Impact of Direct Health Facility Funding on Service Delivery in Primary Healthcare Facilities in Plateau State

Christopher Bewa*

Department of Public Health, College of Public Health, Texila American University, Guyana

Abstract

The study sought to investigate the impact of Direct Health Facility Funding on Service Delivery in Primary Healthcare Facilities in Plateau State, Quantitative and qualitative data were collected and analyzed. The findings from the quantitative analysis revealed that the introduction of Direct Health Facility Funding has improved the standard of maternal and child health services, standard of malaria treatment and control services, standard immunization services by improving the availability of vaccines, ensuring wider coverage immunization particularly in rural communities. The thematic analysis also indicated that the introduction of direct financing of facilities in the Primary Health Care facilities in Plateau State has improved that the standard of child and maternal health services in the primary healthcare centres in Plateau State and this has been attributed to financial autonomy provided by the Direct Health Facility Funding scheme. It has also led to the improvement in the standard of facility maintenance and renovation. The study recommends that there is need to devise means of ameliorating these challenges. The Ministry of Health should provide the policy guidelines on management of government health funds to primary health facilities to be used by the facility management committees and the health workers. A committee should be setup comprising of management staff of primary health facilities, community leaders and staff of the ministry of health to monitor how funds disbursed to primary health facilities are expended.

Keywords: Child and Maternal Health Services, Direct Health Facility Funding, Service Delivery and Primary Healthcare Facilities.

Introduction

Globally, the primary methods of health care financing include taxation, out-of-pocket payments, donor contributions, and various forms of health insurance, such as social, community, and private insurance [7]. These funding sources can be categorized into public, quasi-public, and private sectors. Each year, approximately 100 million individuals worldwide are driven into poverty due to direct payments for their health care [9]. Thus, sufficient funding for public health care systems is essential to achieve universal health care access, especially for populations with the greatest health care needs [14].

The approach by World Health Organization (WHO) to health financing involves core functions: revenue raising (while the sources of funds include government budgets, it also includes voluntary or compulsory prepaid insurance schemes, direct out-of-pocket payments from users as well as external aid) pooling of funds (that is, accumulating prepaid funds on behalf of the population) purchase of services (that is, payment or allocating resources to the health service provider). Additionally, every country has policies deciding which services are available to the population [19].

In [1] health care financing is concerned with the creation, distribution, and utilization

of financial resources within the healthcare system. The paper in [3] encourages the government to increase funding for health, improve financial protection, make better use of already-existing resources to improve health outcomes, and strategically buy from the private and non-profit sectors. In order to help policymakers allocate funds appropriately, it also underlined the need to build and institutionalize a strong Health Accounts system. The choice of an appropriate finance system, an organizational delivery structure for health services that is effective and efficient, and a payment strategy for health providers are the final steps in achieving the national health objectives. Furthermore, additional structural components, such the legal framework and public education initiatives, help accomplish health goals [4].

Burkina Faso has shown that it is committed to directly funding facilities by sending money to them in order to eliminate user fees. User fees were used to pay for the of health facilities' majority operating expenses following the launch of the Bamako Initiative. In 2016, the elimination of user fees for women and children under five left PHC facilities unable to pay for these services' operating expenses. In order to make up for the financing loss, policymakers agreed to use general income and a provider payment scheme that was tied to health service consumption. Fees for facilities are determined by how many consultations they provide for services that are exempt. In [16] the fees are the same as they were before to the policy decision.

In Plateau State, people's ability to obtain appropriate, reasonably priced, and high-quality healthcare services in a suitable medical facility when needed—particularly in rural areas—is one of the fundamental needs they hold the government to. This is because, in a large country like Nigeria, rural areas are more likely to have earth or gravel roads built, or roads graded using tractors [12]. Health

financing is a fundamental aspect of health systems that can facilitate advancements universal towards health coverage by enhancing effective service access providing financial protection. Currently, millions of individuals are unable to access services due to costs [18]. Many others experience subpar quality of care even when they pay out-of-pocket. Well-crafted and executed health financing policies can help mitigate these challenges. For instance, implementing specific contracting and structures payment can motivate care coordination and improve care quality; timely and adequate disbursement of funds to providers can ensure sufficient staffing and access to medications for patient treatment [15].

Nigerian Despite the government implementing DHFF, minimal improvements have been observed in the primary health facilities with accompanying overburden of workload. Shortages witnessed across the health workforce stands at around 50% alongside a 15.3% mean attrition rate as well as 26% no reporting rate [17]. In rural areas the situation is worse as the available workforce are saddled with the tasks of performing multiple duties which include data management, patient care as well managerial tasks.

Irrespective of the reforms and different approached used in DHFF, primary health facilities over time have experienced failure in improving service delivery, hence hampering attainment of the health sector reforms goals. As such the DHFF implementation program is designed towards improving health service quality, improve efficiency, while mobilizing health workers as well as community levels for improved health service delivery. However, despite these impediments of the achievement of the program goals in view of primary healthcare facilities still exist. The study sought to investigate the impact of Direct

Health Facility Funding on Service Delivery in Primary Healthcare Facilities in Plateau State.

Literature Review

In Nigeria, public health services are provided at three different levels of care. The local government, state, and federal governments are in charge of the primary, secondary, and tertiary levels, respectively [8]. In order to improve the health status of Nigerians, the Nigeria National Health Policy also aims to fortify the country's healthcare system so that it can offer high-quality, costeffective, accessible, and efficient medical care. Another tool for efficiently funding healthcare in Nigeria is the Nigeria National Health Act, which was enacted in December 2015.

The National Primary Health Care Development Agency (NPHCDA) is the national organization in charge of coordinating efforts to establish sustainable and highquality primary health care services through collaborations and the creation of communitybased infrastructure and systems. However, because of the terrible condition of primary health clinics across the country, which is most likely caused by inadequate funding for the general health care system, this position has not yet been fully implemented. Community secondary health workers, and tertiary healthcare centers, and other healthcare providers also offer health services.

Research Methodology

The study adopted the pragmatism research philosophy and descriptive cross-sectional design. The population for this study therefore was made up of staff and management of primary health care facilities in centres in Plateau State. There are a total of 974 healthcare centres in Plateau State, out of which 851 are primary health care centres with a population of 1702 administrators (chairmen and secretaries) and 25,111 staff. The sample of this study was drawn from the population of

the study using Krejcie and Morgan technique. This provided a sample of 265 administrators and 377 staff giving a total sample size of 642 respondents.

The samples for the study were selected through stratified random sampling. The researcher first stratified the population into service providers and administrators. The researcher then employed the simple random sampling technique, specifically the ballot system in drawing the sample size of administrators and staff. Through the ballot system, a sample of 265 administrators and 377 staff were selected, giving a total sample size of 642 respondents. The researcher's choice of the stratified random sampling technique is to accord every member of the population an equal chance of being sampled. Data was collected using interviews and questionnaires.

Data Analysis and Discussions

This section is based on data analysis and its subsequent discussions. This was based on the qualitative and quantitative data collected for the study.

Data Analysis

The analysis of data was based on qualitative and quantitative analyses. The analysis of data was guided by various statements/questions in line with the study objective.

Qualitative Analysis

The qualitative analysis was aimed at providing answers to the following research question:

What are the Impacts of Direct Health Facility Funding on Service Delivery in Primary Healthcare Facilities in Plateau State?

From the thematic analysis of research question two, three themes emerged which included improvement in child and maternal health services, improvement in immunisation services and improved facility renovation.

Improvement in Child and Maternal Health Services

One of the major themes that emerged from the thematic analysis of responses collected from the interview with stakeholders from the primary health facility is improvement in child and maternal health services. 82% of the interviewees mentioned the fact that child and maternal health services have improved in their facility since the introduction DHFF. To buttress this point, a key stakeholder in one of the primary health care facility who was interviewed on the 27th of October, 2024 has this to say:

"Since the introduction of Direct Healthcare Facility Funding Scheme, the standard of child and maternal health services has improved. This may be due to improved procurement of facilities and better motivation of health personnel in the primary health facilities".

Furthermore, respondent number five who was interviewed on the 27th of October, 2024 has this to say:

"Many primary healthcare facilities witnessed improved standard of child and maternal health. This is evident in the reduced rate of child and maternal mortality during delivery. My facility in particular witnessed a 15% drop in child and maternal mortality since the inception of direct healthcare facility funding".

To further buttress the above point, a principal officer in one of the primary healthcare facility who was interviewed on the 27th of October, 2024 has this to say:

"The standard of delivery services at our health facility improved after the introduction of direct health facility funding and this has largely been attributed to improved funding and utilisation of the funds for procurement of equipment and better motivation and commitment of staff to their job".

To corroborate this point, respondents number eight who was interviewed on the 27th of October, 2024 made the following assertion:

"The introduction of Direct Healthcare facility funding brought about an improvement in the standard of delivery services starting from an improvement in the quality of antinatal services to post-delivery services. Several facilities, medication and training services were offered to staff of primary healthcare facilities to update their knowledge and improve their job competence".

Improvement in Immunisation Services

One of the major themes that came to limelight during thematic analysis of interview responses collected on research question two is improved immunisation services. 80% of the respondents interviewed attested to the fact the primary healthcare facilities in Plateau State witnessed a tremendous improvement in immunisation services since the introduction of Direct Healthcare Facility Funding. To further buttress this point, a key stakeholder in one of the primary healthcare facilities has this to say:

"Due to increased availability of funds through the DHFF scheme, we were able to procure more vaccines for wider coverage of immunisation".

To support the above assertion, one the chairmen of the governing committee of one of the primary healthcare facilities who was interviewed on the 27th of October, 2024 has this to say:

"The introduction of Direct Health Facility Funding (DHFF) has led to an improved immunisation coverage particularly in the rural community. The DHFF made it possible to engage more personnel to cover areas initially not reached due to insufficient resources"

To corroborate this account, an OIC who was interviewed on the 28th of October, 2024 has this to say:

"The Direct Financing of facilities in the Primary Health Care Centre has provided financial autonomy especially to us in township. We normally have budget, costing all we need and when the money comes we make purchase of all we need in the facility without waiting for directives or waiting for supplies which might not be useful for us in our community and this has help in improving the standard of immunization services"

Improved Facility Renovation

One of the major themes that emerged during the thematic analysis of research question two is improved facility renovation. 78% of the respondents interviewed mentioned the theme of improved facility renovation. To further buttress this point, one of the officer in charge of one of the primary healthcare facilities who was interviewed on the 28th of October, 2024 has this to say:

"The DHFF has assisted us in providing certain services in the facility. For example, part of the funds received by the facility has gone into renovation services as some parts of the facility structures had began to deteriorate. Due to the flexibility of DHFF funding, we were able to carry out major renovations on facility structures".

To corroborate this account, another respondents who was interviewed on the 28th of October, 2024 has this to say:

"The implementation of the Direct Health Facility Funding was fundamental to the recent renovations carried out on the facility. DHFF has made it easy to access funds for facility renovation".

Another respondent who was interviewed on the 28th October, 2024 corroborated this account by saying:

"Due to the flexibility of the DHFF scheme, many primary healthcare facilities have been renovated and regular maintenance services are carried out on the facilities".

Quantitative Analysis

The quantitative analysis was based on descriptive analysis. The descriptive analysis was guided by the following research question:

What are the impact of Direct Health Facility Funding on Service Delivery in Primary Healthcare Facilities in Plateau State?

Based on the above question, several subquestions were formulated in the questionnaire and administered.

Since the Implementation Direct Health Facility Funding, has there been any Improvement in Child and Maternal Services in Your Facility?

In assessing whether there has been any improvement in child and maternal services since the implementation of Direct Health Facility Funding, responses obtained from the field were analyzed as contained in Figure 1.

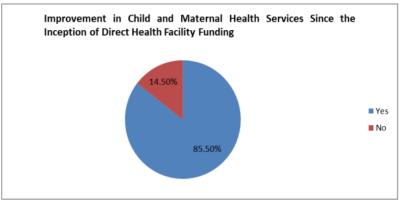


Figure 1. Improvement in Child and Maternal Health Services Since the Inception of Direct Health Facility Funding

Figure 1 shows that 85.5% of the respondents agreed that there has been an improvement in child and maternal health

services in their healthcare facility since the introduction of Direct Health Facility Funding while 14.5% disagreed.

If yes, what are the Improvement You Noticed (Select all that Apply)

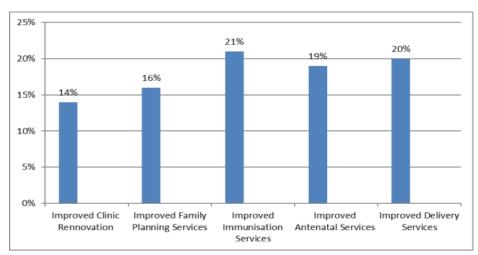


Figure 2. Noticeable Improvement Since the Introduction of DHFF in Primary Health Care Facilities in Plateau State

Figure 2 shows the areas of improvement in primary healthcare services since the introduction of direct health facility funding to primary health care centres in Plateau State. 14% of the respondents reported an improvement in the renovation of clinics, 16% reported an improvement in family planning services, 21% reported an improvement in immunisation services, 19% reported an

improvement in Antenatal services while 20% reported an improvement in delivery services.

Has Basic Health Care Funding (DHFF) Improved Immunisation Services in Your Facility?

An analysis was done on whether Basic Health Care Funding (DHFF) has improved immunization services and findings documented in Figure 3.

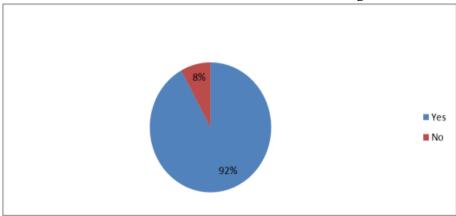


Figure 3. Showing Responses on Whether DHFF has Improved Immunisation Services in Primary Healthcare Facilities in Plateau State

From the analysis on Figure 3, 92% of the respondents agreed that direct health facility funding has improved the standard of

immunisation in primary healthcare facilities in Plateau State while 8% disagreed.

If Yes, How Has it Impacted Immunization Rates? (Select all that Apply)?

immunization rates. The outcome is presented in Figure 4.

The responses were evaluated with a view of determining how DHFF has impacted

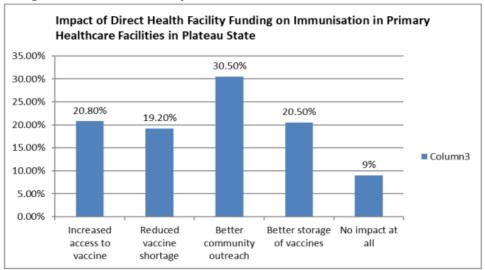


Figure 4. Impact of Direct Health Facility Funding on Immunisation in Primary Healthcare Facilities in Plateau State

Figure 4 shows the responses on the impact of Direct Health Facility Funding on immunisation in Primary Healthcare Facilities in Plateau State. 20.8% of the respondents said it has increased access to vaccines, 19.2% said it has reduced vaccination shortage, 30.5% said DHFF has led to better community outreach on vaccination, 20.5% while 9% of the respondents said DHFF has no impact on immunization in primary healthcare facilities in Plateau State.

How has the Basic Health Care Funding (DHFF) Model Impacted Malaria Control Efforts in Your Facility? (Select all that Apply)

An analysis was conducted to ascertain how the Basic Health Care Funding (DHFF) model has impacted malaria control efforts. The findings are contained in Figure 5.

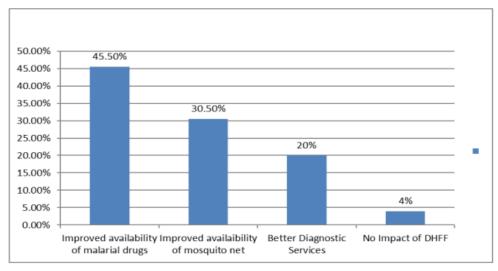


Figure 5. Impact of DHFF Model on Malarial Control Efforts in Primary Healthcare Facilities in Plateau State

Figure 5 shows the responses of the respondents on Impact of DHFF Model on Malarial Control Efforts in Primary Healthcare Facilities in Plateau State. 45.5% of the respondents said DHFF has improved the availability of malarial drugs, 30.5% indicated that DHFF has improved the availability of mosquito nets for malarial prevention, 20% of the of the respondents indicated DHFF has led to better diagnostic services while 4% of the respondents indicated that there is no impact of DHFF on malarial control effort.

Discussions of Findings

The study sought to investigate the impact of Direct Health Facility Funding on Service Delivery in Primary Healthcare Facilities in Plateau State. The purpose of the research was to examine the extent to which DHFF have impacted on family planning services, immunization services, antenatal services, general service delivery and clinic renovation. In line with this, both quantitative and qualitative data were analysed. From the findings of the study, it was discovered that the introduction of Direct Health Facility Funding has improved the standard immunization services by improving the availability of vaccines, ensuring wider coverage immunization particularly in rural communities. It was also discovered from the thematic analysis that the introduction of Direct Financing of facilities in the Primary Health Care facilities in Plateau State provided financial autonomy thus creating a flexible budget for procurement of what is it is needed as at when due without delay. This has improved the standard immunization services in the facility. This finding is in tandem with the findings of [17] who discovered that the introduction of DHFF to primary health facilities has creating financial autonomy thus creating flexibility in the procurement, storage and coverage of immunization across both rural and urban communities.

Similarly, from the results of the thematic analysis revealed that the introduction of Direct Health Facility Funding has improved that the standard of child and maternal health services in the primary healthcare centres in Plateau State and this has been attributed to financial autonomy provided by the DHFF scheme which has led improved to procurement of facilities and better motivation of health personnel in the primary health facilities. It has also led to better procurement drugs and medication. This finding is in agreement with the findings of [2] who discovered that the introduction of Direct Health Facility Funding has help enhance the quality of maternal and childcare in primary health care facilities leading to a significant decrease in child and maternal mortality rate in

The findings from the thematic analysis of data collected also revealed that introduction of direct health facility funding scheme also improved the standard of facility maintenance and renovation. The financial flexibility and autonomy from DHFF scheme enabled facility management to embark on maintenance and renovation activities in most of the primary health care facilities in Plateau State. This finding corroborates the findings of [5] who discovered that the introduction of DHFF in health care facilities have enhance the standard of renovation activities on facilities due to funding autonomy.

In a similar vein, the results of the quantitative analysis revealed that 85.5% of the respondents reported that the introduction of DHFF to their facility has improved the standard of maternal and child health services. This is evident in the improvement in the provision of antenatal, delivery and post-natal services in the primary healthcare facilities in Plateau State. This finding is in conformity with the findings of [9] who discovered that the introduction of DFF to primary healthcare facilities has reduced maternal and child mortality by over 15%.

Furthermore, the findings of the quantitative analysis revealed that 92% of the respondents reported that the introduction of improved DHFF has the standard immunization services by the primary healthcare facilities. This is evident in the increased access to vaccines by the health facilities, reduced vaccine shortage, wider community immunisation outreach as well as better procurement and storage of vaccines. This finding is in agreement with the findings of [15] who discovered that the introduction of DHFF initiative in primary healthcare facilities have enhanced the coverage immunization programme through financial autonomy which has enable primary healthcare facilities to engage more community health workers to carry out the immunization programme for wider outreach especially in the rural areas.

The findings from the quantitative analysis also revealed that the introduction of basic health funding scheme in primary health facilities in Plateau State has improved the standard of malaria treatment and control services. This is evident in the improved availability of malarial drugs, improved availability of mosquito nets and better malarial diagnostic services in the health facilities. This finding is in agreement with the findings of [1] who discovered a significant impact of direct health facility funding on malaria control and treatment among rural health facilities in Nigeria.

Conclusion and Recommendations

The introduction of Direct Health Facility Funding has improved the standard

References

[1]. Ajuaye, W. A., Verbrugge, G. E. & Van-Ongevalle., D. S., 2019. Decentralization and health care prioritization process in Tanzania: from national rhetoric to local reality. *International Journal of Health Planning Management*, 26(2):e102-120.

immunization services by improving the availability of vaccines, ensuring wider coverage immunization particularly in rural communities. Direct Health Facility Funding has improved that the standard of child and maternal health services in the primary healthcare centres in Plateau State and this has been attributed to financial autonomy provided by the DHFF scheme which has led to improved procurement of facilities and better motivation of health personnel in the primary health facilities.

Despite the introduction of the DHFF financial model to primary health facilities in Plateau State improving the standard of service delivery particularly in the area of child and maternal health services, immunisation, malarial control and treatment as well as general facility maintenance, the effectiveness of the DHFF programme is constrained by challenges such as delay in disbursement of funds, poor training, shortage of competent staff and financial misappropriation. The study recommends that there is need to devise means of ameliorating these challenges. The Ministry of Health should provide the policy guidelines on management of government health funds to primary health facilities to be used by the facility management committees and the health workers. A committee should be setup comprising of management staff of primary health facilities, community leaders and staff of the ministry of health to monitor how funds disbursed to primary health facilities are expended.

- [2]. Bruun, H., Huniche, L. & Stenager, E., 2019. Hospital ethics reflection groups: a learning and development resource for clinical practice. *BMC Medicine Ethics*, 20(75), 1-17. DOI: 10.1186/s12910-019-0415-5.
- [3]. Kapologwe, A. R., Kalolo, N.T. & Kibusi, S. R., 2019. The effects of performance-based financing on the use and quality of health care in

- Burundi: an impact evaluation. *Lancet*, 2(2), 381-391.
- [4]. Kombe, S. A., Marsh, L. S. & Molyneux, P. O., 2019. Paying for performance to improve the delivery of health interventions in low- and middle-income countries. *Cochrane Database System Review*, 2(3), 102-121.
- [5]. Maluka, M. A. & Hurtiq, T. W., 2021. Does pay-for-performance improve the quality of health care? *Annals of International Medical Research*, 2(4):265–72.
- [6]. Mauteen, T. S., 2016. Effects in spite of tough constraints-a theory of change based investigation of contextual and implementation factors affecting the results of a performance based financing scheme extended to malnutrition in Burundi. *PloS One*, 15(1), 22-26.
- [7]. Mowbray, C. K. & Teague, F. S., 2023. Equity in Health Care Financing in Low- and Middle-Income Countries: A Systematic Review of Evidence from Studies Using Benefit and Financing Incidence Analyses. *PLOS ONE*, *11*(4), 20-26.
- [8]. Mwangi, B. A., 2023. Political economy and history: making sense of health financing in Sub-Saharan Africa. *Journal of International Development*, 5(3): 297–309.
- [9]. Nigerian National Strategic Health Development Plan (NSHDP), 2010. *National Routine Immunization Strategic Plan*. Abuja, Nigeria.
- [10]. Njoroge, G. W., 2019. Financial incentives for return of service in underserved areas: a systematic review. *BMC Health Service Research*, 2(2), 19-26.

- [11]. Obi, J. A. & Okojie, N. S., 2023. Universal health coverage: The post-2015 development agenda. *Lancet*, 2(1), 10-22.
- [12]. Olatubi, M. I., Oyediran, O. O., Adubi, I. O., & Ogidan, O. C., 2018. Health care expenditure in Nigeria and National productivity: A review. *South Asian Journal of Social Studies and Economics*, *1*(1), 1-7.
- [13]. Pyonen, S. L., Smith, W. T. & Broek, V. A., 2019. Performance-based financing as a health system reform: mapping the key dimensions for monitoring and evaluation". *BMC Health Services Research*, *1*(3): 11-20.
- [14]. Renggli, V. B. & Mishana, A. S., 2019. Setting performance-based financing in the health sector agenda: A case study in Cameroon". *Globalization and Health Journal*, *1*(2), 100-120.
- [15]. Scheiba, J. A. & Meceda, S. U., 2020. Output-based payment to boost staff productivity in public health centres: contracting in Kabutare district, Rwanda". *Bulletin of World Health Organization*, 8(5), 113-125.
- [16]. Turkay, S. S. & Pasape, T. A., 2021. The quality of care: how can it be assessed? *JAMA*, 2(2), 200-222.
- [17]. Watkins, N. V. & Jamieson, A. T., 2017. Clinical governance and the drive for quality improvement in the new NHS in England. *BMJ*, *1*(2), 61–65.
- [18]. World Health Organisation, 2020. World Health Organization. Nigeria National Expenditure on Health. Geneva: World Health Organization.