



ASSESSMENT OF ACCESSIBILITY AS A FACTOR INFLUENCING THE UTILIZATION OF PRIMARY HEALTH CARE FACILITIES AMONG PREGNANT WOMEN IN BIRNIN KEBBI LOCAL GOVERNMENT AREA, KEBBI STATE

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Abstract

This study assesses the accessibility as a factor influencing the utilization of primary health care facilities among pregnant women in Birnin Kebbi Local Government Area, Kebbi State. one objectives and one research questions were development and answered. descriptive research design of survey type was employed in this study. The population of the study comprised of 21,450 pregnant women in Birnin Kebbi. The sample size for this study is 200 pregnant women in Birnin Kebbi Local Government Area of Kebbi State selected using multi-stage sampling procedure. Self-developed questionnaire was used as instrument for data collection. Descriptive statistics was used to answered the research questions of the study. The findings of the study revealed that accessibility is a factor influencing the utilization of primary health care facilities among pregnant women in Birnin Kebbi Local Government Area of Kebbi State. Based on the findings of this study, it was concluded that the utilization of primary health care facilities among pregnant women in Birnin Kebbi Local Government Area of Kebbi State is influenced by the accessibility of these facilities. It is therefore, recommended that the government establish additional primary health care facilities in underserved areas to reduce travel distances for pregnant women. Enhancing public transportation systems and providing subsidized or free transport services specifically for pregnant women accessing health care facilities should be prioritized. Furthermore, implementing community outreach programs, such as mobile clinics, can help serve remote or hard-to-reach areas effectively.

Key words: Accessibility, Factor Influencing, Utilization, Primary Health Care, Facilities Pregnant Women

Introduction

Primary health care facilities are the cornerstone of a robust health system, serving as the first point of contact between individuals and the healthcare system. These facilities provide comprehensive, accessible, and community-based care that meets the essential health needs of the population (Idris, Sambo, & Ibrahim, 2021). They play a crucial role in preventing and managing common illnesses, offering services such as vaccinations, maternal and child health care, treatment for chronic diseases, and health education. By focusing on prevention and early intervention, primary health care facilities help reduce the burden on hospitals and specialist services (Ibrahim & Yahaya, 2021).

Abdullahi and Usman (2022) reported that the services provided by primary health care facilities are often tailored to the needs of the local community. This community-centered approach ensures that care is culturally appropriate and accessible to all, including vulnerable populations. These facilities are typically staffed by a team of healthcare providers, including general practitioners, nurses, and sometimes community health workers, who work collaboratively to deliver a wide range of services. The integration of health promotion, disease prevention, and treatment within the community setting fosters a holistic approach to health, addressing both the physical and social determinants of health (Ejembi, et al, 2024).

Accessibility plays a crucial role in the utilization of primary health care (PHC) facilities in Nigeria, particularly for vulnerable populations such as pregnant women. Geographic barriers, including long distances to health facilities and inadequate transportation infrastructure, significantly hinder access to essential maternal and child health services. According to Akinyemi et al. (2021), many rural communities in Nigeria lack well-equipped PHC centers within a reasonable distance, forcing residents to travel long hours to access medical care. Additionally, poor road conditions and high transportation costs further discourage health-seeking behavior, leading to delayed or missed antenatal visits, skilled birth attendance, and immunizations (Adeloye et al., 2017). As a result, many pregnant women in rural areas turn to traditional birth attendants or home-based care, increasing the risks of maternal and neonatal complications.

Financial constraints and socio-cultural factors also contribute to the underutilization of PHC services in Nigeria. High out-of-pocket expenses for consultations, medications, and diagnostic tests make health care unaffordable for low-income households (Okeke et al., 2020). Furthermore, cultural beliefs, misconceptions, and low literacy levels reduce awareness of the importance of seeking skilled medical care during pregnancy and childbirth (Babalola & Fatusi, 2009). In some communities, male decision-makers may restrict women's access to health care due to traditional norms, further limiting their ability to utilize available services. Strengthening PHC accessibility in Nigeria requires targeted interventions, including improved infrastructure, subsidized health care costs, and community education programs to promote the benefits of timely medical care. The utilization of primary health care (PHC) facilities by pregnant women is crucial for ensuring safe pregnancies and reducing maternal and infant mortality. However, in Birnin Kebbi Local Government Area of Kebbi State, there appears to be a significant gap in the utilization of these facilities by pregnant women.

Akinyemi, and Owoaje (2022) conducted a study explores how accessibility affects the utilization of PHC services among pregnant women in Northern Nigeria. The study included 400 pregnant women across five PHC centers, selected through stratified random sampling. The results of the study revealed that low accessibility significantly decreases ANC attendance and skilled birth deliveries. Approximately 58% of respondents reported avoiding PHC visits due to long travel distances, while 47% cited high transportation costs as a deterrent. Interviews with health workers also highlighted inconsistent service availability and long wait times as contributing factors. The study recommends community-based interventions, mobile health clinics, and improved road networks to enhance maternal health service utilization

The researcher observed that many pregnant women in Birnin Kebbi reside in remote areas, far from the nearest primary health care (PHC) centers, making it challenging for them to seek timely medical care. Factors such as lack of transportation, poor road networks, and financial constraints further exacerbate this issue, leading to delayed or inadequate utilization of health services. Consequently, some pregnant women may resort to traditional birth attendants or self-care, increasing the risk of complications. The researcher noted that many women may not fully understand the importance of regular antenatal visits, immunizations, and skilled birth attendance, all of which are essential for their well-being and that of their unborn children. Cultural beliefs, misconceptions, and low literacy levels contribute to this lack of awareness, further hindering the utilization of available health care services. Against this backdrop, the researcher aimed to examine accessibility as a key factor influencing the utilization of primary health care facilities among pregnant women in Birnin Kebbi Local Government Area of Kebbi State.

Objective of the Study

1. The objective of this study is to assess whether accessibility is a factor affecting utilization of primary health care facilities among pregnant women in Birnin Kebbi Local Government Area of Kebbi State

Research Question

1. Is accessibility a factor influencing the utilization of primary health care facilities among pregnant women in Birnin Kebbi Local Government Area of Kebbi State?

Methodology

A descriptive research design of survey type will be employed in this study. Descriptive research is a type of research that describes a population, situation, or phenomenon that is being studied. It focuses on answering the how, what, when, and where questions. a research problem rather than the why (McCombes, 2020). This design will be choosing to allow the researcher to describe factors affecting utilization of primary health care facilities among pregnant women in Birnin Kebbi Local Government Area of Kebbi State in order to make generalisations in the study area.

The population of the study area is twenty-one thousand, four hundred and fifty (21,450) pregnant women in Birnin Kebbi. The population of Birnin Kebbi, Nigeria's metro area, is projected to be 429,000 in 2024. This is a 4.13% increase from 2023, when the population was 412,000 (United Nations and World Population Prospects, 2024). According to WHO (2020), pregnant women represent approximately 5% of the total population. 5% out of 429,000 is 21,450.

The sample size for this study is two hundred (200), which was selected among pregnant women in Birnin Kebbi Local Government Area, Kebbi State. The sampling procedure for this study consist of multi-stage sampling techniques. Therefore, the stages for sampling in this study were as follows: Step I: Birnin Kebbi Local Government Area, Kebbi State are clustered in ten (10) wards; Step II: A simple random sampling technique was used to select six (6) wards out of 10 wards in Birnin Kebbi Local Government Area; Step III: A purposive sampling technique was also be used to select 1 (1) health facility with ANC services from each selected 6 wards; Stage IV: The proportionate sampling technique was used to select ten percent (10%) of the respondents as the sample size from each selected health facility; and Stage V: The respondents in each health facility was selected using the availability sampling technique.

Table 1: Proportionate Distribution of Respondents

Simple Random Sampling Selected Wards	Purposive Sampling Selected Health Facilities	Population	Proportionate Sampling 10%
Kanya	PHC Kanya	310	31
Ribah	PHC Ribah	270	27
Yelwa Central	PHC Yelwa Central	440	44
Rafin Zuru	PHC Rafin Zuru	313	31
Tadurga	PHC Tadurga	330	33
Rikoto	PHC Rikoto	320	32
Total		1983	200

A researcher's designed structured questionnaire titled "Accessibility as a Factor Influencing the Utilization of Primary Healthcare Facilities among Pregnant Women Questionnaire" (AFIUPHPWQ) was used to obtain data from the selected respondents. The questionnaire consists of two (2) sections (sections A and B); section A consists of 5-items on socio-demographic characteristics of the respondents; and section B consists of 5-items on accessibility of primary health care facilities. A four-point modified Likert scale will score as follows: strongly Agreed, 4 points. Agreed 3 points, disagreed 2 points, and strongly disagreed 1 point at a decision mean of 2.50.

An introductory letter was submitted to the office of the Director of Primary Health Care in Birnin Kebbi Local Government Area, for permission to carry out the study. The office was also given another introductory letter to the person in charge of the selected health facilities in Birnin Kebbi Local Government Area. Following the receipt of the letter of approval, the researcher sent a letter to the selected health facilities prior to conducting the study. Two hundred (200) copies of the questionnaire were administered to the participants in their respective ANC health facilities with help of four (4) research assistants were trained on how to administer and retrieve the instruments and the exercise lasted for 2-weeks.

Simple frequencies and percentages were used to organize and described the socio-demographic characteristics of the respondents, descriptive statistic of mean score and standard deviation was used to answered the research questions at 2.50 decision mean

Result

Research Question: Is accessibility a factor influencing the utilization of primary health care facilities among pregnant women in Birnin Kebbi Local Government Area of Kebbi State?

Table 2: Accessibility of primary health care facilities among pregnant women in Birnin Kebbi Local Government Area of Kebbi State

S/N	Items	SA	A	D	SD	Total
1.	Accessibility significantly impacts the utilization of primary health care facilities, with proximity and ease of transportation playing crucial roles.	61 (30.0%)	99 (49.5%)	32 (16.0%)	08 (4.0%)	200 (100%)
2.	Geographic location, including rural or urban settings, often determines how accessible a health care facility is to the local population.	63 (31.5%)	91 (45.5%)	36 (18.0%)	10 (5.0%)	200 (100%)
3.	Physical barriers, such as poor road infrastructure, can hinder individuals from reaching primary health care services.	67 (33.5%)	93 (46.5%)	34 (17.0%)	06 (3.0%)	200 (100%)
4.	Socioeconomic factors, including the cost of travel and time required, can limit access to primary health care facilities.	68 (34.0%)	93 (46.5%)	31 (15.5%)	08 (4.0%)	200 (100%)
5.	Availability of services, such as operating hours and emergency care, further affects the perceived accessibility and utilization of these facilities.	67 (33.5%)	93 (46.5%)	34 (17.0%)	06 (3.0%)	200 (100%)

The findings presented on Table 2 shows the frequencies count and percentages of responses regarding the accessibility a factor influencing the utilization of primary health care facilities among pregnant women in Birnin Kebbi Local Government Area of Kebbi State. The table demonstrates that the out of 200 respondents 08 (4.0%) strongly disagree, 32(16.0%) disagree but majority of respondents 99(49.5%) agree while 61(30.0%) strongly agree with the accessibility significantly impacts the utilization of primary health care facilities, with proximity and ease of transportation playing crucial roles.

The table also indicated that the out of 200 respondents 10(5.0%) strongly disagree, 36(18.0%) disagree but majority of respondents 91(45.5%) agree and 63(31.5%) strongly agree with the geographic location, including rural or urban settings, often determines how accessible a health care facility is to the local population. The table also revealed that the out of 200 respondents 06 (3.0%) strongly disagree, 34(17.0%) disagree but majority of respondents 93(46.5%) agree while 67(33.5%) strongly agree with the physical barriers, such as poor road infrastructure, can hinder individuals from reaching primary health care services.

The table also revealed that the out of 200 respondents only 08 (4.0%) strongly disagree, 31(15.5%) disagree but majority of respondents 93(46.5%) agree and 68(34.0%) strongly agree with the socioeconomic factors, including the cost of travel and time required, can limit access to primary health care facilities. The table also shows that the out of 200 respondents only 06 (3.0%) strongly disagree, 34(17.0%) disagree but majority 93(46.5%) agree and 67(33.5%) strongly agree with the availability of services, such as operating hours and emergency care, further affects the perceived accessibility and utilization of these facilities.

Discussions

The outcome of this study revealed that accessibility is a factor influencing the utilization of primary health care facilities among pregnant women in Birnin Kebbi Local Government Area of Kebbi State. This is in line with study conducted by Akinyemi, and Owoaje (2022) how accessibility affects the utilization of PHC services among pregnant women in Northern Nigeria and the results of the study revealed that low accessibility significantly decreases ANC attendance and skilled birth deliveries. Approximately 58% of respondents reported avoiding PHC visits due to long travel distances, while 47% cited high transportation costs as a deterrent. Interviews with health workers also highlighted inconsistent service availability and long wait times as contributing factors. The study recommends community-based interventions, mobile health clinics, and improved road networks to enhance maternal health service utilization.

Conclusion

Based on the findings of this study, it was concluded that the utilization of primary health care facilities among pregnant women in Birnin Kebbi Local Government Area of Kebbi State is influenced by the accessibility of these facilities.

Recommendation

Based on the findings of this study, it is recommended that the government establish additional primary health care facilities in underserved areas to reduce travel distances for pregnant women. Enhancing public transportation systems and providing subsidized or free transport services specifically for pregnant women accessing health care facilities should be prioritized. Furthermore, implementing community outreach programs, such as mobile clinics, can help serve remote or hard-to-reach areas effectively.

REFERENCES

- Abdullahi, H. M., & Usman, N. O. (2022). Attitude and utilization of postnatal care services among women of reproductive age in the rural and urban communities in Northern Nigeria. *Calabar Journal of Health Sciences*, 6(2), 72-79.
- Adeloye, D., David, R. A., Aderemi, A. V., Iseolorunkanmi, A., & Ezechi, O. (2017). Health workforce and governance: The crisis in Nigeria. *Human Resources for Health*, 15(1), 20-32.
- Akinyemi, J. O., & Owoaje, E. E. (2022). The accessibility affects the utilization of PHC services among pregnant women in Northern Nigeria. *African Journal of Reproductive Health*, 26(4), 112-125.
- Akinyemi, J. O., Adedini, S. A., & Odimegwu, C. (2021). Distance to health facilities and maternal health service utilization in Nigeria: Evidence from the 2018 Demographic and Health Survey. *BMC Health Services Research*, 21(1), 1-13.
- Babalola, S., & Fatusi, A. (2009). Determinants of use of maternal health services in Nigeria—Looking beyond individual and household factors. *BMC Pregnancy and Childbirth*, 9(5), 43-55.
- Ejembi, C. L., Alti-Muazu, M., Chirdan, O., Ezech, H. O., Sheidu, S., & Dahiru, T. (2024). Utilization of maternal health services by rural Hausa women in Zaria environs, northern Nigeria: Has primary health care made a difference? *Journal of Community Medicine and Primary Health Care*, 16(2), 47-54.

- Ibrahim, S. M., & Yahaya, S. (2021). Health facility accessibility and maternal health outcomes in Northern Nigeria: A socio-spatial analysis. *PLOS One*, 16(5), 25-45.
- Idris, S. H., Sambo, M. N., & Ibrahim, M. S. (2021). Barriers to utilisation of maternal health services in a semi-urban community in northern Nigeria: The clients' perspective. *Nigerian Medical Journal*, 54(1), 27-32.
- McCombes, S. (2020). *How to write a research methodology*. Scribbr. Retrieved from <https://www.scribbr.com/methodology/>
- Okeke, E. N., Wagner, Z., & Abubakar, I. (2020). Maternal health care seeking behavior in Nigeria: The role of affordability, availability, and accessibility. *Health Policy and Planning*, 35(1), 1-10.
- United Nations, Department of Economic and Social Affairs, Population Division. (2024). *World Population Prospects 2024: Summary of Results*. Retrieved from https://population.un.org/wpp/assets/Files/WPP2024_Summary-of-Results.pdf
- World Health Organization. (2020). *Women of reproductive age (15-49 years) population (thousands)*. Retrieved from <https://platform.who.int/data/maternal-newborn-child-adolescent-ageing/indicator-explorer-new/mca/women-of-reproductive-age-%2815-49-years%29-population-%28thousands%29>