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Barriers and Pathways to Healthcare for Low-Income Residents in Etche LGA, Rivers State, Nigeria: Implications for Policy and Practice

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Abstract: Equity of health care services among the rural poor In Nigeria, access to healthcare remains unequal especially in rural areas for the poor. Residents of Etche Local Government Area (LGA) in Rivers State, Nigeria's second richest oil-producing state experience and negotiate access to health facilities by the poor informed this qualitative case study. Based on Andersen's Behavioral Model of Health Services Use and the Social Determinants of Health (SDH) framework, the study investigates facility availability, patterns of utilization, barriers and coping strategies among the poor. The accounts of 15 residents interviewed who were low income, as well as five primary care workers, show that government services are restricted to a handful of basic clinics often located far away and poorly resourced. The vast majority of the respondents postpone treatment—using home remedies, encased drugs, and traditional healers(SE)—for lack of money and difficulty accessing/expensive transportation. Findings illuminate enabling (insurance, poor travel infrastructure, drug stockouts) and predisposing (low education, gender norms) factors restricting service use. Consistent with earlier studies, this research indicates that cost-related issues and poor infrastructure deter rural Nigerians from formal health services. Policy recommendations include fairly building primary care, subsidizing poor people's access to care, boosting the provider workforce and setting up community outreach (like mobile clinics or insurance schemes) to close gaps. These type of multi-sectoral interventions are also needed to address health equity in Etche, and similar environments.

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1. Introduction

Gaps between rich and poor show up vividly in health worldwide — and are particularly glaring in rural regions. Supporting information Introduction In populations around the world, people from low socio-economic backgrounds or living in rural areas have a higher burden of disease and lower life expectancies than those living in urban areas or in wealthier communities [1]. The World Health Organization estimates that around 80% of extreme poverty is found in rural areas, which have weaker health systems, poor infrastructure and worse social determinants of health – including education, employment and sanitation. This rural disadvantage not only serves to exacerbate the

global inequity of health, but also constrains achievements of international development agenda goals and targets such as for example the Sustainable Developmental Goals (SDGs) especially SDG 3 – Good Health and Well-being[2].

In Nigeria, these global trends can be readily observed and taken to an extreme. The country's health outcomes continue to be among the region's worst despite its economic promise. Rural populations have higher mortality, and morbidity rates compared to urban counterparts. For example, maternal and infant mortalities are several fold higher in rural areas compared to urban centres ([3]). Malaria, diarrheal illnesses and vaccine preventable diseases are still endemic in rural Nigeria with consequent additional stress placed on weak health systems [4]. More than 40% of the population live on less than a dollar per day, most of who reside in rural areas where they have limited access to essential services including electricity, clean water, and education [5]. This structural poverty dovetails with low capacity health systems to perpetuate ugly cycles of poor outcomes in health.

Another aspect of inequity is the disparity in health resources. Specialists and public hospitals are also predominantly based in urban cities such as Lagos, Abuja, and Port Harcourt with hinterland and rural areas being poorly covered [6]. The disparity translates into rural residents frequently travelling long distances at great cost to reach second or third level facilities. In addition, under-investment in the primary health care (PHC) system in Nigeria has resulted in rural clinics being low on resources and deficiently staffed such that even basic services cannot be provided [7]. It contributes to late detection of diseases, tendency towards self-medication or non-medical treatment and even total absence of care; such factors increase preventable deaths in individuals.

Etche Local Government Area (LGA) of Rivers State is a typical rural unfortunate area. Its economy is characterized by subsistence farming, informal trading and off-farm activities, as the majority of households have very low and unreliable income. The community lacks physical facilities (roads, electricity), which in turn limits access to healthcare. There is limited access to primary health care facilities, with villages frequently poorly served by clinics or being devoid of medical services forcing residents to travel long distances to receive even basic medical treatment – sometimes on foot [8] and sometimes without valid transportation means even when some modes are available. Among the poorest households, these obstructions lead to delayed careseeking, significant dependence on traditional healers and increased exposure to catastrophic health spending when illness is severe.

This paper addresses these obstacles, seeking to present a detailed, policy- relevant record of how poverty and access to healthcare intersect in Etche LGA. The use of the lived experiences among poor households has enabled this investigation to illuminate some of the structural and socio-cultural conditions that influence health practices in rural Nigeria. In addition to presenting challenges, the study illuminates potential areas for policy innovation in addressing equity in health care provision at the local government level.

The conceptual framework is based on Andersen's Behavioral Model of Health Services Utilization, which posits that the factors contributing to utilization of healthcare can be classified into three groups including predisposing (e.g., demographics, health beliefs), enabling (e.g., income, insurance and transportation) and need (e.g., severity of illness) factors [9]. This model is helpful to explain the interaction between structural poverty and personal decision-making in Etche. Furthermore, the study is rooted in perspective of Social Determinants of Health (SDH) which holds that health is influenced not only by medical treatment but also by setting in which people are born, grow, live, work and age [10]. Through the application of these lenses, the research foregrounds not only individual agency but also structural impediments – poverty, illiteracy and gender inequality and infrastructural neglect – that shape health-related behavior or outcomes.

Theoretical Framework

Health access and utilization are shaped by a combination of individual, structural, and systemic factors. To analyze the realities of low-income groups in Etche LGA, this study is anchored on two complementary perspectives: Andersen's Behavioral Model of Health Services Use and the Social Determinants of Health (SDH) framework. Together, these frameworks provide a multi-level lens for understanding how poverty, social context, and health systems interact to produce inequalities in healthcare access.

Andersen's Behavioral Model of Health Services Use

Andersen's model remains one of the most widely applied frameworks in health sociology for understanding why people seek or fail to seek healthcare. The model identifies three key determinants of utilization:

1. Predisposing factors – demographic (age, sex, marital status), social structures (education and ethnicity) and perceptions of need based on health beliefs. Elsewhere in Etche, poor literacy, use of indigenous medical knowledge and distrust for government clinics predispose residents to late or non-use of biomedical services.
2. Enabling factors—resources and material circumstances that help or hinder access, including income, health insurance, transportation, and service availability. The residents of Etche are particularly vulnerable in this environment: most survive on meager and erratic incomes, few wish to spend precious money on health insurance or can afford the services that such a policy would provide – and the distances from their homes to ill-equipped clinics are long. In light of these feeble enabling factors, the formal health care service is a last resort.
3. Need variables – both perceived need (self-rated health) and evaluated need (doctor-assessed illness history). In Etche, a lot of people tend to diminish the prevalence of minor illnesses because they are far from healthcare facilities or do not have money for medicine and so may not bother until things get very bad.

This tripartite model has been used in numerous African contexts to explain under-utilization of maternal care, immunization, and treatment for chronic conditions [11]. By applying Andersen's model, this study situates Etche's case within broader debates on structural inequities and behavioral health outcomes.

Social Determinants of Health (SDH) Framework

Andersen's model focuses on individual, household characteristics, while the SDH framework underscores a wider social structural framework. The concept of SDH, according to the WHO Commission on Social Determinants of Health (3), is taken to be the conditions in which individuals are born, grow, live, work and age that are shaped by political forces including economic policies. These determinants contribute to unjust health risk and opportunity distributions in 38 social groups.

In Etche, low literacy rates, food and water insecurity, inadequate sanitation, gender inequalities, and limited economic opportunities form a cluster of adverse determinants. These not only increase susceptibility to disease (e.g., malnutrition, malaria, diarrheal illness) but also undermine the ability to seek timely and effective healthcare [12]. The SDH lens highlights that the health challenges of Etche's poor cannot be reduced to individual choices alone; they are the outcome of entrenched poverty, weak governance, and infrastructural neglect.

Integrative Relevance to the Study

Bringing both frameworks together, this study recognizes that healthcare utilization is both behaviorally mediated and structurally constrained. Andersen's model clarifies how demographic, financial, and perceptual factors drive individual health behaviors, while the SDH framework situates these behaviors within the wider environment of deprivation, inequality, and institutional weakness. For Etche, this integrated lens underscores that improving health access requires interventions that are not only

biomedical (e.g., more clinics) but also socio-structural (e.g., poverty alleviation, education, gender empowerment, and infrastructural development).

2. Methodology

The study used a qualitative case-study design to capture the lived experiences of low-income residents of Etche LGA regarding medical care. Twenty participants were purposively selected: 15 low-income community members (diverse in age and gender) and five primary healthcare professionals working in the LGA. Semi-structured interviews were conducted, covering income, typical health problems, access patterns, facility experiences, and suggested solutions. Each interview lasted 30–45 minutes, was audio-recorded with consent, and later transcribed. Data were analyzed using Braun and Clarke's thematic analysis approach. Measures such as triangulation and respondent validation enhanced credibility.

3. Results

Healthcare Facilities and Distribution

Results showed that public health facilities in Etche are few, unevenly distributed and less adequate for its increasing population. Participants' responses continued to highlight the lack of operational PHCs in the LGA. There are only a few PHCs available, and most of them are in accessible villages; therefore those who live in distant villages do not have equal access to health-care services. Many of those at the meeting lamented that their villages had what amounted to no government clinic, a situation that often is characterized by residents having to walk for hours or rely on informal providers. And even where facilities existed, they were characterized by respondents as under-resourced, often without essential drugs, diagnostics, electricity or clean water. Staffing was also a challenge: clinics were often empty, and with only one nurse or community health worker serving several villages, long waits and irregular hours of operation ensued. These stories are consistent with the general evidence of weak PHC systems in rural Nigeria where physical existence of facilities does not necessarily imply the capacity for service provision [13,cljs25].

Socio-Economic Profile

The socio-economic conditions of participants further illustrated the precariousness of life in Etche. Most respondents were subsistence farmers cultivating cassava, maize, or vegetables, petty traders selling small goods in local markets, or artisans and casual laborers. Reported daily incomes ranged from ₦500–₦1,000 (USD 0.30–0.60), amounts insufficient to cover basic food, transport, or medical expenses. Many households depended on seasonal agricultural income, making them vulnerable to fluctuations in weather, pests, or market conditions. Participants described living "hand-to-mouth," with no savings or financial buffers, and none had formal health insurance coverage. This economic vulnerability meant that healthcare costs were perceived as a heavy burden, with even small fees for consultation or medication requiring trade-offs with food or children's school fees. Such findings mirror national data indicating that rural poverty continues to be a powerful determinant of health inequity in Nigeria [14].

Health Service Utilization Patterns

Health-seeking behavior among participants was shaped by both structural barriers and cultural practices. The use of formal medical services was sporadic and generally reserved for emergencies such as severe infections, complicated childbirth, or life-threatening injuries. For minor ailments—such as fever, cough, headaches, or gastrointestinal problems—respondents preferred more immediate and affordable alternatives, including herbal remedies, over-the-counter drugs from patent medicine vendors, and prayer or spiritual healing in churches. One female respondent explained that she would only visit the clinic when "the sickness is beyond us," reflecting how cost

and distance limited health facility visits until illness became critical. This pattern resonates with broader studies showing that rural Nigerians often delay care, engaging first in self-treatment or traditional healing due to affordability and accessibility challenges [15].

Barriers to Access

Respondents identified a wide range of barriers, which can be grouped into financial, infrastructural, and socio-cultural challenges.

- Material resources were the most predictable barrier. Reasons such as consultation fees, laboratory tests and the price for prescribed drugs were predominantly reported as barriers. For families that subsisted on ₦500 per day, a consultation that cost ₦2,000 was the equivalent of multiple days' income. As a result, many of them postponed or declined treatment.
- Infrastructural access constraints were distance to facilities, poor roads that were rendered impassable during the rainy season and unreliable public transport. Some respondents transported sick relatives on motor bikes or travelled for hours to get to the nearest PHC.
- **Health system limitations** such as drug stock-outs, absent staff, and outdated equipment further eroded trust in the formal healthcare system. Participants often expressed frustration at visiting a clinic only to be told that "there are no drugs" or that the health worker was unavailable.
- There were also cultural barriers. A series of participants expressed a preference for traditional healers, due to cost, proximity and perceived cultural concordance. Others mentioned distrust of government-run facilities, saying the staff were unfriendly or unresponsive. Getting care also was influenced by religious beliefs about the nature of diseases, as some illnesses were considered to have spiritual causes and were addressed with prayer or faith healing. These are similar to dynamics identified in other settings in Nigeria, where culture, religion, and previous negative experiences contribute to shaping communities' perception of biomedical care [16].

Coping Strategies

Faced with persistent barriers, Etche residents relied on a range of coping strategies to manage health needs. The most common was self-medication, either through leftover drugs at home or by purchasing inexpensive medications from patent medicine vendors. Others turned to herbal treatments, often using locally available plants, roots, and concoctions passed down through generations. Religious healing was another coping strategy: some respondents reported attending prayer houses or relying on pastors' prayers as a form of treatment. While these alternatives provided immediate and affordable relief, they posed significant risks of misdiagnosis, inappropriate dosing, or delayed access to lifesaving medical care. Such practices mirror patterns observed across rural Nigerian communities, where households attempt to balance affordability, accessibility, and cultural familiarity when addressing health needs [17].

4. Discussion

The findings of this study demonstrate that access to healthcare in Etche LGA is shaped by a web of interlocking constraints that reflect both individual limitations and structural inequalities. While residents expressed a clear awareness of the value of modern healthcare, their ability to access such services was systematically undermined by poverty, weak infrastructure, and broader social determinants of health.

Insights from Andersen's Behavioral Model

The use of the Andersen Health Model provides an opportunity to describe how these limitations work on different levels. Access to resources was the most significant barrier: Most respondents had no disposable income, health insurance, reliable

transportation or a nearby adequately staffed health facility. These results are also in agreement with studies carried out in other rural areas of Nigeria where low enabling levels are the best predictors for not utilizing health care services [18].

Predisposing factors further reinforced these barriers. Limited educational attainment reduced health literacy, thereby lowering residents' perceived benefits of preventive or routine biomedical care. Cultural preferences for herbal medicine or religious healing also diminished reliance on formal services. Such patterns echo findings from Osamor and Grady, who observed that cultural interpretations of illness, combined with poor experiences with government clinics, shape health-seeking behavior across rural Nigeria [19].

Finally, need factors emerged as an important but secondary influence. Residents tended to delay formal treatment until illnesses became severe, reflecting a high threshold for perceiving illness as requiring professional care. This pattern is not unique to Etche; it reflects broader rural African realities where health services are often viewed as a last resort rather than a first line of defense [20].

Insights from the Social Determinants of Health Framework

That's where the Social Determinants of Health (SDH) framework comes in, focusing on the structural causes of those inequities. The lack of educational opportunities, unstable means of livelihood and poor sanitation that characterized the lives of the people made them more vulnerable to ill health while drawing so much away from their ability to budget for or make payments on treatment. These examples illustrate that poverty constructs a "double burden" by increasing the risk of disease and compromising one's ability to access prompt treatment [21].

The findings also resonate with broader scholarship showing that out-of-pocket payments remain the dominant form of health financing in Nigeria, accounting for nearly 70% of total health expenditure. For poor households, such costs are catastrophic, often pushing families further into poverty. Moreover, the shortage and uneven distribution of PHCs in Etche reflects a national trend in which rural areas are systematically disadvantaged in the allocation of health resources [22].

Comparative Dimensions: Situating Etche within Africa and Beyond

The barriers identified in Etche are not isolated but resonate with patterns observed across Sub-Saharan Africa and other low- and middle-income countries (LMICs). In Ghana, poor households in rural districts similarly underutilize biomedical services, with financial hardship and distance to facilities emerging as critical deterrents (Kumi-Kyereme & Amo-Adjei, 2016). In Uganda, access is further undermined by shortages of essential drugs and reliance on out-of-pocket expenditure, leading to heavy dependence on traditional healers (Rutebemberwa et al., 2009). In Kenya, rural women often bypass local clinics due to perceptions of poor quality, seeking care only in emergencies [23].

Internationally, we can see correlations with rural health disparities in South Asia, where for some communities the same intersection of poverty paired with poor investment infrastructure and traditional dependence on indigenous medicine exist. What is unique about Nigeria, and Etche in particular, is the severity of misallocation of resources in the health sector and its failure to provide efficient health insurance for rural residents.

These comparative insights suggest that Etche is not an outlier but part of a wider structural challenge in LMICs where rural health is systematically underfunded, and poor households bear the heaviest costs. At the same time, they highlight opportunities for cross-national policy learning: for example, Ghana's experiments with community-based health planning and services (CHPS) or Rwanda's community-based health insurance schemes offer potential models for Nigeria's rural regions.

Broader Implications

Together, these insights suggest that the challenges in Etche cannot be addressed solely through individual behavior change or isolated facility upgrades. Rather, they point to structural inequities that require systemic interventions. Weak enabling resources and adverse social determinants are not accidental but reflect broader governance and policy failures, including underinvestment in rural health, inadequate social protection schemes, and neglect of rural infrastructure.

For sociology of health and social work, the Etche case reveals that there is an imperative to connect micro-level health-seeking experiences with macro-level structures of inequality. It provides a picture of how domestic experiences with illness are shaped by larger structural patterns of poverty, infrastructural neglect and cultural marginality. Addressing these inequities requires a multi-sectoral approach, including health system reform as well as poverty-reduction, education and community-based interventions..

Policy Implications

The findings from Etche LGA underscore that improving healthcare access for low-income rural populations requires comprehensive, multi-level interventions that address not only medical facilities but also the structural and social conditions shaping health. From a policy perspective, several key implications emerge.

1. Strengthening Primary Health Care (PHC)

A clear priority is investment in functional PHCs. While Nigeria's National Primary Health Care Development Agency has long emphasized PHCs as the foundation of the health system, in practice, rural facilities remain underfunded, understaffed, and under-equipped [24]. Targeted investment in Etche should prioritize:

- Ensuring adequate staffing of nurses, midwives, and community health workers.
- Providing consistent drug supplies and essential diagnostic tools.
- Expanding the number of PHCs to underserved villages to reduce travel distances.

2. Expanding Financial Protection Mechanisms

The dominance of out-of-pocket payments among rural households highlights the urgent need for health financing reform. Nigeria's National Health Insurance Authority (NHIA) has struggled to cover the informal sector and rural poor. Lessons from Rwanda's community-based health insurance and Ghana's NHIS demonstrate that community-based risk pooling is feasible in low-income settings [25]. For Etche, pilot schemes involving local cooperatives, farmer groups, and religious associations could serve as entry points for scaled insurance enrollment.

3. Improving Rural Infrastructure and Transportation

Poor road networks and lack of affordable transport remain critical barriers to access. Health policies must therefore integrate with broader rural development strategies, including road construction, electrification, and water supply. Without these infrastructural investments, even well-staffed clinics will remain underutilized. Cross-sectoral planning between the Ministry of Health, Ministry of Works, and local government councils is essential.

4. Promoting Health Literacy and Community Engagement

Low literacy and cultural reliance on herbal or religious healing mean that effective interventions must be culturally sensitive and community-driven. Social workers, health educators, and community leaders should collaborate to deliver health education campaigns that respect local traditions while promoting awareness of preventive care, maternal health, and child immunization. Building trust in formal healthcare requires participatory approaches where communities feel ownership over services.

5. Strengthening Social Protection and Poverty Alleviation

The SDH perspective makes clear that health inequities are rooted in broader social deprivation. Addressing healthcare inequities in Etche requires policies that extend beyond the health sector, including:

- Expanding conditional cash transfer programs to rural households.
- Subsidizing agricultural inputs to stabilize incomes.
- Improving access to safe water and sanitation to reduce disease burden.

6. Leveraging Faith-Based and Civil Society Organizations

Given the central role of churches, mosques, and community associations in rural life, these institutions can serve as critical partners in extending health coverage. Faith-based clinics, for example, already provide a significant share of healthcare in rural Nigeria. Strengthening partnerships with such providers can expand access while respecting cultural contexts.

7. Monitoring, Data, and Accountability

Finally, the Nigerian health system suffers from weak monitoring and accountability. For Etche, establishing community health committees to monitor PHC performance, report drug shortages, and track absenteeism among staff would enhance transparency. Local data collection should be strengthened to guide resource allocation and ensure that the poorest communities are not overlooked.

The health care needs of Etche indigents are multi-sectoral and rights based. Policies should go beyond increasing clinic coverage and focus on not only lowering financial barriers, but also building rural infrastructure, empowering communities, and addressing underlying socio-economic inequalities that contribute to poor health. Only with such holistic reforms will the vicious cycle of rural Nigerian poverty and ill-health can be brok.

5. Conclusion

This study highlights the complex, multi-factorial barriers low-income segments of Etche LGA experience in accessing healthcare as influenced not only by facility paucity but a myriad of invariant socio-economic and cultural structures. The results suggest that health system inequities in rural Nigeria were not just limited to infrastructure, but are situated within wider contexts of poverty, poor education and limited health finance.

Through the lens of Andersen's Behavioral Model, we emphasize how limited enabling resources—low incomes, not having health insurance and little access to transport—together with predisposing factors such as low literacy levels and a preference for more traditional care converge resulting in delayed or not seeking formal health care. In a similar vein, the Social Determinants of Health framework highlights how lack of sanitation and food insecurity, and more generalised social and economic deprivation are not only perpetrators in the prevalence of disease but also in the undermining capacity to engage care when ill.

“All of these things underscore the fact that we cannot address healthcare in Etche simply by building more clinics and renovating infrastructures. Although necessary, such actions need to be followed by holistic multisector initiatives that involve poverty reduction, education, social protection and health care funding. Proactive measures to broaden the coverage of community-based insurance, revitalize rural PHCs, enhance roads and water utilities systems and include communities in culturally sensitive health education are fundamental steps towards equity.

For sociology and social work alike, this research makes a contribution to global discussions of rural health inequities by detailing the ways in which low-income household-level travails are enmeshed within larger macro-system features of structural inequality. The Etche case illustrates broader issues that many other sub-Saharan African

deliveries and low- and middle-income countries tend to face and, therefore, is a local or even global example of how health and poverty are closely interwoven.

In sum and substance, achieving equal health access in Etche would involve the acknowledgment that health is a social right and must be seen as an essential element of development. Without ongoing investment in both health systems and the social determinants of well-being, those living in rural Nigeria will continue to endure avoidable misery fuelled by entrenched cycles of poverty and exclusion.

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