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Assessment of Factors Affecting Utilization of Basic Healthcare Provision Fund Program at PHC Facilities in Itas/Gadau LGA Bauchi State

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Abstract

Background: The Basic Health Care Provision Fund (BHCPF) was established under section 11 of the National Health Act as a catalytic funding to improve access to primary health care. The BHCPF is derived from: (a) an annual grant from the Federal Government of Nigeria of not less than one percent (1%) of the Consolidated Revenue Fund; (b) grants by international donor partners; (c) funds from any other source, inclusive of the private sector. This study determined the factors affecting utilization of the BHCPF program at PHC facilities in Itas/Gadau LGA, Bauchi State.

Methods: The study was carried out in rural areas in Itas/Gadau Local Government Area of Bauchi State, in the north eastern part of Nigeria. A descriptive cross-sectional study design was used, with multistage sampling technique employed.

Results: The study found that the majority of workers stated that facility funding supports activities including: community prevention 250 (95.8%), purchase of essential medicines and health commodities from accredited pharmacies 212 (81.2%). The main factors affecting utilization of BHCPF at PHC facilities were: delay in releasing funds 194 (74.3%), weak financial management and accountability systems 177 (67.8%), and inadequate equipment 203 (77.8%). The majority of respondents identified the following causes of inefficiency: adequate staff numbers 215 (82.4%), awareness of periodic facility evaluations 223 (85.4%), and prior facility evaluation on BHCPF performance 215 (82.4%).

Conclusion: PHC workers are well-versed in the BHCPF project. The project funds improved facilities (equipment, drugs, renovation of structures). Primary health care facilities can utilize the BHCPF, though notable gaps remain. The need for more BHCPF training and clarification on strengthening the PHC system was expressed by 100% of respondents.

Keywords: primary health care; basic healthcare provision fund; basic minimum package of health services

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Introduction

The Basic Health Care Provision Fund (BHCPF) was established under section 11 of the National Health Act of Nigeria as a catalytic funding to improve access to primary health care. The BHCPF serves to fund a Basic Minimum Package of Health Services (BMPHS), increase the fiscal space for health, strengthen the national health system particularly at primary health care (PHC) level by making provision for routine daily operation cost of PHCs, and ensure access to health care for all, particularly the poor, thus contributing to overall national productivity (Lassi et al., 2025). The BHCPF is derived from (a) an annual grant from the Federal Government of Nigeria (FGoN) of not less than one percent (1%) of the Consolidated Revenue Fund (CRF); (b) grants by international donor partners; (c) funds from any other source, inclusive of the private sector (Abdurrahman & Royal, 2019). The Nigerian healthcare system is profoundly afflicted by a multi-

tude of systemic deficiencies and operational shortcomings, which collectively contribute to the nation's persistently poor and suboptimal health outcomes. A preeminent and deeply entrenched issue at the core of these challenges is the chronically insufficient financial allocations and grossly inadequate investment from the government, which severely constrains the sector's capacity for development, infrastructure modernization, and staffing (Sn, 2022).

The BHCPF is implemented by 3 gateways namely, the National Primary Health Care Development Agency (NPHCDA) gateway which provides operational cost (Decentralized Facility Financing – DFF) and Human Resource for Health (HRH) for PHCs through the State Primary Health Care Board (SPHCB), the National Health Insurance Scheme (NHIS) gateway which insures the most vulnerable Nigerians to access the BMPHS through the State Social Health Insurance Agencies (SSHIA), and the National Emergency Medical Treatment (NEMT) gateway which is expected to cater for emergency ambulance services (Federal Ministry of Health, 2020).

According to the WHO, the fastest route for achieving equitable universal care and improving the population's health outcomes is through adequate PHC funding (Igbokwe et al., 2024). Health financing policies are political decisions that involve all stakeholders because of their potential in altering allocations in the budget and status quo. This important economic tool should always be used in economic policies of nations, especially developing economies. There is a wrongly perceived notion that there is no investment case for health, as health is seen rather as a consumption good. It is therefore crucial that research-based evidence is provided on the investment case for health. Health financing is concerned with how financial resources are generated, allocated and used in health systems (Auwalu Ibrahim, n.d.). Therefore, any reform that sets out to improve health financing objectives and ensure citizens get maximum benefits from it will be an ideal health financing reform (Du et al., 2019).

Nigeria, with a population of 223.8 million (est.), is one of the most populous nations but ranks poorly in healthcare standards. Among the people of Nigeria, a vast majority live in rural areas and often have access to little or none of the essential basic amenities. Despite extensive investments, the country still has insufficient healthcare delivery infrastructures, poor quality healthcare services, and unevenly distributed human resource capacity (Ahmedov et al., 2014). These are reflected in its healthcare quality ranking of 187 of 200 countries and its listing among countries with some of the worst health indicators in the world. The country has an estimated 23,640 health facilities, and 85.5% of these are primary healthcare facilities. Although these facilities serve the majority of the population, they are unable to provide basic and cost-effective services, especially in rural areas. This poor performance is attributed to various factors including poorly equipped health facilities, insufficient staff, lack of clearly defined roles and responsibilities, inadequate political commitment, and poor accountability (Bitton et al., 2017). Quality improvement at primary healthcare facilities is critical; however, efforts to address the quality of care as a contributory factor to the country's poor health outcomes receive less attention. It is in light of this that this study seeks to examine the factors affecting utilization of the Basic Health Care Provision Fund (BHCPF).

Methods

Study Design

A descriptive cross-sectional study design was employed to systematically investigate the phenomenon of interest at a single point in time, providing a snapshot of the variables and their distribution within the target population. This methodological approach facilitated the collection of quantifiable data from a representative sample of participants, allowing for the precise measurement of prevalence, the identification of patterns, and the description of characteristics without manipulating the study environment or imposing an intervention. Data were gathered utilizing a structured survey questionnaire designed to capture key metrics pertinent to specific variables.

Study Area

The study was carried out in rural areas in Itas/Gadau Local Government Area of Bauchi State, in the north eastern part of Nigeria. Its headquarters are in the town of Itas. The Itas/Gadau LGA is

located at 11°50'08"N 10°10'02"E. It has an area of 1,398 km^2 and a population of 229,996 at the 2006 census. Using the National Population growth rate of 2.6% per annum, Itas/Gadau LGA has a total projected population of 312,961 as of 2018. It is dominated by Hausa/Fulani people and shares boundaries with Jama'are, Katagum, Zaki and Gamawa local government areas. The predominant religion is Islam, with a small Christian population. The local government has one general hospital and primary health care facilities.

Study Setting

The study was conducted among PHC and CHC facilities in Itas/Gadau LGA of Bauchi State.

Inclusion Criteria

Facilities were included if they were: (1) located within Itas/Gadau LGA; (2) operational and functional for at least 12 months; and (3) an enrolled and active beneficiary of the BHCPF program.

Exclusion Criteria

Facilities were excluded if they were: (1) not enrolled in the BHCPF program; (2) non-operational or temporarily closed; or (3) newly established (operational for less than 12 months).

Sample Size Determination

Sample size was determined using Fisher's formula for descriptive studies:

$$n = \frac{Z^2 pq}{d^2}$$

Where $Z = 1.96$ (standard normal deviate), $p = 0.81$ (prevalence), $q = 1 - p = 0.19$, and $d = 0.05$ (degree of precision). This yielded $n = 237$, and with a 10% non-response allowance: $N = 237 + 23.7 \approx 261$.

Sampling Technique

A multistage sampling procedure was employed. In Stage One, all wards of Itas/Gadau LGA were listed and two wards randomly selected by ballot: Gadau and Kashuri. Under Gadau ward, Gadau village, Katsinawa and Malumawa were selected; under Kashuri ward, Kashuri village was selected. In Stage Two, study participants meeting the inclusion criteria were selected, ensuring each PHC had an equal chance of participation.

Study Instrument

Structured questionnaires were used to collect data. The questionnaire consisted of five sections including demographic data, and was adopted from a previous study (Koce et al., 2019). It contained questions on participants' age, gender, and multiple-choice and yes/no questions to assess knowledge of the factors affecting utilization of the BHCPF. The questionnaire was semi-structured, consisting of sections A, B, C, and D.

Statistical Analysis

Data were analyzed using SPSS Version 21. Descriptive statistics including frequencies, percentages, means, and standard deviations were used to summarize knowledge scores, attitudes, and acceptance rates, presented using tables.

Measurement of Variables

The dependent variable was the factors affecting utilization of the Basic Health Care Provision Fund. Independent variables included age, gender, and economic status/level of income, selected based on the existing literature.

Results

Based on the data obtained from this study, Table 1 shows that the mean age of respondents was 34 years. The majority were female 144 (55.2%), the most common age group was 26–30 years 88 (33.0%), the most common profession was nursing 88 (33.7%), 172 (65.9%) were married, 182 (69.7%) held diplomas as their highest qualification, 196 (75.1%) worked in a PHC, and 193 (73.9%) had 1–10 years of work experience. Results from Table 2 revealed that the majority of workers reported facility funding supports: community prevention 250 (95.8%), purchase of essential medicines and health commodities from accredited pharmacies 212 (81.2%), distribution within geographical proximity and vaccine collection 217 (83.1%), facility-based care 212 (81.2%), treatment of malaria, pneumonia, measles, and dysentery for children under five 195 (74.7%), availability of functional storage facilities for health commodities 160 (61.3%), and relevant BHCPF and

BMPHS information displayed in PHC facilities 193 (73.9%).

Table 1: Distribution of respondents according to socio-demographic/economic status

Variables	Frequency	Percentage (%)
Age (years)		
20–25	62	23.8
26–30	86	33.0
31–35	50	19.2
36–40	50	19.2
40 & above	13	5.0
Sex		
Male	117	44.8
Female	144	55.2
Profession		
Nurse	88	33.7
Doctor	40	15.3
Midwife	30	11.5
Community health extension worker	60	23.0
Others	43	16.5
Marital Status		
Single	74	28.4
Married	172	65.9
Separated	1	0.4
Divorced	6	2.3
Widowed	8	3.1
Highest Education		
Diploma	182	69.7
Degree	74	28.4
Masters	5	1.9
Facility Type		
Comprehensive health care	65	24.9
Primary healthcare facility	196	75.1
Working Experience		
1–10 years	193	73.9
11–20 years	55	21.1
21–30 years	9	3.4
30 & above years	4	1.5
Total	**261**	**100.0**

Table 2: Utilization of BHCPF at PHC facilities

Variables	Frequency	Percentage (%)
Funding to support activities		
Yes	117	44.8
No	144	55.2
Prevention in the PHC		
Yes	250	95.8
No	10	3.8
Prevention of the community		
Yes	212	81.2
No	49	18.8
Purchase medicines from accredited pharmacies		
Yes	217	83.1
No	44	16.9
Distribution within geographical proximity		
Yes	212	81.2
No	49	18.8
Facility-based care		
Yes	54	20.7
No	207	79.3
Antenatal care		
Yes	67	25.7
No	194	74.3
Immunization		
Yes	195	74.7
No	66	25.3
Treatment of common U5 diseases		
Yes	160	61.3
No	100	38.3
Availability of storage facilities		
Yes	173	66.3
No	88	33.7
Availability of information about BHCPF & BMPHS		
Yes	193	73.9
No	68	26.1
Total	**261**	**100.0**

Table 3: Factors affecting utilization of BHCPF at PHC facilities

Variables	Frequency	Percentage (%)
Delay in releasing funds		
Yes	194	74.3
No	66	25.3
Weak financial management		
Yes	177	67.8
No	83	31.8
Tendency for political interference		
Yes	88	33.7
No	173	66.3
Lack capacity for essential healthcare		
Yes	149	57.1
No	112	42.9
Poor staffing		
Yes	78	29.9
No	183	70.1
Inadequate equipment		
Yes	203	77.8
No	58	22.2
Poor distribution of health workers		
Yes	232	88.9
No	29	11.1
Poor quality of health services		
Yes	117	44.8
No	144	55.2
Poor condition of infrastructure		
Yes	248	95.0
No	13	5.0
Total	**261**	**100.0**

The majority of respondents reported the following factors affecting BHCPF utilization at PHC facilities (Table 3): delay in releasing funds 194 (74.3%), weak financial management and accountability systems deterring donor funding 177 (67.8%), lack of capacity to provide essential healthcare services 149 (57.1%), inadequate equipment 203 (77.8%), poor distribution of health workers 232 (88.9%), and poor condition of infrastructure 248 (95.0%). Table 4 shows that the majority of respondents identified adequate staff numbers to provide BMPHS using the BHCPF 215 (82.4%), awareness of periodic facility evaluations 223 (85.4%), prior facility evaluation 215 (82.4%), availability of an established National Health Management Information System (NHMIS) 202 (77.4%), an annual quality improvement strategy 195 (74.7%), adequate community awareness of the BHCPF 146 (55.9%), availability of maternal and neonatal child health emergency facilities 193 (73.9%), prompt referral services per NPHCDA standard operating procedures 232 (88.9%), project sustainability 216 (82.8%), and project improvement of PHC 234 (89.7%).

Discussion

The study assessed the factors affecting utilization of BHCPF in PHCs, particularly in beneficiary communities, evaluating factors, benefits, and challenges associated with the ability of the PHC system to improve health care services. Fifty facilities were selected and 261 participants enrolled, with all questionnaires returned.

According to the findings, the majority of respondents stated that there is no NHMIS or register for proper record-keeping, which helps maintain best practice, aids clear communication between professionals, and demonstrates adherence to best practice. For good medical practice and continuity of care, medical records must be complete, simultaneous, and well-organized (Koce et al., 2019; Oyebade & Oshineye, 2022). The return system is included in the BHCPF training manual guideline, and the majority of respondents agreed that there is an annual quality improvement strategy in place at their facilities to improve the user experience following BHCPF investments.

The findings also indicated that community information on BHCPF and BMPHS services was not displayed in 66.3% of facilities, community awareness of the BHCPF stood at 52.0%, and community outreach reached 59.2%. The main goal of the BHCPF project is to strengthen PHC facilities to provide good health care services, thereby improving community health and reducing the financial burden of purchasing health care services. Unfortunately, the community does not know enough about the project (World Health Organization, 2019). The

WHO defines PHC as a whole-of-society approach to healthcare that aims to ensure the highest possible level of well-being and equitable distribution, focusing on people's needs across the continuum from health promotion and disease prevention to treatment, rehabilitation, and palliative care (World Health Organization, 2021). Involving the community in their care is therefore vital because extending a country's health care system to its geographical and social periphery is cost-effective. Communities that begin to view their health status objectively rather than fatalistically may be moved to take preventive measures (Goodyear-Smith et al., 2019).

The study confirmed that 88.9% of facilities had emergency facilities for maternal, neonatal, and child health care. This service was made available in PHC facilities even though gaps remain due to high mortality rates. Furthermore, 89.7% of respondents stated that their facilities had referral services in place. According to WHO, referral is a process in which a health worker at one level of the health system seeks assistance from a better or differently resourced facility at the same or higher level due to insufficient resources. Operational inefficiencies in the medical workplace cause bottlenecks in the care continuum (Brick et al., 2019; Inter-Agency Working Group on Reproductive Health in Crises, 2025). In a study on strengthening referral systems in community health programs in Mozambique, community members and community health workers identified distance to healthcare facilities, lack of access, and transportation costs as significant barriers preventing clients from following the referral pathway (Goodyear-Smith et al., 2019).

Other impediments included the costs of receiving healthcare, such as medicines, laboratory tests, or unjustifiable payments requested by healthcare professionals (World Bank Group & UNICEF, 2025). Approximately 60–90% of patients in Nigeria are reported to self-refer to a referral level of care, primarily due to lack of trust in PHC workers (Adewole et al., 2021; Koce et al., 2019). The respondents' perspectives on the project's long-term viability were largely positive, with 82.1% stating the program could be sustained (Onwujekwe et al., 2018).

Table 4: Causes of BHCPF inefficiency

Variables	Frequency	Percentage (%)
Adequate staff to offer BMPHS using BHCPF		
Yes	215	82.4
No	46	17.6
Awareness: BHCPF/periodic facility evaluations		
Yes	223	85.4
No	38	14.6
Facility previously evaluated on BHCPF		
Yes	215	82.4
No	46	17.6
Grading for facility evaluation		
Excellent	42	16.1
Very Good	208	79.7
Good	11	4.2
Fair	0	0
Poor	0	0
Availability of NHMIS		
Yes	202	77.4
No	59	22.6
Availability of annual QI strategy		
Yes	195	74.7
No	66	25.3
Adequate awareness of BHCPF		
Yes	146	55.9
No	115	44.1
Availability of MCH service		
Yes	193	73.9
No	68	26.1
Referral SOPs in place		
Yes	232	88.9
No	29	11.1
Project has improved PHC		
Yes	234	89.7
No	27	10.3
View project as sustainable		
Yes	216	82.8
No	45	17.2
BHCPF funds used to improve PHC		
Yes	54	20.7
No	207	79.3
Total	**261**	**100.0**

Conclusion

According to the findings, PHC workers are well-versed in the BHCPF project. The project funds improved facilities including equipment, drugs, and renovation of structures. It indicates that primary health care facilities can utilize the BHCPF even though there are gaps. The need for more BHCPF training and clarification on the concept of strengthening the PHC system was expressed by 100% of respondents. The studies showed insufficient healthcare workers to carry out this project efficiently. In addition, there is inadequate information about the project in the community and a lack of proper data management. The project's goal is to improve health care services provided by PHC facilities while also reducing financial hardship when accessing health care services. Community participation and awareness of the project remain meager; therefore, creating community awareness is essential.

Recommendations

Based on the findings of this study, the following recommendations are made: (1) the Federal and State Governments should intensify efforts to ensure timely disbursement of BHCPF funds to PHC facilities; (2) financial management and accountability systems should be strengthened to promote donor confidence; (3) sustained community engagement and awareness campaigns on the BHCPF and BMPHS should be implemented; (4) adequate healthcare staff should be deployed and equipment provided to PHC facilities; and (5) robust data management systems (NHMIS) should be fully operationalized across all beneficiary facilities.

Funding Disclosure

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Conflict of Interest Statement

The authors declare no conflicts of interest.

Implications for Practice and Policy

This study highlights critical gaps in the implementation of the BHCPF at the primary care level. Policymakers should prioritize timely fund release, capacity building, and community sensitization to optimize the impact of the BHCPF in achieving Universal Health Coverage in Nigeria.

What is Known About This Topic

The BHCPF was established under the National Health Act to catalyze improved primary healthcare access in Nigeria. Despite its establishment, implementation challenges including funding delays, weak governance, and community unawareness continue to undermine its effectiveness at the facility level.

Authors' Contributions

KUI conceived and designed the study and drafted the manuscript. YAM, MMS, and MKA contributed to study design, data interpretation, and critical revision of the manuscript. SBA and BIH contributed to data collection and analysis. All authors reviewed and approved the final manuscript.

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