



Review

## Equity of Healthcare Access in Nigeria: A Scoping Review

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Article history: Received 18 August 2024, Reviewed 3 September 2024, Accepted for publication 10 September 2024

### Abstract

**Background:** Health is a fundamental right for all living beings, and ensuring health equity is crucial. In our society, the primary, secondary, and tertiary healthcare systems are tasked with delivering health services. However, people's perception of these systems varies based on the quality of services provided. This study aimed to identify the barriers contributing to health inequity and elaborate on these obstacles.

**Method:** To conduct this review, a comprehensive search of reputable sources including PubMed and Google Scholar was performed. Adhering to the Preferred Reporting Items for Systematic Reviews and Meta-Analysis extension for Scoping Reviews (PRISMA-ScR) reporting guidelines, a total of 13 studies were identified, spanning from 2016 and 2023, that focused on health care delivery, health seeking behaviour and health utilization.

**Result:** From the thirteen articles consulted, a total of 9,720 respondents were included in the study. The South-West zone had the most publications (eight) while the North-West had no published article with data. 30.8% of the reviewed publications highlighted level 1 factors as a prominent barrier to healthcare access, while 38.5% were on level 2 factors. A significant 69.2% of the literature emphasizes the role of level 3 factors as a barrier responsible for health inequity.

**Conclusion:** Achieving universal health coverage by 2030 in Nigeria requires significant transformation for equitable healthcare access. Ongoing monitoring of regional challenges is essential, along with increased research on primary healthcare accessibility, especially in northern regions. Initiatives to improve health insurance access nationwide are also crucial for creating a more inclusive healthcare system.

**Keywords:** Health Equity, Public Health, Healthcare, Health systems, Nigeria.



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### How to cite this article:

Adomi S, Asogun D, Rwuaan RK, Iliya BT, Adebanjo O. Equity of Healthcare Access in Nigeria: A Scoping Review. The Nigerian Health Journal 2024; 24(3):1345-1354.  
<https://doi.org/10.60787/tnhj.v24i3.891>



## Introduction

Access to healthcare is intrinsically tied to a country's progress and development, as exemplified by the widely recognized saying, "Health is wealth." This connection is significant because a healthy population is essential for productive economic engagement and contributes to the country's gross domestic product. The importance of ensuring health for all was underscored by the Alma Ata Declaration<sup>1</sup> and reiterated in the 2015 Sustainable Development Goals<sup>2</sup> and the recent Astana Declaration.<sup>3</sup>

Health equity is seen as a fundamental prerequisite on which levels of healthcare rest, in the quest for achieving universal health coverage.<sup>4</sup> According to Whitehead (1992), endeavors towards health equity aim to reduce or eliminate disparities in healthcare access arising from unrelated factors. This approach promotes equal opportunities to address health needs.<sup>5</sup> This health access is dependent not only on the availability of service but of the populace's ability and willingness to utilize these services because of perceived challenges that form an oversight.<sup>6</sup>

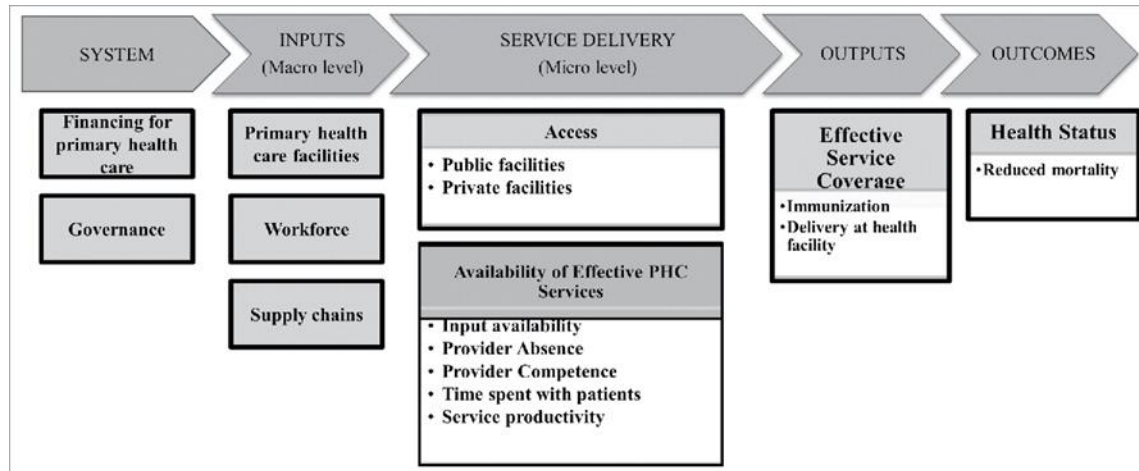
Conversely, healthcare access inequity entails a disproportionate limitation or complete blockade of access to essential health resources, products, and services based on factors such as geographical location, gender, financial status, or ethno-religious affiliations. These characteristics are not pertinent to the requirements for healthcare delivery; thus when a community member requires care but cannot access it because of one of the mentioned causes, it constitutes healthcare inequity.<sup>5</sup> The repercussions of inequitable healthcare access manifest in higher morbidity and mortality rates, increased disability, and a deterioration of the socio-economic condition of the populace.<sup>5</sup> Given these crucial considerations, it is evident that prioritizing the monitoring and enhancement of healthcare access is imperative for advancing national progress. This paves the way for a more in-depth examination of the specific barriers to accessing healthcare and the contributions of various stakeholders to healthcare delivery.

Healthcare provision is usually compared to a pyramid with three levels (primary, secondary, and tertiary), just like the three levels of government.<sup>7,8</sup> These three levels denote increasing levels of specialization, complex healthcare delivery, and technological sophistication, with primary being the smallest and tertiary being the biggest. Majority of care is provided by the primary care, typically a patient's first interaction with the healthcare

system. As patients are filtered out of this first level and into higher levels of specialized care at secondary, and tertiary care, the number of patients seen declines.<sup>8</sup> The bulk of a person's health requirements throughout their lifetime, including physical, emotional, and social well-being, are taken care of by primary health care, which is a people-centered service rather than a disease-centered one. Secondary care, on the other hand, provides expert consultant's advice and specialized diagnostics. A local or regional hospital's technology is frequently needed for secondary health. Institutions like teaching hospitals and units dedicated to the treatment of certain groups—women, children, people with mental problems, etc.—offer the third tier of health care, Tertiary care, which uses specialized services.<sup>9</sup>

The paramount importance of equitable healthcare delivery necessitates the establishment of a comprehensive system for delivery and evaluation, with the goal of achieving sustainable health for all by 2030. While all levels of healthcare are important for this, Primary Healthcare (PHC) plays a pivotal role, a principle underscored by the Alma Ata Declaration<sup>1</sup> and described by Pettigrew et al., "a well-integrated and prepared primary health care has a key role in health emergency responsiveness, and it is essential for the achievement of UHC equitably and cost-effectively".<sup>10</sup> The Alma Ata Declaration emphasizes that Primary Health Care (PHC) serves as a focal point for improving health access in developing countries, particularly in reaching remote communities and the poor. However, recent times have seen significant challenges arise. A notable gap exists between the healthcare needs of these rural community members and the quality of healthcare provided by these centers.<sup>11</sup>

These challenges not only hinder PHC service delivery but also lead to diminished utilization of these centers. Instead, individuals often turn to private facilities, traditional providers, or resort to self-medication. To address this, the Primary Health Care Performance Initiative (PHCPI) framework (**Figure 1**) was developed and implemented. It aims to evaluate and enhance PHC services, specifically focusing on their effectiveness in improving equity of healthcare access through a set of documented indicators.<sup>11</sup> The measurement framework of the PHCPI takes into consideration both the healthcare needs of the population and the performance of the healthcare centers. It assesses key aspects such as financing, capacity, performance, and equity of healthcare provision. This evaluation employs 25 crucial indicators, often referred to as the vital signs.



**Figure 1:** PHCPI Conceptual Framework. Retrieved from Kress et al (14)

According to the PHCPI, PHC services are considered accessible when there are no geographical or financial barriers impeding individuals from receiving necessary healthcare.<sup>12</sup>

### ***Equitable Access to Healthcare in Nigeria: Current Landscape and Challenges***

Primary Healthcare (PHC) and overall healthcare access in Nigeria, much like in many other countries globally, exhibit disparities influenced by financial, geographical, educational, and even political factors such as conflicts.<sup>13</sup> Research conducted by Kress et al. reveals that Nigeria falls below the threshold for all PHC performance indicators on the PHCPI, primarily due to a gap in policy development and implementation.<sup>14</sup>

While there have been some publications addressing barriers to healthcare access in Nigeria, the body of research remains limited. For example, Adeleye et al.'s study on financial barriers affecting women from 2003 to 2018 demonstrated an increase in such barriers from 2003 to 2008, followed by a decline from 2008 to 2018, possibly attributable to program implementation aligned with SDG 3.<sup>15</sup> Other publications have pointed to several issues impeding equitable health access in Nigeria, including the escalating brain drain, which contributes to lower quality health service provision,<sup>16</sup> the surge in conflicts in certain regions,<sup>6,14</sup> socio-economic disparities leading to financial barriers,<sup>6</sup> and the limited capacity of PHC, encompassing infrastructural constraints, availability of medications, and human resources.<sup>14</sup>

Nevertheless, there remains a crucial need for a more comprehensive assessment of barriers to equitable healthcare access in Nigeria, particularly at the state and regional levels. This deeper analysis is essential to dismantle these barriers and establish an environment of equal opportunities for accessing healthcare.

This review delves into the state of healthcare access in Nigeria following the SDG declaration. It scrutinizes the multifaceted barriers impeding access and examines their profound impact on the perception and willingness of individuals, particularly those residing in rural communities. Thus, the objective of this research is to evaluate the existing documented evidence concerning obstacles to healthcare access in Nigeria and to pinpoint the primary challenges faced in obtaining health services within the country.

### **Method**

The literature review was conducted through a systematic search to identify relevant research regarding access to healthcare delivery and to understand the major barriers in accessing healthcare in Nigeria. The search was conducted based on keywords below, including terms related to equality, healthcare, and geographic terms specific to Nigeria.

The titles and abstracts of all identified articles were independently screened to ensure consistency and minimize selection bias. The full texts of selected articles were then reviewed to confirm their eligibility based on the inclusion and exclusion criteria.

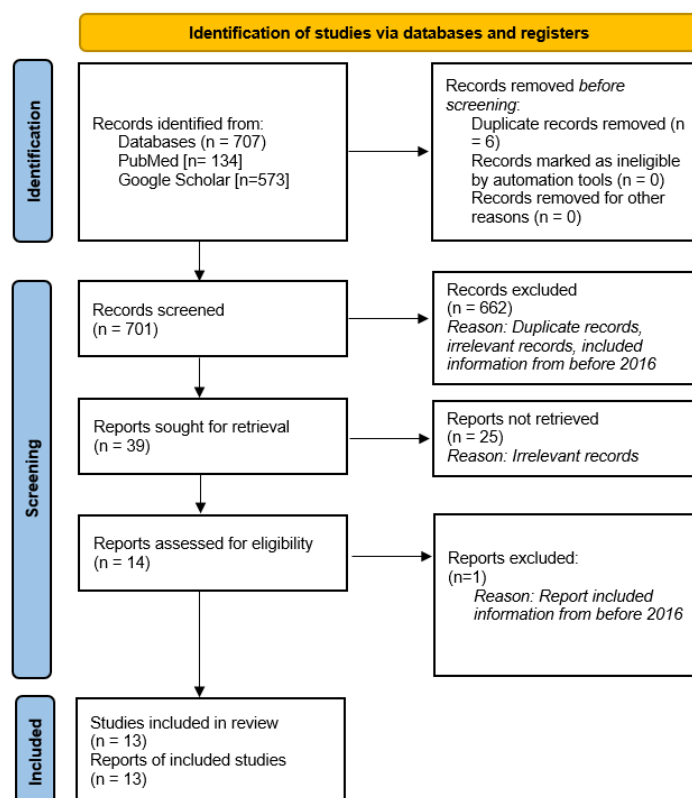
**Table 1:** Search Strategy

Database	Search Keywords/MeSH terms	No of papers
PubMed	((Nigeria) AND (Equality OR Equity)) AND (healthcare) AND (access)	134
Google Scholar	1. Nigeria AND (equality OR equity) AND "Access to healthcare" -Review 2. Nigeria AND barriers AND "Access to healthcare"	573

Primary research papers published in journals were included in this study if they were:

- Published between the period of 2016-2023
- Involved participants from Nigeria.
- Looked at barriers in accessing or utilizing healthcare services like insurance and therapeutic, diagnostic, and prophylactic health interventions.

Studies were excluded if they were not focused on Nigeria, if they were not original studies, and if they were not peer reviewed.



**Figure 2:** PRISMA flowchart <sup>(17)</sup>

A PRISMA flow diagram was used to document the screening process in Figure 2, ensuring transparency in study selection. Data were extracted into an excel sheet, including publication date, sample size, study location, study focus, frequency of health utilization, barriers to health service access, and unique findings. The collated data were screened further by two reviewers for quality before synthesizing the results.

## Results

Thirteen articles were selected between 2016 to 2023 from different journals as shown in Error! Reference source not found.. Seven (53.8%) of the selected publications focused on healthcare delivery (two of the seven articles were focused on PHC delivery/access), four publications (30.8%) focused on health seeking behaviour due to the barriers accessing healthcare, and two publications (15.4%) focused on health utilization.



The majority (84.6%) of the articles were more recent (2020-date).

**Table 2:** Selected Papers in the Review

s/n	Authors	Title	Publ. Year	Journal	Geopolitical Zone
1	Anakwenze et al. (18)	Barriers to Radiotherapy Access at the University College Hospital in Ibadan, Nigeria	2016	Clinical and Translational Radiation Oncology	S-West
2	Egbunu et al. (19)	A Spatial Analysis of Health Care Accessibility and Utilization Among Rural Households in Kogi State, Nigeria	2022	International Journal of Life Science Research Archive	N-Central
3	Fatima et al. (20)	The Distribution of Healthcare Facilities in Mubi North: Local Government Area: The Physical Planning Perspective	2022	African Scholar Journal of Built Env. & Geological Research	N-East
4	Ahmed et al. (21)	Predictors of Healthcare-Seeking Behaviour, Health Services Access and Utilization in Ajebo Community, South-West, Nigeria	2021	Annals of Health Research	S-West
5	Ahuru et al. (22)	Health Insurance Ownership and Maternal Health Service Uptake Among Nigerian Women	2021	Ibadan Journal of Sociology	N-East N-Central S-South S-West
6	Ahmed Jimoh (23)	Community Perceptions on the Preference and Impediments to the Utilization of Healthcare Services in Omu-Ijebu, Ogun State, Nigeria	2022	American Journal of Health Research	S-West
7	Sibeudu et al. (24)	Rural–Urban Comparison of Routine Immunization Utilization and Its Determinants in Communities in Anambra States, Nigeria	2019	SAGE Open Medicine	S-East
8	Osunde et al. (25)	Awareness, Willingness, And Challenges of The Informal Sector Toward State National Health Insurance Services in Benin City, Nigeria	2023	MGM Journal of Medical Sciences	S-South
9	Akinyemi et al. (26)	Community Perception and Determinants of Willingness to Uptake COVID-19 Vaccines Among Residents of Osun State, South-West Nigeria	2021	International Journal of Community Medicine and Public Health	S-West
10	Ogunyemi et al. (27)	Health-seeking Behaviour and Self-rated Health of Adult Men in an Urban Local Government Area in Lagos, Nigeria	2021	Annals of Health Research	S-West
11	Kwaskebe et al. (28)	Factors Affecting Service Delivery of Primary Health Care Centers in Nigeria: A Case Study of Isiala-Ngwa North Local Government	2022	Sapientia Foundation Journal of Education, Sciences and Gender Studies	S-East
12	Ajayi et al. (29)	“I don't like to be seen by a male provider”: Health Workers’ Strike, Economic, And Sociocultural Reasons for Home Birth in Settings with Free Maternal Healthcare in Nigeria	2023	International Health	S-West and N-Central
13	Adekunmi et al. (30)	Assessment Of Rural Women’s Access to Primary Health Care Services in Southwest Nigeria	2020	International Journal of Innovative Research and Advanced Studies	S-West

**Figure 3** shows the number of articles per geopolitical zone. The South-West zone had the most publications (eight) while the North-West had no published article with data. **Table 3** shows the educational status of respondents. A total of 9,720 respondents were included

in the study. Six publications reported the educational status of their respondents, and four reported their corresponding health access. A greater number of respondents in the study are educated and access care



services (including insurance) than the uneducated respondents.

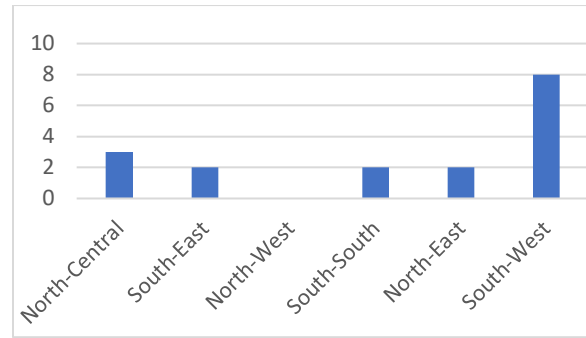


Figure 3: Number of publications per geopolitical zone

Table 3: Reported educational level of respondents

S/N	Authors	Sample Size	Uneducated#	Access to Healthcare (or insurance)	Educated	Access to Healthcare (or insurance)
1	Anakwenze et al.	50	5%	Unreported	95%	Unreported
2	Egbunu et al.	200	43.5%	69.23%	56.5%	76.19%
3	Ahmed et al.	420	28.1%	78.4%	71.9%	91.2%
4	Ahuru et al.	8006	0.89%	0.89%*	99.89%	3.23%*
5	Akinyemi et al.	744	1.9%	46.2%*	98.1%	59.5%*
6	Ogunyemi et al.	300	5.7%	Unreported	94.3%	Unreported

\*= % access to insurance (as shown in Ahuru et al. (22))/% willingness to utilize healthcare (as shown in Akinyemi et al. (26)). # = Educated: Those who attended at least primary School; Uneducated: Those who never attended School

The barriers to accessing healthcare are summarized in

Table 1. The most reported barrier(s) to healthcare access are unavailable social amenities (including

poor road network or location of the health facility) and low standard of healthcare facility (including personnel attitude during service delivery and facility mismanagement)

Table 1: Summary of the barriers to healthcare access

s/n	Barrier	Freq	Note	Ref (s)
i	Worker Strike	2	One of the studies reported as much as 13% of respondents having no access to healthcare due to worker's strike (18)	(18,29)
ii	Equipment/service Challenges: faulty equipment or absence of equipment or service	3	One of the studies reported a shutdown of a particular critical healthcare service delivery because the machine was completely faulty (18)	(18,23,30)
iii	Prolonged wait times	4	A study that reported 89% awareness of insurance and its importance noted that 72.9% of respondents faced prolonged waiting times of different forms that has affected their willingness to use the service (25)	(18,23,25,27)
iv	Unavailable Social Amenities: Good Road, Light, water supply that limit accessibility and utilization	5	Although 100% of the respondents in a study were aware of health facilities and services, over 80% picked distance and transportation difficulties as barriers affecting them (21)	(18,21,27,29, 30)
v	Insufficient government support	1		(21)
vi	Low standard of Health facility: personnel attitude or other facility associated problems	5	Majority of the respondents report less access to clinic services due to substandard health facilities and personnel, and this has influenced their choices in selecting PHCs (30), while another reported that the availability of expert care influenced the health seeking behaviour of more than 45% of respondents (27)	(21,23,25,29, 30)
vii	Insufficient Health Personnel	4	More than 80% reported inadequate access to healthcare services due to insufficient health personnel (28)	(20,23,28,30)



s/n	Barrier	Freq	Note	Ref (s)
viii	Insufficient bedspace	1		(20)
ix	Insufficient drugs or problem with drugs	4	45% of respondents in one of the studies noted inadequate drugs as a barrier even with some having access to Health Insurance (NHIS) (25)	(20,21,25,28)
x	Financial Challenges/high cost of care	3	Despite 63% awareness of NHIS among respondents, not many have access to in and 11% report cost of care as a barrier (29)	(27,29,30)
xi	Other: Minor illness, religious beliefs	3		(23,27,29)

## Discussion

This study aimed to assess equitable healthcare access, focusing on the prevalent barriers encountered across various geopolitical zones in Nigeria. Notably, there exists a scarcity of literature addressing the crucial issue of equitable health access. The result vividly illustrates this gap, with an abundance of studies primarily concentrated in the southern regions. Conversely, the North-West emerges as the most affected area, experiencing a glaring dearth of data. Consequently, there has been a conspicuous absence of publications examining barriers to healthcare access, be it from PHCs or NHIS utilization.

Also, significant insights emerge from this review about the barriers to healthcare access: 30.8% of the reviewed publications highlight household and community level factors like education level, financial challenges, religious beliefs, and minor illnesses, as significant impediments to healthcare access, while 38.5% concentrate their focus on logistical factors like distance of health facility and poor transportation/road networks. A substantial majority, comprising 69.2% of the examined literature, emphasizes the role of systemic factors like facility capacity, wait times, service challenges, and sufficient health workers in shaping the landscape of healthcare access. These findings underscore the critical importance of adequate health education, strategically siting healthcare facilities and enhancing their capacity to deliver high-quality unhindered healthcare services.

Despite the pivotal role of PHCs in attaining the objectives outlined by the Alma Ata declaration, only two publications have documented evidence from 2016 to the present. Both publications shed light on the inadequacies plaguing these centers, particularly in terms of facility and human resource capacity required for delivering quality healthcare. This was particularly discussed by Abosedo et al.<sup>19</sup> who highlighted issues surrounding the uneven

distribution of health facilities and the resultant inaccessibility of government establishments in specific areas. Other publications underscore the impact of underfunded or ill-equipped facilities on respondents' willingness to seek healthcare.<sup>8,22,28</sup> Conspicuously, there is paucity of literature examining the availability of insurance and its role in facilitating healthcare access, with only two publications addressing the subject of willingness and access to insurance services, as demonstrated in the result which stands as a notable oversight, given the pivotal role health insurance plays in both affordability and health outcomes.<sup>31</sup> Despite reasonable awareness of its existence and benefits, particularly in urban areas, these studies reveal low levels of insurance utilization; however, awareness in rural communities is markedly lower.<sup>22,31</sup> This disproportionate utilization of the insurance scheme exacerbates the challenge of achieving equitable healthcare access, as the burden of out-of-pocket health expenses discourages positive health-seeking behaviors and promotes self-medication.<sup>22</sup> Some of the documented obstacles to improved NHIS utilization may include inadequate financial allocations and deficient infrastructure, among others.<sup>31</sup>

To navigate these barriers, the solutions lie within the challenges themselves. Firstly, there is an imperative need for a robust, effective monitoring system across the board, evaluating the utilization and performance of both NHIS and PHCs. Additionally, a strategic mapping of affected geographical areas, potentially utilizing Geographic Information Systems (GIS), coupled with the judicious placement of PHCs in favorable locations with efficient network systems, is indicated.<sup>22</sup> Standardizing health facilities through adequate financing, deploying a sufficient human resource contingent (augmented by comprehensive training of additional community health workers to complement the lean workforce), and intensifying public awareness campaigns regarding strides

towards improved healthcare access and the imperative of utilizing healthcare facilities, collectively represent steps in the right direction.<sup>19,32</sup>

### **Implications of the findings of this study**

This scoping review underscores significant implications for evidence-based policy formulation, practical implementation, and future investigative efforts. There is need for focused interventions aimed at vulnerable demographics, such as rural inhabitants, women, and economically disadvantaged groups and policymakers need to prioritize resource allocation to mitigate disparities in healthcare access. Enhancing health infrastructure is vital, especially in areas that are underserved, in conjunction with improvements in transportation and telehealth services. Moreover, reforming health insurance systems is essential to extend coverage to marginalized populations; there is a need to increase public awareness about insurance benefits and streamline the enrollment process. Engaging local communities in healthcare initiatives can effectively address unique challenges and facilitate the development of culturally relevant services. Furthermore, equipping healthcare providers with training in cultural competence can diminish biases and enhance interactions between patients and providers, thereby promoting a more inclusive healthcare setting.

The review also emphasizes the necessity for robust data collection systems to monitor healthcare access equity over time. Ongoing evaluations will enable stakeholders to discern patterns, evaluate the effects of interventions, and make data-driven decisions. Future research should concentrate on longitudinal studies to observe shifts in access, particularly following policy changes, as well as qualitative investigations to capture the experiences of marginalized groups, which can guide the formulation of more effective healthcare policies. Additionally, drawing comparisons between healthcare access equity in Nigeria and that of similar countries may yield valuable insights and best practices for adaptation.

### **Strengths and limitations of the Study**

A key limitation of this review is the small number of studies analyzed, with only thirteen contributing data, which is insufficient given Nigeria's large population. More studies could have provided deeper insights into health access equity. Additionally, most studies were conducted between

2016 and 2023 and may not accurately represent the current state of health care access. New primary research from the past year would offer a more recent perspective. Lastly, the cross-sectional design of these studies only offers a snapshot rather than a trend analysis that longitudinal studies could provide.

### **Conclusion**

In conclusion, attaining universal health coverage by 2030 hinges on a transformative shift towards equitable healthcare access. Continuous and vigilant routine monitoring of these factors is paramount in comprehending the specific challenges unique to each geopolitical zone. There is a pressing need for an increased body of published research, particularly pertaining to the accessibility of PHCs, with a specific emphasis on the northern regions. Additionally, concerted efforts should be directed towards enhancing health insurance accessibility throughout the country. These critical steps will be instrumental in paving the way for a more inclusive and accessible healthcare landscape for all Nigerians.

### **Declarations**

**Authors' Contribution:** A.S was responsible for conceptualizing the study, engaging in screening/review, drafting the initial manuscript, and manuscript review. A.D contributed to the writing of the first draft, composed the abstract, and reviewed the completed manuscript. R.R.K, I.B.T participated in data curation and reviewed the manuscript. A.O conducted data curation and screening/review and contributed to study conceptualization.

**Conflict of interest:** The authors declare no conflict of interest

**Funding:** No funding was received for this study

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