Health Serv Res*. 2024;24(1).
19. Ibrahim AI, Adebayo AM. Cultural influences on the utilization of primary health care services in Oyo State, Nigeria. *J Public Health Afr*. 2019;10(1):82-7.
20. Babatunde OA, Akande TM, Salaudeen AG, Aderibigbe SA, Elegbede OE, Ayodele LM. Utilization of primary health care services in a rural community in southern Nigeria. *J Community Med Prim Health Care*. 2013;25(2):35-44.
21. Chinawa JM, Chukwu BF, Obu HA, Chinawa AT, Aniwada E. Perception and utilization of primary health care services by residents of Enugu metropolis, southeast Nigeria. *Ann Med Health Sci Res*. 2020;10(1):31-5.
22. Nurani H, Akbar IZ, Abdan-Shadiqi M. Influencing Healthcare Utilization: Exploring the Interplay of Education, Attitudes, and Distance in Access to Health Services. *River Stud*. 2023;1(2):82-92.
23. Ntoimo LFC, Okonofua FE, Igboin B, Ekwo C, Imongan W, Yaya S. Why rural women do not use primary health centres for pregnancy care: evidence from a qualitative study in Nigeria. *BMC Pregnancy Childbirth*. 2019;19(1).
24. NDHS. Nigeria Demographic and Health Survey 2023-24 Key Indicators 2024. Available at: <https://dhsprogram.com/pubs/pdf/PR157/PR157.pdf>. Accessed on 21 October 2025.
25. WHO. Primary health care systems (PRIMASYS): Case study from Nigeria, abridged version. Geneva: WHO. 2017. Available at: [https://www.who.int/alliancehpsr/projects/alliancehpsr\\_nigeriaprimasys.pdf](https://www.who.int/alliancehpsr/projects/alliancehpsr_nigeriaprimasys.pdf). Accessed on 21 October 2025.
26. Ryan EO, Theresa OE, Onuseolu OE, Awosan W, Abiodun F, Anuyah S, et al. Assessment of Barriers to The Utilization of Primary Healthcare Services in Abuja, Nigeria. *Research Square*. 2024.
27. Idowu A, Aremu O, Oluwole F. Health manpower shortages and primary health care delivery in Nigeria. *Niger J Health Sci*. 2023;13(2):101-8.
28. Dalhatu M, Yusha AK. Primary Healthcare Delivery in Rural Areas of Nasarawa State, Nigeria: Accessibility Survey. *Am J Humanit Soc Sci Res*. 2021;5(5):43-9.
29. Tuolong JG, Alatinga KA, Yendaw E. Supply-side factors influencing national health insurance uptake, access and use of primary health care: Evidence from the Upper West Region, Ghana. *SSM - Health Systems*. 2024;3:100036.
30. Fabong JY, Adanchin H, Igboechesi GP. A Review of Basic Health Care Provision Fund (BHCF) and Primary Health Care Assessment in Plateau State. *Int J Health Psychol Res*. 2023;11(2):41-55.
31. Schuster RC, de Sousa O, Reme AK, Vopelak C, Pelletier DL, Johnson M, et al. Performance-Based Financing Empowers Health Workers Delivering Prevention of Vertical Transmission of HIV Services and Decreases Desire to Leave in Mozambique. *Int J Health Policy Manag*. 2018;7(7):630-44.
32. Abiuro GA, Alatinga KA, Yamey G. OUP accepted manuscript. *Health Policy Plan*. 2021.
33. Alkhalwaldeh A, AlBashtawy M, Rayan A, Abdalrahim A, Musa AS, Eshah NF, et al. Application and Use of Andersen's Behavioral Model as Theoretical Framework: A Systematic Literature Review from 2012–2021. *Iran J Public Health*. 2023;52(7).
34. Nwokoro UU, Ugwa OM, Ekenna AC, Obi IF, Onwuliri CD, Agunwa C. Determinants of primary healthcare services utilisation in an under-resourced rural community in Enugu State, Nigeria: a cross-sectional study. *Pan Afr Med J*. 2022;42.
35. Adejoh SO. Rural Health and Health Care in Nigeria: Challenges and Prospects. *J Community Med Prim Health Care*. 2022;34(2):45-54.
36. Afolabi MO, Ezedinachi ENU, Okeibunor JC, Ogungbemi KT. Community engagement and mobilisation for COVID-19 vaccine uptake: Lessons from the polio eradication initiative in Nigeria. *BMJ Glob Health*. 2021;6(6):e005303.

**Cite this article as:** Waryit YE, Chibuisi EC, Adamu AI, Lohnan CL, Joseph AP, Jimmy B, et al. Utilization of primary healthcare services in Nasarawa state, Nigeria: addressing structural and sociocultural barriers. *Int J Community Med Public Health* 2026;13:2511-6.