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Assessment of Utilization of Primary Health Care Services and Quality Health System Among Inhabitants of Wukari Local Government, Taraba State, Nigeria

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Abstract

This study assesses the utilization of Primary Health Care (PHC) services and the perceived quality of the healthcare system among residents of Wukari Local Government Area, Taraba State, Nigeria. While the presence of health facilities is crucial, access and utilization are influenced by a range of socioeconomic factors. Using a cross-sectional survey design, the demographic analysis revealed that the majority of respondents (59%) were aged 20–39 years, with 58% female and 42% male participants. Educational levels varied, with 37% having secondary education, 27% primary education, 20% no formal education, and 16% tertiary education. Marital status data showed 52% were single, 32% married, and 16% divorced, while religious affiliation indicated that 54% were Christians, 32% practiced African traditional religions, and 14% were Muslims. Occupationally, 53% were farmers, 26% civil/public servants, 13% artisans, and 7% petty traders. Findings revealed that major barriers to PHC utilization included inadequate staffing (90%), high drug costs (95%),

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long waiting times (80%), poor staff attitudes (85%), and long distances to health facilities (70%). Notably, 75% of respondents did not consider staff incompetence a major issue. Regarding satisfaction, high levels of dissatisfaction were recorded with service charges (75%), drug supply (90%), treatment modalities (60%), chronic disease management (95%), child care services (87.5%), antenatal care (90%), and delivery services (87.5%). Chi-square analysis showed a statistically significant relationship between PHC facility-related factors and service utilization ($\chi^2 = 250.7$, $df = 18$, $p < 0.001$). The study concludes that despite the availability of PHC facilities, critical issues such as cost, accessibility, quality of care, and staff performance hinder effective utilization. It recommends targeted policy interventions to improve staffing, service delivery, affordability, and access to ensure equitable and efficient primary healthcare in Wukari.

Keywords: Primary Health Care; Health Service Utilization; Access Barriers; Healthcare Quality; Wukari; Socioeconomic Determinants

INTRODUCTION

Primary Health Care (PHC) forms the backbone of an effective health system, offering essential, affordable, and accessible services especially in rural and underserved communities (WHO, 2018). Primary Health Care (PHC) is a cornerstone of modern healthcare, offering a comprehensive, patient-centered approach that ensures coordinated care across various medical specialties and effective patient follow-up. According to AlOmar *et al.*[1], high-quality PHC that aligns with patient needs and expectations leads to stronger systems and greater satisfaction. As the first point of contact with the national health system, PHC's accessibility especially to the poor and remote populations makes it the most vital and relevant component of Nigeria's three-tier healthcare structure, as emphasized by the World Health Organization [2].

The use of Primary Health Care (PHC) services by communities depends on several influencing factors. The core objective of PHC is to ensure universal access to essential health services that meet the most pressing health needs [3]. Over the past four decades, PHC has undergone significant global development. In Nigeria, PHC implementation began in 1992 at the local government level, making the country one of the first developing nations to decentralize basic healthcare delivery through LGAs. This approach was rooted in the 1988 National Health Policy, which emphasized a shared

responsibility between the government and citizens to provide a comprehensive health care system [4].

A key challenge facing Primary Health Care (PHC) in Nigeria is the lack of adequate infrastructure. Many PHC facilities, especially in rural areas, operate without basic necessities like electricity, clean water, and functional medical equipment, which undermines the quality of care. Some centers are housed in dilapidated buildings or suffer from limited space, resulting in overcrowding and poor service delivery. The absence of proper sanitation facilities also raises the risk of infections and worsens health outcomes [5].

Primary Health Care (PHC) utilization in Nigeria is hindered by a shortage of skilled health personnel. Many facilities lack enough doctors, nurses, midwives, and community health workers to serve their communities, especially in rural areas like Wukari Local Government. The situation is worsened by the migration of health workers to urban centers in search of better job opportunities and working conditions. This results in long wait times, poor service delivery, and increased stress on the limited staff, which discourages patients from using PHC services [6]. Inadequate funding remains a major obstacle to the effective operation of Primary Health Care (PHC) in Nigeria. Despite government efforts, many PHC centers lack the financial resources needed for essential drugs, equipment, and supplies. Frequent stockouts force patients to buy medications from private pharmacies, making care unaffordable for low-income families [7].

Access to Primary Health Care (PHC) remains a major barrier to utilization, especially in rural areas like Wukari. Poor road infrastructure and long distances to facilities discourage timely healthcare-seeking. Some patients travel several kilometers to reach the nearest center a serious challenge for pregnant women, the elderly, and people with disabilities. The absence of a strong referral system worsens the issue, making it difficult for those needing specialized care to access secondary or tertiary facilities [8].

Socio-cultural factors significantly influence the use of Primary Health Care (PHC) services. In many rural communities, traditional beliefs lead people to prefer herbal remedies, spiritual healing, or traditional birth attendants over modern medical care. Cultural misconceptions also prevent some women from accessing maternal and reproductive health services, contributing to high maternal and infant mortality [9]. Despite existing challenges, Primary Health Care (PHC) remains central to Nigeria's health system

and efforts toward universal health coverage. Initiatives like the Basic Health Care Provision Fund (BHCPF) have been launched to improve PHC financing and service delivery [10].

In Wukari Local Government, evaluating the utilization and quality of Primary Health Care (PHC) services is key to identifying gaps and areas for improvement. Like many rural areas in Nigeria, Wukari faces challenges such as high disease burden, poor infrastructure, and limited access to care. Gaining insight into the factors affecting PHC use and patient satisfaction will help policymakers and stakeholders implement targeted strategies to enhance health outcomes. Strengthening PHC is also vital for achieving health-related Sustainable Development Goals (SDGs), which are closely tied to other goals such as poverty reduction, quality education, decent work, reduced inequality, and climate resilience.

Given the critical role of PHC in providing essential health services, it is necessary to assess the level of utilization and the quality of the health system in Wukari. Understanding the factors influencing PHC utilization and identifying gaps in service delivery will provide valuable insights for policymakers and health administrators to improve health care access and outcomes in the region. Therefore the study aimed to assess the utilization of Primary Health Care (PHC) services and evaluate the quality of the health system among the inhabitants of Wukari Local Government, Taraba State, Nigeria.

MATERIALS AND METHODS

Study Design

This study adopted a descriptive cross-sectional research design to assess the utilization of primary health care (PHC) services and the quality of the health system among inhabitants of Wukari Local Government, Taraba State, Nigeria. The cross-sectional approach was considered appropriate as it allowed for data collection at a single point in time, providing insights into the current state of PHC service utilization and quality perception. The study population consisted of residents of Wukari Local Government who accessed or had previously accessed PHC services. A multi-stage sampling technique was used to select participants, ensuring representation across different communities and demographic groups.

Study Population

The study population comprises the inhabitants of Wukari Local Government Area (LGA), Taraba State, Nigeria, who either utilize or have access to Primary Health Care (PHC) services. Wukari LGA is a diverse region with a mix of urban, semi-urban, and rural communities, each with different levels of access to health care services. Understanding the utilization of PHC in this area requires studying various demographic groups, including health care users, service providers, and key stakeholders. The primary group of interest consists of residents of Wukari LGA, who seek health care services at PHC facilities. This includes individuals from different age groups, genders, occupations, and socioeconomic backgrounds, as their experiences and perceptions will provide insights into the factors influencing PHC utilization. Another important segment of the study population includes health care workers, such as doctors, nurses, midwives, community health extension workers (CHEWs), and other medical personnel who provide PHC services.

Sample Size and Sampling Technique

The desired sample size for this study was determined using Taro Yamane's formula, which is widely used to calculate sample size based on a known population. The total population of Wukari Local Government Area (LGA) is estimated to be 241,546 (according to the 2006 National Population Census, with projected growth). To ensure a statistically representative sample, the Taro Yamane formula is applied as follows:

$$n = \frac{N}{1 + N\,(e)^2}$$

Were:

n = the sample size

N = the population sample size

e = the acceptable sampling error

95 percent level of significance p = 0.05

$$n = \frac{241{,}546}{1+241{,}546(0.052)241{,}546}$$

$$\frac{241{,}546}{1+241{,}546(0.052)241{,}546}$$

n = 200

From the sample size determined above, a total number of 200 questionnaires shall be administered for the purpose of this research study, which comprises our sample population.

Instrument for Data Collection

The instrument for data collection was a semi-structured questionnaire which was developed in part by the researcher, while some part was adapted from the World Bank working paper of improving Primary Health Care Delivery in Nigeria, Evidence from Four States [11]. The questionnaire was divided into two sections A-B. It was distributed to sampled respondents on the day of data collection in the selected communities, and the filled questionnaire was retrieved immediately. Trained nurses who were recruited from PHCs in the selected communities assisted the researcher in the distribution of the questionnaires.

Method of Data Analysis

The data were analyzed with Statistical Package for Social Sciences (SPSS) version 15.0 (IBM Corp., Chicago, USA). Results were presented in frequency tables and inferential statistics; Chi-square was used to test hypothesis set at $P< 0.05$.

Inclusion and Exclusion Criteria

To ensure the study focused on relevant participants, specific inclusion and exclusion criteria were established. These criteria helped to define the population under investigation and maintain the validity and reliability of the study findings.

Inclusion Criteria

Participants were included in the study based on certain conditions. Firstly, only individuals who were residents of Wukari Local Government Area were eligible to participate. This ensured that the study focused on those directly affected by the primary health care (PHC) services in the region. Additionally, only individuals who had accessed or attempted to access PHC services at least once were included, as their experiences were crucial in evaluating service utilization and quality. The study also considered only adults aged 18 years and above, as they were deemed capable of providing informed consent and reliable responses. Furthermore, health care providers working in PHC facilities, including doctors, nurses, midwives, and community health officers, were included to provide professional insights into service delivery and challenges. Lastly, only individuals who

willingly consented to participate were included to ensure ethical compliance and voluntary involvement in the study.

Exclusion Criteria

Certain individuals were excluded from the study to maintain the focus on relevant respondents. Non-residents of Wukari Local Government Area were not considered, as their experiences with PHC services might not reflect the realities of the local population. Additionally, individuals who had never accessed or attempted to access PHC services were excluded, as their input would not align with the study objectives. Children and minors below the age of 18 were not included unless they were represented by a guardian providing relevant information on their behalf. Similarly, severely ill or cognitively impaired individuals who were unable to provide reliable responses were excluded to maintain the accuracy of the data collected. Finally, individuals who refused to give consent or withdrew their participation at any stage were not included in the study.

Ethical Consideration

This study was conducted in strict adherence to ethical principles to protect participants' rights, dignity, and well-being. Ethical approval was obtained from the relevant institutional review board to ensure compliance with established guidelines. Participants were fully informed about the study's purpose and procedures, and written or verbal consent was obtained before their participation. Confidentiality was strictly maintained by anonymizing responses and securely storing data to prevent unauthorized access. Additionally, participants were assured that their involvement was voluntary, and they had the right to withdraw at any time without consequences. The study also prioritized non-maleficence by minimizing risks and ensuring that no harm physical, psychological, or social came to participants. Cultural sensitivity was observed by framing questions in a respectful and appropriate manner. Researchers remained objective and avoided conflicts of interest to uphold the integrity of the study. These ethical measures ensured a transparent and credible research process while fostering trust between researchers and participants. Ultimately, the findings aimed to contribute to the improvement of primary health care services in Wukari Local Government.

RESULTS

Table 1 shows the data on the age distribution of the respondents. The table indicates that 59.0% of the respondents are between 20 and 39 years old. Those who are < 20 years old account for 24.0 % of the respondents. A total of 12 % are those > 60 years old, while11.0 % represent those who are between 40 and 59 years old. More than half of the respondents were females accounting for 58.0%, while male account for 42.0% as shown in Table 2. Clearly indicates that 37% of the respondents had attained secondary education, 27% attained primary education, and 20% respondent attained no formal education at all while 16% attained tertiary education as represented in Table 3.

Table 1: Age distribution of respondents

Age				
	Frequency	**Percent (%)**	**Valid Percent**	**Cumulative Percent**
<20	48	24.0	24.0	24.0
20 – 39	118	59.0	59.0	83.0
40 – 59	22	11.0	11.0	94.0
>60	12	6.0	6.0	100.0
Total	200	100.0	100.0	

Table 2: Gender distribution of respondents

Gender				
	Frequency	**Percent (%)**	**Valid Percent**	**Cumulative Percent**
Male	84	42.0	42.0	42.0
Female	116	58.0	58.0	100.0
Total	200	100.0	100.0	

Table 3: Educational status distribution of respondents

Educational status				
	Frequency	**Percent (%)**	**Valid Percent**	**Cumulative Percent**
No formal education	40	20.0	20.0	20.0
Primary	54	27.0	27.0	47.0
Secondary	74	37.0	37.0	84.0
Tertiary	32	16.0	16.0	100.0
Total	200	100.0	100.0	

Table 4 presents marital status distribution of respondents. The table shows that 52% of the respondents are single, 32% married and 16% divorced. Table 5 depicts the Religion distribution of respondents where 54% of the respondents are Christians, 32% African tradition and 14% Muslims. Table 6 shows occupational distribution of respondents where 53% of the respondents are farmers, 26% are civil/public servant, 13% are artisans and 7% business (petty trading). Values in parenthesis represent percentages.

Table 4: Marital status distribution of respondents

Marital status				
	Frequency	**Percent (%)**	**Valid Percent**	**Cumulative Percent**
Married	64	32.0	32.0	32.0
Single	104	52.0	52.0	84.0
Divorced	32	16.0	16.0	100.0
Total	200	100.0	100.0	

Table 5: Religion distribution of respondents

Religion				
	Frequency	**Percent (%)**	**Valid Percent**	**Cumulative Percent**
Christian	108	54.0	54.0	54.0
Islam	28	14.0	14.0	68.0
African Traditional Religion	64	32.0	32.0	100.0
Total	200	100.0	100.0	

Table 6: Occupational distribution of respondents

Occupation				
	Frequency	**Percent (%)**	**Valid Percent**	**Cumulative Percent**
Artisans	26	13.0	13.0	13.0
Farmers	106	53.0	53.0	66.0
Civil/public servants	52	26.0	26.0	92.0
Business (Petty trading)	14	7.0	7.0	99.0
31.00	2	1.0	1.0	100.0
Total	200	100.0	100.0	

Table 7 presents the perceptions of respondents regarding various factors that influence the utilization of primary health care (PHC) services. A significant majority of the respondents perceived inadequate number of staff as a major barrier to the utilization of PHC services. Specifically, 60% strongly agreed and 30% agreed with this statement, making a combined 90% in agreement. Only 10% disagreed, with 7.5% disagreeing and 2.5% strongly disagreeing. This finding highlights a widespread concern about staffing shortages, which may lead to delays and reduced quality of care.

In terms of availability of drugs, 75% of the respondents agreed (45% strongly and 30% agreed) that lack of essential drugs affects their use of PHC services. Meanwhile, 25% expressed disagreement (15% disagree and 10% strongly disagree), suggesting that although drug availability is generally viewed as inadequate, a quarter of the respondents may have

experienced otherwise or used facilities with better supply chains. The high cost of drugs was perceived as the most significant factor affecting PHC utilization, with 70% of the respondents strongly agreeing and 25% agreeing a total of 95% affirming the issue. Very few respondents disagreed (4%) or strongly disagreed (1%), indicating that affordability is a nearly universal concern and a potential deterrent to accessing needed services.

Regarding long waiting times, 80% of the participants were in agreement (50% strongly agreed and 30% agreed) that it affects their decision to use PHC services. However, 20% did not view this as a problem, showing that while waiting time is widely recognized as an issue, its impact may vary by facility or personal tolerance levels. Interestingly, incompetence of staff was not widely perceived as a problem. Only 25% (10% strongly agreed and 15% agreed) believed this to be a factor, while a majority of 75% disagreed (40% disagreed and 35% strongly disagreed). This indicates a general level of trust in the competence of healthcare workers, despite concerns about staffing levels and attitudes. On the issue of staff attitude, 85% of the respondents agreed (50% strongly and 35% agreed) that it affects service utilization. This suggests that interpersonal relations and how patients are treated are crucial components in determining whether individuals will seek care. Only 15% disagreed with this sentiment, reinforcing the importance of compassionate and respectful care. Lastly, long distance to health facilities was considered a barrier by 70% of the respondents (40% strongly agreed and 30% agreed), while 30% disagreed (20% disagreed and 10% strongly disagreed). This suggests that geographical accessibility remains a significant challenge for a large segment of the population, potentially limiting access to essential services, especially in rural or underserved areas.

Table 7: Respondent's perception of factors affecting utilization of primary health care services

Factor	SA	A	DA	SD
Inadequate number of staff	120 (60%)	60 (30%)	15 (7.5%)	5 (2.5%)
Lack of drugs	90 (45%)	60 (30%)	30 (15%)	20 (10%)
High cost of drugs	140 (70%)	50 (25%)	8 (4%)	2 (1%)

Factor	SA	A	DA	SD
Long waiting time	100 (50%)	60 (30%)	25 (12.5%)	15 (7.5%)
Incompetent staff	20 (10%)	30 (15%)	80 (40%)	70 (35%)
Attitude of staff	100 (50%)	70 (35%)	20 (10%)	10 (5%)
Long distance to facility	80 (40%)	60 (30%)	40 (20%)	20 (10%)

Values in parenthesis represent percentages

Table 8: presents respondents' level of satisfaction with Primary Health Care (PHC) services. A majority of the respondents expressed dissatisfaction with the amount charged for services, as 40% disagreed and 35% strongly disagreed with the statement that they were satisfied with service charges. Only 25% were in agreement (10% strongly agreed and 15% agreed), indicating that the cost of accessing care remains a substantial concern for most service users. The supply of drugs at PHC centers was another area of significant dissatisfaction. Half of the respondents (50%) disagreed, and 40% strongly disagreed that the drug supply met their expectations. Only 10% of respondents expressed satisfaction (5% strongly agreed and 5% agreed). This shows that inadequate drug supply is a widespread and persistent issue that negatively affects patient satisfaction and service utilization.

In terms of treatment modalities, which refer to the effectiveness and appropriateness of medical interventions, the response was somewhat more balanced. A total of 40% expressed satisfaction (15% strongly agreed and 25% agreed), while a larger portion (60%) remained dissatisfied (35% disagreed and 25% strongly disagreed). This suggests that while some patients perceive the treatments to be satisfactory, a majority feel there is still room for improvement. The management of chronic diseases at PHC centers received overwhelmingly negative feedback. Only 5% of respondents strongly agreed and another 5% agreed that chronic conditions were being well-managed. A combined 95% (45% disagreed and 50% strongly disagreed) were dissatisfied, indicating a critical gap in service delivery for patients with long-term health issues. Similarly, respondents were largely unsatisfied with child care services. Only 12.5% indicated satisfaction (7.5% strongly

agreed and 5% agreed), while 87.5% expressed dissatisfaction (45% disagreed and 42.5% strongly disagreed). This finding is concerning given the importance of child health services in reducing infant and child morbidity and mortality.

The situation is also poor concerning antenatal care services. A mere 10% of respondents expressed satisfaction (5% strongly agreed and 5% agreed), while a striking 90% (50% disagreed and 40% strongly disagreed) reported dissatisfaction. This suggests that pregnant women are not receiving the level of care they expect or need, potentially putting maternal and fetal health at risk. Lastly, satisfaction with delivery services was similarly low, with only 12.5% of respondents (5% strongly agreed and 7.5% agreed) expressing contentment. An overwhelming 87.5% (45% disagreed and 42.5% strongly disagreed) reported dissatisfaction. This may reflect issues such as inadequate staffing, poor facilities, lack of skilled birth attendants, or unavailability of essential supplies during delivery. Table 4.9 shows the test of hypothesis using chi square and it is observed that the critical value of chi square 29.955 at 6 degree of freedom and 0.05 level of significance given as 12.592 (table value) accept the substantive hypothesis. This proves that factors at the primary health care facility have significant impact on service utilization.

Table 8: Level of satisfaction of PHC services

Satisfaction Statement	SA	A	DA	SD
I am satisfied with the amount charged for PHC services	20 (10%)	30 (15%)	80 (40%)	70 (35%)
The supply of drugs at the PHC center meets my expectations	10 (5%)	10 (5%)	100 (50%)	80 (40%)
The treatment modalities used at the PHC center are effective and satisfactory	30 (15%)	50 (25%)	70 (35%)	50 (25%)
The PHC center provides good management of chronic diseases	5 (2.5%)	5 (2.5%)	90 (45%)	100 (50%)
I am satisfied with the child care services provided at the PHC center	15 (7.5%)	10 (5%)	90 (45%)	85 (42.5%)
The antenatal care services at the PHC center are adequate and satisfactory	10 (5%)	10 (5%)	100 (50%)	80 (40%)
I am satisfied with the delivery services provided at the PHC center	10 (5%)	15 (7.5%)	90 (45%)	85 (42.5%)

Values in parenthesis represent percentages

Test of Hypothesis

H_0: The factors at the health facility level have no significant impact on service utilization

Table 9 Test of Hypothesis

Factor	SA	A	DA	SD
Inadequate number of staff	120 (60%)	60 (30%)	15 (7.5%)	5 (2.5%)
Lack of drugs	90 (45%)	60 (30%)	30 (15%)	20 (10%)
High cost of drugs	140 (70%)	50 (25%)	8 (4%)	2 (1%)
Long waiting time	100 (50%)	60 (30%)	25 (12.5%)	15 (7.5%)
Incompetent staff	20 (10%)	30 (15%)	80 (40%)	70 (35%)
Attitude of staff	100 (50%)	70 (35%)	20 (10%)	10 (5%)
Long distance to facility	80 (40%)	60 (30%)	40 (20%)	20 (10%)

$\chi^2 = 250.7$, df = 18, P-value = $p < 0.001$

Since p-value < 0.05, we reject H_0. There is a statistically significant relationship between the health facility factors (like staff adequacy, drug availability, cost, and waiting times) and service utilization. This indicates that these factors do significantly influence whether or not people use health services.

DISCUSSION

The study revealed several critical insights into the utilization and satisfaction levels with primary health care (PHC) services in Wukari. Demographically, the majority of respondents were young adults aged 20–39 years (59.0%), predominantly female (58.0%), single (52%), Christian (54%), and farmers (53%). A significant portion (37%) had attained secondary education. These characteristics reflect the typical population of Wukari, where farming is a primary occupation, and Christianity is the dominant religion.

Respondents identified multiple factors affecting PHC utilization. Inadequate staffing (90%), high drug costs (95%), long waiting times (80%), poor staff attitudes (85%),

and long distances to health facilities (70%) were widely acknowledged as barriers. Interestingly, only 25% agreed that staff incompetence was a major issue, suggesting that while healthcare workers are generally seen as competent, systemic issues hinder service delivery. Satisfaction levels with PHC services were notably low. A large majority of respondents (75%) expressed dissatisfaction with the cost of services, while 90% were unhappy with drug availability. Only 10% were satisfied with the management of chronic diseases, and just 12.5% expressed satisfaction with child health services. Antenatal and delivery services were also poorly rated, with 90% and 87.5% dissatisfaction, respectively. These findings point to significant deficiencies in maternal and child healthcare services, which could pose serious risks to health outcomes. Hypothesis testing confirmed a significant impact of PHC facility factors on service utilization, emphasizing the need for urgent health system improvements.

It has been observed from this study that more than half (59.0%) of the respondents were between 20 and 39 years old. This is consistent with the report of Ibebuike *et al.* [12] in Calabar. This high percentage of young adults could be attributed to their educational level and knowledge of preventive health care, and most adults within that age group are newly married or just less than 5 years in marriage, resulting in frequent hospital visits and basically the primary health care facilities. More than half of the respondents were female, accounting for 58.0%; 52% of the respondents were single; 54% of the respondents were Christians; 53% of the respondents were farmers; and 37% of the respondents had attained secondary education. This is not in agreement with the report of Agofure and Sarki [13], which reported that most of his respondents are married and civil servants. Adam *et al.* [14] reported that almost half of the respondents had at least one primary level of education: 142 (49.8%), and the majority were Christians: 218 (76.5%). The high percentage of farmers among respondents could be attributed to the fact that the primary heritage of the Wukari population is farming and the lack of industries and factories, resulting in a high level of unemployment. Wukari is a Christian-dominated local government, which accounts for the high percentage of Christians in the study area.

The respondents agreed that several factors affect the utilization of primary health care services: 90% agreed that inadequate staffing is a barrier, 95% agreed on high drug costs, 80% agreed on long waiting times, 85% agreed on poor staff attitudes, and 70% agreed that long distances to health facilities impact access, while only 25% agreed that staff incompetence is a major issue. This is in agreement with the reports of Ibebuike *et*

al. [12], Agofure and Sarki [13], Azuh *et al.* [15], and Sule *et al.* [16]. Lack of drugs and high cost of drugs are factors that can influence the choice of seeking healthcare among respondents. The significant percentage of respondents who acknowledged this factor's significance shows how crucial cost is to the provision of basic healthcare. Nigeria, an oil-producing country, has challenges from a burgeoning economy that just went into recession. The federation's states are all impacted by the economic difficulties. The high cost of medications and services may be the reason why most people cannot afford to visit hospitals for medical care; instead, they choose to self-medicate or participate in unhealthy traditional health practices that could jeopardize their lives. A respectable proportion of respondents (95%) also mentioned high drug costs as a contributing factor. This is a crucial observation made by the participants.

The findings from this study on the level of satisfaction with PHC services highlight critical issues affecting the accessibility, affordability, and effectiveness of PHC services, emphasizing the urgent need for improvements in healthcare delivery. 95% of respondents were dissatisfied with the cost of PHC services, indicating that affordability is a major barrier to healthcare access. Showing that many residents, particularly those from low-income backgrounds, avoid seeking medical care due to financial constraints. The high cost of services often forces people to rely on traditional medicine, self-medication, or delay seeking medical attention, which can result in complications and increased morbidity rates. To improve PHC utilization in Wukari and similar regions, government intervention in subsidizing healthcare costs, implementing health insurance schemes, and offering free or low-cost essential services for vulnerable populations is necessary.

The findings of the study also reveal widespread dissatisfaction among respondents regarding various aspects of primary health care (PHC) services. A significant concern was the cost of services, with 75% of respondents (40% disagreed and 35% strongly disagreed) expressing dissatisfaction with service charges, and only 25% indicating satisfaction. This highlights that affordability remains a key barrier to accessing care for many users. Another major area of concern was the supply of drugs in PHC centers. A vast majority of respondents 90% (50% disagreed and 40% strongly disagreed) were dissatisfied with drug availability, while only 10% reported satisfaction. This underscores a critical issue in drug supply management that directly affects both patient satisfaction and the likelihood of seeking care.

Regarding treatment modalities, which reflect the effectiveness of medical interventions, responses were more mixed. While 40% of respondents (15% strongly agreed and 25% agreed) expressed satisfaction, a larger proportion 60%, remained dissatisfied. This suggests that although some patients find the treatments acceptable, many believe there is still significant room for improvement.

The management of chronic diseases emerged as one of the most poorly rated aspects of PHC services. Only 10% of respondents expressed satisfaction, while an overwhelming 95% (45% disagreed and 50% strongly disagreed) were dissatisfied. This points to a serious gap in the capacity of PHC centers to provide continuous and effective care for patients with long-term health conditions.

Child health services also received low satisfaction ratings. Just 12.5% of respondents expressed satisfaction, compared to 87.5% who were dissatisfied. This is particularly concerning given the critical role of PHC in promoting child health and preventing infant and child mortality. Similarly, antenatal care services were poorly rated, with only 10% of respondents expressing satisfaction, while 90% were dissatisfied. This suggests that many pregnant women are not receiving the necessary care and support during pregnancy, which can pose risks to both maternal and fetal health.

Delivery services were also rated poorly. Only 12.5% of respondents were satisfied, whereas 87.5% reported dissatisfaction. This likely reflects challenges such as inadequate staffing, poor infrastructure, and lack of essential supplies or skilled birth attendants, all of which can compromise the safety and quality of maternal care. These findings point to significant deficiencies across multiple areas of PHC service delivery, emphasizing the urgent need for systemic improvements to ensure accessible, affordable, and high-quality care for all.

To improve maternal and child healthcare in Wukari and similar regions, the government and stakeholders must ensure skilled birth attendants are available at PHC centers, improve antenatal and postnatal care services through regular check-ups, counseling, and nutrition support, increase community awareness programs to encourage women to seek professional maternal healthcare instead of home births and provide incentives for pregnant women to attend healthcare facilities for safe deliveries.

CONCLUSION

This study identifies inadequate staffing, high costs of services and medications, limited drug availability, and poor maternal and child healthcare as major barriers impacting service utilization and the quality of health system of primary health care centers in Wukari. Addressing these challenges is essential to improving health outcomes in the community. Therefore, strategic interventions such as increased government funding, the establishment and expansion of health insurance schemes, and the strengthening of drug supply chains are imperative. These measures will help enhance access to affordable, reliable, and quality primary health care services, ultimately contributing to better health and well-being for the people of Wukari.

Recommendations

1. The government should subsidize healthcare costs to make services more accessible, especially for low-income individuals and vulnerable populations.
2. Implement community-based health insurance schemes to reduce out-of-pocket expenses and encourage more people to seek medical care.
3. Periodic studies such as this that exposes some of the major barriers to the use of services from the perspective of the end user could assist in guiding policy formulations and decision making to ensure that primary health care remains the fulcrum of all health policies in Nigeria.

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