

PROVISION AND AVAILABILITY OF PRIMARY HEALTHCARE SERVICES IN WUKARI, TARABA STATE

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Abstract - The study investigated the provision and availability of primary health care (PHC) in Wukari LGA of Taraba State. To achieve the purpose of study, two research questions were utilized for the study. The study adopted descriptive cross sectional research design. The population for the study consisted of all the 380 healthcare workers in Wukari LGA of Taraba State. The whole population of the HCWs was used in the study as it was small and accessible to the researcher. The instrument used for data collection was Primary Health care Service Provision and Availability Checklist (PHCSPAC). The face validity of the instrument was by five public health experts. The Cronbach Alpha statistic was used to ascertain the reliability coefficient. The questionnaire yielded a high reliability coefficient of 0.82. The research questions were analyzed using frequencies, percentages, means and standard deviations. The findings of the study were as follows: Health care workers (HCWs) reported that PHC services were provided to a moderate extent and overall, 60.2 percent of HCWs reported that PHC services were available. Based on the findings of this study, the researcher recommended among others that the government should ensure that all PHC facilities are fully operational by ensuring the provision and availability of adequate essential drugs and equipment.

Keywords: Provision, availability, primary, healthcare, services, Wukari

Introduction

Primary healthcare in Nigeria is a significant concern, with the country bearing a substantial burden of global health issues. Communicable and non-communicable diseases are among the top 10 causes of death globally. Specifically, Nigeria accounts for 27% of global malaria cases and the country is among the top 10 countries contributing to 80% of tuberculosis cases, and carries 40% of Africa's neglected tropical diseases burden (WHO, 2025). Globally, over 600,000 women die annually from preventable deaths due to inadequate medical care or unsafe childbirth practices. Conversely, vaccines prevent approximately 2.5 million deaths among children under five each year [Chowdhury & Puthuchira Ravi, 2022]. However, about 20% of children worldwide lack access to adequate provision of life-saving vaccinations. The WHO ranked Nigeria's healthcare 157th out of 191 countries globally (WHO, 2022). Nigeria has one of the world's highest child mortality rates, with approximately 85 out of 1,000 live births resulting in death before age five (UNICEF, 2023). Furthermore, over 30% of children under five suffer from stunting due to poor nutrition. Primary Health Care (PHC) services in Nigeria face significant challenges, including staffing shortages, non-availability of adequate equipment distribution, poor infrastructure quality, insufficient drug supplies, and non-availability of medical personnel (Oluwadare et al., 2023).

Nigeria's primary healthcare faces ongoing challenges, including ineffective governance, inadequate funding, and shortages of skilled professionals. Despite the 2001 Abuja Declaration's aim to allocate 15% of the national budget to healthcare, actual spending has averaged only 5% since 2001 (Idris & Olokeogun, 2024; National Primary Health Care Development Agency, 2020; Efe, 2013). This has resulted in inadequate

infrastructure, disparities in healthcare provision and quality, and poor rural healthcare facilities (Ayodeji, 2019). Rural areas, home to over 60% of Nigeria's population, struggle with poor infrastructure, worse health outcomes, and higher maternal mortality rates (World Bank Group, 2021). In 2022, Nigeria's national budget allocated only 5.7% to healthcare, exacerbating gaps in primary healthcare quality and availability (WHO, 2022).

Primary healthcare (PHC) provides essential medical services, focusing on health promotion, disease prevention, and treatment. PHC aims to ensure the highest possible level of health and well-being, with equitable distribution, as close to people's everyday environment as possible (World Health Organization & UNICEF, 2018). It comprises essential components, which include education, disease control, immunization, maternal and child health, essential drugs, nutrition, and safe water and sanitation (Public Health Nigeria, 2022). Equity is crucial, ensuring access to healthcare regardless of financial status or location (Dada, 2023). The Alma Ata Conference defines PHC as essential, universally accessible, and socially acceptable healthcare, integral to the country's health system and overall social and economic development (Public Health Nigeria, 2022). Nigeria needs to increase healthcare expenditure to achieve the Abuja Declaration's objectives and improve health outcomes (Idris & Olokeogun, 2024). Funding gaps hinder comprehensive and equitable healthcare, and primary health Care (PHC) facility functionality varies across geographical zones (Idris & Olokeogun, 2024). Reforms, such as the National Health Insurance Authority (NHIA) Act (2022), aim to address these issues [Ogundeji et al., 2023]. Best practices in healthcare services involve facility-level (service rosters, skilled staff, training) and community-level (health education, outreach programs) initiatives [Ogah et al., 2024]. Adequate technical and financial support is necessary for PHC success (Oyekale, 2017). Effective healthcare services require combining resources, including funding, personnel, equipment, and medications (Intan et al., 2016). The National Primary Health Care Development Agency (NPHCDA) emphasizes the federal government's role in providing quality PHC services.

Prior to the introduction of Primary Health Care (PHC), Nigeria's healthcare services was plagued by high infant and maternal mortality rates, with women in developing countries being the primary victims of quackery and traditional birth attendants (Oyekale, 2017). The country also struggled with high morbidity rates due to diseases like malaria, hypertension, and diabetes, which often went untreated (Oyekale, 2017). Poor vaccination rates further exacerbated the issue, leaving children vulnerable to preventable diseases like polio and measles. Financial constraints restricted outreach and health services, particularly in remote areas (Idris & Olokeogun, 2024). Despite government initiatives like the National Primary Health Care Development Agency (NPHCDA) and the National Health Insurance Scheme (NHIS), lack of funding hindered their effectiveness (Idris & Olokeogun, 2024). The shortage of adequate facilities and services resulted in poor health outcomes and reduced quality of life for citizens (Benfer, 2015). Increasing domestic healthcare spending could reduce reliance on overseas treatment and strengthen Nigeria's healthcare (Balogun, 2021). Ultimately, achieving the primary objective of Primary Health Care (PHC) services, which is to deliver high-quality, equitable healthcare that promotes social justice and respects human rights. (WHO, 2025). This study is anchored on the Structural Functionalism (SF) theory, propounded by Radcliff-Brown (1952), which explains how PHC operates within societal structures, emphasizing interdependence among various structures for optimal functioning. Therefore, for optimal functioning, there should be interrelation and interdependence between PHC and both internal and external structures.

In this study provision of primary healthcare services refers to the planning, allocation of resources, and preparation of PHC services to ensure quality healthcare delivery. While availability of primary healthcare services refers to the accessibility and affordability of PHC services to the community, implying that services are usable upon demand and functioning when needed. Despite efforts to strengthen PHC, Nigeria still faces significant challenges in providing equitable and available healthcare services, particularly in rural areas. Lack of treatment guidelines and standardized healthcare protocols is a concern (Ajike & Obot, 2021). Nigeria's primary healthcare faces challenges, including 80% under-resourced rural health facilities (Idris & Olokeogun, 2024). The provision and availability of PHCs in Wukari, Taraba State, appear inadequate, resulting in poor health outcomes and limited provision and availability of healthcare services for the population. Despite the importance of PHCs in Wukari, the challenges facing PHCs in Wukari are multifaceted and require a comprehensive approach to address them. Again, there is limited research on the extent of provision and availability of these PHC services in the area. Therefore, this study aims to bridge this knowledge gap by assessing extent of provision and availability of PHC services in Wukari, with a view to identifying the challenges which will be utilized by stakeholders in proffering solutions to improve healthcare services in the area.

Research Questions

The following research guided the study;

1. What is the extent of provision of healthcare services in Wukari?
2. What are the available healthcare services in Wukari?

Methods

The study adopted the descriptive survey research design. Nworgu (2015) identifies the design as exploratory in nature allowing easy description of phenomena at one point as they exist in their natural setting. The area of the study is Wukari LGA of Taraba State. It is one of the sixteen Local Government Areas in Taraba state. The LGA has an area of 4,308 square kilometres and a population of 318,400 as at 2006 census (National Population Commission, 2006). However, as at 2018, Wukari LGA population is 387,400 as projected by World Health Organization (2018). Its headquarters is in the town of Wukari. It is the home of the great Jukun people. Wukari LGA is bounded in the North by Ibi and Gasol LGAs, South by Ukum LGA in Benue state, West by Awe and Tunga in Nasarawa state and in the East by Donga LGA. The choice of this area of study is due to the fact that a previous study by Kress, Su and Wang (2016), reported low participation in PHC delivery services and the attendant low health indices in all the LGAs in Taraba state. In view of the above, Wukari LGA was adjudged suitable for the study on the extent of provision and availability of PHC services. The population of the study comprise of all 380 health care workers in Wukari LGA of Taraba State. According to the Office of the Deputy Director PHC system Wukari (2018), the population of healthcare workers in the health post is seventy-four (74); health clinics ninety (90); primary healthcare centres ninety-one (91) and comprehensive health centres is one hundred and twenty-five (125). There was no sampling for the health care workers since the population was small and accessible 380. The instrument used for the study was the Primary Healthcare Services Provision and Availability Checklist (PHCSPAC). The face validity of the instrument was five public health experts. The Cronbach Alpha statistic was used to ascertain the reliability coefficient. The instruments were collected on the spot and this is to ensure high return rate. The completed copies of the questionnaire were properly screened for

completeness of responses. Mean, standard deviation, frequencies and percentages were used in analyzing the generated data.

Results

Research Question One: What is the extent of provision of PHC services in Wukari LGA? Data answering this question are contained in Table 1

Table 1: Extent of Provision of PHC Services in Wukari LGA, Taraba State (n = 380)

S/N	PHC Services	$\bar{X}$	SD
	To what extent are the following PHC services provided in this community:		
	Health Education Services		
1.	Health education on ORS/Sugar salt solution and food demonstrations	3.62	.78
2.	Means/media for constant supply of current health education literature or materials (books, posters, visual aids and internet materials)	2.34	.97
	Cluster	2.98	.88
	Food and Nutrition Activities		
3.	Essential food supplements (e.g., iodized salt, Vit A capsules, Iron tablets)	3.39	.76
4.	Nutrition education programme	2.90	1.11
	Cluster	3.15	.94
	Water Supply and Basic Sanitation		
5.	Public tap/standpipe, tube well/borehole, protected dug well	2.47	1.19
6.	Planned programme package and environmental sanitation	2.85	1.11
7.	Health education programme on water borne diseases prevention, purification of water, maintains of water sources and environment.	2.74	1.24
	Cluster	2.69	1.18
	Maternal and Child Health Services		
8.	Antenatal care services	3.31	.94
9.	Delivery and newborn care services	2.84	1.11
10.	Family planning services	3.38	1.00
11.	Postnatal care services	3.30	.99
	Cluster	3.21	1.01
	Immunization Services against major Infectious Diseases		
12.	Vaccine (eg; OPV, DPT, HB, TT vaccines)	3.41	.91
13.	Other equipment's (e.g.,Refrigerator, vaccine carriers and icepacks)	2.85	.97
14.	Immunization monitoring chart (to show progress, drop out and monthly (summary)	3.12	1.10
	Cluster	3.13	.99
	Prevention and Control of Endemic Diseases		

	(PCED) such as malarial and typhoid fever		
15.	Training manual for PHC work on PCED	3.10	1.00
16.	Equipment for diagnostic tests (analysis, MP, widal test, Hb, BP Measurement)	3.08	1.16
	Cluster	3.09	1.08
	Services on Treatment of Minor Ailments and Injuries		
17.	Client examination room (running water, soap, hand rub, waste receptacles, safety bot, gloves, and disinfectants)	3.06	.99
18.	Guidelines for standard precautions or standard order	3.07	.94
	Cluster	3.07	.97
	Essential Drugs Services		
19.	Antibiotics (e.g., Amoxicillin, Ampicillin, Azithromycin and Crystallin pen.)	2.94	1.14
20.	Medicine for warm infestation (Albendazole & Mebendazole)	3.23	1.06
21.	Anti-malarial medicine (eg; Artemisinin-based combination therapy (ACT), Fansidar, quinine tablet and injectable Artesunate)	3.15	.92
22.	Medicine for MCH (e.g., Calcium gluconate injection, folic acid tablet, ferrous sulphate, ORSetc.)	3.02	.94
23.	Intravenous fluids (normal saline, ringers' lactate and 5% dextrose water)	2.99	1.24
24.	Fever and pain reducing medicine (diclofenac tablet, paracetamol tablet, syrups and injectables)	2.84	1.24
	Cluster	3.03	1.09
	Community Mental Health Personal and Resource Services		
25.	Presence of community development committee that advocate for non-conflict workplace	3.47	.90
26.	Equipment for early diagnosis and care of the mentally ill	1.94	1.01
27.	Referral chart (indicating early referral) and clients referred	2.42	1.15
	Cluster	2.61	1.02
	Dental Health Services		
28.	Sugar substitutes (eg; sweetner, hydrolyzed starch known as glucose syrup "bulk"-sorbitol mannitol)	2.79	1.43
29.	Equipment for early diagnosis of periodontal (Gum) disease	1.61	.81
	Cluster	2.20	1.12
	Grand mean	2.92	1.03

Note. $\bar{X}$ = 1.00-1.99 (Low Extent); $\bar{X}$ = 2.00-2.99 (Moderate Extent); $\bar{X}$ = 3.00-3.49 (High Extent); $\bar{X}$ = 3.50-4.00 (Very High Extent)

Results in Table 1 showed that overall, healthcare workers reported that PHC services were provided to a moderate extent (Grand $\bar{x}$ =2.92; SD=1.03). Specifically, healthcare workers indicated MCH services ($\bar{x}$ =3.21; SD=1.01), food and nutrition activities ($\bar{x}$ =3.15; SD=.94), immunization services against childhood killer diseases ($\bar{x}$ =3.13; SD=.99), PCED ($\bar{x}$ =3.09; SD=.97), and essential drugs services ($\bar{x}$ =3.03; SD=1.09) were provided to a high extent. However, PHC services such as Health education ($\bar{x}$ =2.98; SD=.88), water supply and basic sanitation ($\bar{x}$ =2.69; SD=1.18), community mental personal and resource services ($\bar{x}$ =2.61; SD=1.02), and dental health services ($\bar{x}$ =2.20; SD=1.12) were provided to a moderate extent.

Research Question Two: What are the available PHC services in Wukari LGA? Data answering this question are contained in Table 2.

Table 2: Available PHC Services in Wukari LGA, Taraba State (n = 380)

S/N	PHC Services	Yes - f(%)	No - f(%)
1	Are the following PHC services made available in this community:		
	Health Education Services		
2	Health education on ORS/Sugar salt solution and food demonstrations	288(75.8)	92(24.2)
3	Means/media for constant supply of current health education literature or materials (books, posters, visual aids and internet materials)	273(71.8)	107(28.2)
	Cluster %	73.8	26.2
4	Food and Nutrition Activities		
5	Essential food supplements (e.g., iodized salt, Vit A capsules, Iron tablets)	215(56.6)	165(43.4)
6	Nutrition education programme	254(66.8)	126(33.2)
	Cluster %	61.7	38.3
	Water Supply and Basic Sanitation		
7	Public tap/standpipe, tube well/borehole, protected dug well	194(51.1)	186(48.9)
8	Planned programme package and environmental sanitation	170(44.7)	210(55.3)
9	Health education programme on water borne diseases prevention, purification of water, maintains of water sources and environment.	231(60.8)	149(39.2)
	Cluster %	52.2	47.8
10	Maternal and Child Health Services		
11	Antenatal care services	182(47.9)	198(52.1)
12	Delivery and newborn care services	243(63.9)	137(36.1)
13	Family planning services	260(68.4)	120(31.6)
14	Postnatal care services	271(71.3)	109(28.7)
	Cluster %	62.9	37.1
15	Immunization Services against Childhood Killer Diseases		
16	Vaccines (eg; OPV, DPT, HB, TT vaccines)	173(45.5)	207(54.5)
17	Immunization scheduling chart (days and time per secession)	288(75.8)	92(24.2)

18	Other equipment (e.g., Refrigerator, vaccine carriers and icepacks	330(86.8)	50(13.2)
19	Immunization monitoring chart (to show progress, drop out and monthly (summary)	192(50.5)	188(49.5)
	Cluster %	64.7	35.3
20	Prevention and Control of Endemic Diseases (PCED) such as malarial and typhoid fever		
21	Training manual for PHC work on PCED	299(78.7)	81(21.3)
22	Equipment for diagnostic tests (analysis, MP, widal test, Hb, BP Measurement)	208(54.7)	172(45.3)
	Cluster %	66.7	33.3
23	Services on Treatment of Minor Ailments and Injuries		
24	Client examination room (running water, soap, hand rub, waste receptacles, safety boot, gloves, and disinfectants	173(45.5)	207(54.5)
25	Guidelines for standard precautions or standard order	292(76.8)	88(23.2)
	Cluster %	61.2	38.8
26	Essential Drugs Services		
27	Antibiotics (e.g., Amoxicillin, Ampicillin, Azithromycin and Crystallin pen.)	332(87.4)	48(12.6)
28	Medicine for worm infestation (Albendazole& Mebendazole)	172(45.3)	208(54.7)
29	Anti-malarial medicine (eg; Artemisinin-based combination therapy (ACT), Fansidar, quinine tablet and injectable Artesunate)	329(86.6)	51(13.4)
30	Medicine for MCH (e.g., Calcium gluconate injection, folic acid tablet, ferrous sulphate, ORSetc.)	180(47.4)	200(52.6)
31	Intravenous fluids (normal saline, ringers' lactate and 5% dextrose water	309(81.3)	71(18.7)
32	Fever and pain reducing medicine (diclofenac tablet, paracetamol tablet, syrups and injectables	164(43.2)	216(56.8)
	Cluster %	65.2	34.8
33	Community Mental Health Personal and Resource Services		
34	Presence of community development committee that advocate for non-conflict workplace	280(73.7)	100(26.3)
35	Equipment for early diagnosis and care of the mentally ill	66(17.4)	314(82.6)
36	Referral chart (indicating early referral) and clients referred	239(62.9)	141(37.1)
	Cluster %	51.3	48.7
37	Dental Health Services		
38	Sugar substitutes (eg; sweetner, hydrolyzed starch known as glucose syrup "bulk"-sorbitol mannitol	88(23.2)	292(76.8)
39	Equipment for early diagnosis of periodontal	234(61.6)	146(38.4)

(Gum) disease

Cluster %	42.4	57.6
Overall %	60.2	39.8

Results in Table 2 showed that overall, 60.2 per cent of HCWs reported that PHC services were available. Furthermore, HCWs indicated that PHC services such as health education services (73.8%), PCED (66.7%), essential drug services (65.2%), immunization services against childhood killer diseases (64.7%), MCH services (62.9%), food and nutrition activities (61.7%), treatment of minor ailments and injuries (61.2%), water supply and basic sanitation (52.2%), and community mental health personal and resource services (51.3%) were available.

Discussion

Result in Table 1 showed that overall, health care workers reported that PHC services were provided to a moderate extent. The finding is expected considering the available literature. Onyenweze (2010) revealed that all the eight components of MCHs except exclusive breast feeding were provided to a moderate extent. Supporting this, Ekwueme (2012) reported a moderate extent of provision of primary health care services at primary health care centres in Enugu, Enugu State, Nigeria. On the contrary, Inelegwu (2014) observed that provision of maternal and child health services to women of child bearing age in Benue State were not significantly adequate. Adam and Nwaogwugwu (2020) averred that the provision of the key components of Primary Health Care, including essential drug supply, oral health services, mental health services, and HIV/AIDS testing, were either inadequate or unavailable in some primary health centers. The present finding is also in support of the structural functionalism (SF) theory by Radcliff-Brown (1992) which this study was anchored on. The structural functionalism theory posits that PHC is an important institution under health structure by which individuals health needs are fulfilled. The result implies that effort is still needed to provide PHC services at a higher extent. Also the primary health care authorities should ensure that adequate provision of PHC services is a priority in view of its importance in minimizing morbidity and mortality rate. The moderate finding in this study could therefore be explained on the basis that government has started seeing the importance of these PHC services in the life of the people in the community as seen in the morbidity and mortality rate reduction. As such government has deemed it necessary to get these PHC service provided especially to the grassroots.

Result in Table 2 showed that overall, 60.2 percent of HCW's reported that PHC services were available. This finding is expected because it is in line with the earlier findings. For instance, the finding is consistent with the finding of Onunze (2013) reported moderate availability of primary healthcare services in Nsukka Health District, Enugu State. Ogah, et al. (2024) added that community-level best practices, including health education and outreach programs, improved the availability and uptake of primary healthcare services such as family planning, antenatal care, postnatal care good hygiene and nutrition. However, the findings is at variance with Oyekale (2017) reported which stated that drug and medical equipment availability increased significantly ($P < 0.05$) among states in southern Nigeria but decreased among dispensaries/health posts. Again, Oluwadare, Adegbilero-Iwari, Fasoro and Faeji (2023) opined that non-availability of medical equipment, inadequate infrastructure, and drug supply issues pose significant challenges to the use of Primary Health Care (PHC) facilities. The finding of this study implies that the percentage of health care workers that reported the availability of primary

health care services were more than average. As such it can be deduced that primary health care services are availability in the present location. Also the treatment of minor ailments and several communicable diseases will be easier thereby improving the health status of the individuals. The reasons for the finding could be explained on the bases that the health care workers were faithful enough to put in their best in making the PHC services available to the people of the community. Probably, the government might have met the needs of the PHC health workers thereby given their necessary and needed support which helped the workers to render essential services to the grassroots.

Conclusion

The finding of the study showed that there was a moderate provision of primary healthcare services. The availability of PHCs was just above average. This study is crucial as it evaluated PHC service provision and availability in Wukari, Taraba State, offering stakeholders actionable insights. Its findings will give the government and policymakers to make room for the provision of maternal and child health services, water supply and basic sanitation among others and to ensure the increased availability of essential drugs, equipment for diagnostic tests, guidelines for standard precaution among others. The findings will also give room for improvement on primary healthcare services to healthcare providers, stakeholders and health educators.

Recommendations

Based on the findings of the study, the following recommendations are made:

1. The government should guarantee the full functionality of all PHC facilities through the provision and availability of sufficient essential medicines and equipment.
2. PHC healthcare workers should receive regular training and capacity-building opportunities through programs, seminars, and workshops to improve their skills and quality of care.

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