



Living with Deprivation:

An Assessment and Evaluation of Women and Children's Access
to Health Services in Gwale and Kumbotso Local Government
Areas in Kano State, Nigeria

Living with Deprivation:

An Assessment and Evaluation of Women and Children's Access
to Health Services in Gwale and Kumbotso Local Government
Areas in Kano State, Nigeria



Resource Centre for Human Rights and Civic Education (CHRICED)
January, 2023

All rights reserved. This publication is copyright, but may be reproduced by any method without fee for advocacy, campaigning and teaching purposes, but not for resale. The copyright holders request that all such use be registered with them for impact assessment purposes. For copying in any other circumstances, or for reuse in other publications, or for translation or adaptation, prior written permission must be obtained from the publishers, and a fee may be payable. To request permission, or for any other inquiries, please contact the Resource Centre for Human Rights and Civic Education (CHRICED) at the address on this page.

ISBN: 978-978-59908-1-2

First published in 2023 by:

Resource Centre for Human Rights & Civic Education (CHRICED)

Professor Abubakar Momoh House
Hse 5, Malcom X Street, First Avenue
Gwarimpa, Abuja, Federal Capital Territory (FCT), Nigeria

Upper Floor, Ahmadiyya Hospital Building
52 Bompai Road, Kano, Kano State, Nigeria
Phone: +234 909.999.9014, 802.313.3924

Email: info@chriced.org.ng, Website: www.chriced.org.ng
facebook.com/chricedng, Twitter: [@chricedng](https://twitter.com/chricedng)
Skype ID: chriced Nigeria

Printed by:

University of Lagos Press and Bookshop Ltd.

Works and Physical Planning Complex
Unilag P.O. Box 132, University of Lagos,
Akoka, Yaba - Lagos, Nigeria.
e-mail: unilagpress@unilag.edu.ng,
Phone: +234 809 292 5635

Table of Contents

Acronyms.....	6
Preface.....	8
Acknowledge.....	9
Executive Summary.....	10
Introduction.....	10
Methods.....	10
Key Results.....	10
Conclusion and Recommendations.....	11
1.0 The Ecosystem of Maternal and Child Health Delivery in Kano State.....	12
1.1 Background.....	12
1.2 Overview of Public Health Care Service Delivery in Nigeria.....	14
1.3 Barriers to Effective Health Delivery Service in Nigeria.....	15
1.4 Issues in Maternal and Child Mortality Rates in Nigeria.....	16
1.5 Kano State Development Objectives: Institutions, Policies, Infrastructure and People.....	17
1.6. Role of Health in the Development of Kano State.....	18
1.6.1 Institutional and policy frameworks on Kano’s health care system.....	19
1.6.2 Public Health delivery service in Kano State.....	22
1.7 Gaps in Maternal and Child Health Service Delivery in Kano State.....	23
1.8 Theoretical Framework – Political Economy Theory and the Right-Based Theory.....	23
2.0 Methodology.....	26
2.1 Research Questions.....	26
2.2 Research Design.....	26
2.3 Location of the Study.....	26
3.0 Research Findings.....	29
3.1: Demographic profiling of Gwale and Kumbotso.....	29
3.1.1 Health facility types, health services rendered and health facility usage indicators at assessed facilities.....	29
3.1.2 Utilization of maternal and child healthcare Services.....	30
3.2 Budgeting for MNCH: Average amount received for the year.....	31
3.2.1 Procurement of drugs/pharmaceuticals.....	31
3.3 Health Facility Infrastructure.....	32
3.3.1 Amount of time it takes to reach the nearest facility.....	32
3.3.2 Distribution of health workers across the facilities.....	33
3.3.3 Challenges experienced by Healthcare workers.....	33
3.4 Causes of Maternal and Child Mortality.....	34
3.4.1 Inadequate trained and competent manpower.....	34
3.4.2 Poverty.....	34
3.4.3 Ignorance.....	34
3.4.4 Equipment and transportation network.....	35
3.4.5 Protocols.....	35
3.4.6 Poor maternal health services.....	36
4.0 Discussion of Findings.....	38
4.1 Summary of Findings.....	39
4.2 Recommendations.....	39
References.....	40

Acronyms

AIDS	Acquired immunodeficiency Syndrome
ANC	Antenatal Care
BHCPH	Basic Health Care Provision Fund
CBHI	Community Based Health Insurance
CBOs	Community Based Organizations
CDC	Centers for Disease Control and Prevention
CHEWs	Community health workers
CHRICED	Resource Centre for Human Rights & Civic Education
CPR	Cardiopulmonary Resuscitation
CS	Cesarean Section
CSO	Civil Society Organization
DFID	Department for International Development
DRF	Drug Revolving Fund
EDD	Expected Date of Delivery
eHA	eHealth Africa
FCT	Federal Capital Territory
FGD	Focus Group Discussion
GOPD	General Out-patient Department
HIV	Human Immunodeficiency Virus
HRBA	Human Rights-Based Approach
HRH	Human Resources for Health
IMR	Infant Mortality Rate
INGOS	International Non-governmental Organizations
JCHEWs	Junior Community Health Extension Workers
KII	Key Informant Interview
KSDMC	Kano State Drugs Management and Consumables
LGA	Local Government Area
LIMS	Logistics Information Management System
MCH	Maternal and Child Health
MDGs	Millennium Development Goals
MFP	Malaria Frontline Project
MHFL	Model Known as Master Health Facility List
MIS	Management Information Systems
MMR	Maternal Mortality Rate
MMR	Measles, Mumps, and Rubella
MNCH	Maternal, New-born and Child Health
MSS	Midwives Service Scheme
MTSS	Medium-Term Sector Strategy
NDHS	Nigeria Demographic and Health Survey
NGO	Non-governmental Organizations
NHIS	National Health Insurance Scheme
NMEP	National Malaria Elimination Programme
NPC	National Population Commission
NPHCDA	National Primary Health Care Development Agency
PHC	Primary Healthcare
PHCMB	Primary Healthcare Management Board
PHCUOR	Primary Health Care Under One Roof
PPH	Post Postpartum Hemorrhage
PVC	Premature Ventricular Contraction
RI	Routine Immunization
SACA	State Agencies for the Control of AIDS
SDP	State Development Plan
SDSS	Sustainable Drug Supply System

SERVICOM	Service Compact
SGD	Sustainable Development Goals
SHDP	Strategic Health Plan
SO	Stockout
Sure-P	Subsidy Reinvestment and Empowerment Program
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
WHO	World Health Organization

PREFACE

With tears rolling down his cheeks, the Emir of Kano, HRH Muhammadu Sanusi II, in a chat with Channels Television News, recounted how a baby died in the arms of a woman who had come to his palace to seek for financial support to purchase drugs for her sick baby. According to the monarch, on that fateful day, the woman had walked into his palace from a children's hospital located about 200 metres away. He heard a very loud scream and asked someone to check what happened. The person who went to check came back with tears in his eyes. The Emir said the baby died in the mother's arms while waiting for her turn to ask for money to buy the drugs to save her child. The tragic incident as narrated by the Emir of Kano is a reflection of one of the everyday reality confronting many women and children from poor families in Kano State, and across many other states in Nigeria. A much more specific context of the problem may be gleaned from the critique of the maternal health situation in Nigeria by Microsoft Founder and globally renowned philanthropist, Mr. Bill Gates who, sometime ago, addressed Nigeria's National Economic Council (NEC). Mr. Gates' conclusions reminded us of the very serious fact that Nigeria remains one of the worst places on earth for a woman to give birth.

The death of a mother or child in the course of child birth is a deeply felt grief that is difficult to overcome. Almost everyone in Nigeria, particularly those from low-income families, have had one heartbreaking tale or the other to refer to when it comes to the death of a loved one due to a preventable cause. Over the years, CHRICED has been engaged in raising awareness about maternal and infant mortality issues, not to rehash figures or statistics, but to put a stop to the preventable loss of life. According to World Health Organization (WHO) figures, Nigeria accounts for roughly 20% of all maternal fatalities worldwide. In 2015, Nigeria's maternal mortality ratio was predicted to be above 800 maternal deaths per 100,000 live births, with an estimated 58,000 maternal deaths that year.¹ This data is not counting the 900,000 near misses or narrow escape where the woman could have easily lost her life. Nigeria has therefore acquired the sad distinction of being the 9th most unsafe place to be a woman in the world.²

While CHRICED acknowledges that there are numerous obstacles to realizing the quest for quality maternal and child healthcare, the most obvious and devastating factor of all is corruption, which continues to exacerbate an already dire situation. Budgeting for healthcare, for example, is just half the story. Our leaders do not trust the healthcare system and do not use it. They are top-flight customers for medical tourism to countries whose healthcare system works. Those are jurisdictions where funds meant for quality maternal healthcare are not misappropriated. The irony is that our duty bearers are quick to jump on a plane to go and treat simple ailments in countries, which have taken the pains to put in place a functional healthcare system. As a result, Nigeria's health system is facing several issues, including infrastructure deterioration, insufficient human resources, fund misappropriation, and unmotivated staffing.

The key issue therefore is how to ensure proper use of available resources to address the problem of maternal and child mortality, particularly in a developing country such as Nigeria. As a nation, battling with many developmental challenges, Nigeria is faced with severe governance challenge, which include absence of credible data and reliable information on what government allocate to health financing. Therefore, this baseline study explores and evaluates access to health services by women and children in two local government areas (LGAs) of Gwale and Kumbotso in Kano State, with focus on understanding the demographics, while examining the causes of maternal and child mortalities, as well as the potential link among such factors with gaps in accountability functions of the system of healthcare delivery.

¹ <https://www.who.int/reproductivehealth/maternal-health-nigeria/en/>

² Thompson Reuters Foundation, 2018 <https://punchng.com/nigeria-9th-most-dangerous-country-for-women-report/>

ACKNOWLEDGEMENTS

CHRICED is grateful to Dots Solutions Limited and its CEO, Mrs. Loveth Metiboba, who led the team that conducted this research. Our gratitude equally goes to Professor Ismail Ibraheem, Director, Office of International Relations Partnerships, University of Lagos (UNILAG) for his editing, inputs and contribution to the success of the research. Our thanks also go to the staff of CHRICED who assisted with organising data collection and providing all the technical support. CHRICED acknowledges all the participants who gave their time during the research process, including desk research (literature review), field research (administration of survey questionnaires), In-depth Interviews (IDIs), Key Informant Interviews (KIIs), Focus Group Discussion (FGD), validation workshop and the other research activities, which were put together to produce this report. The respondents include government officials in various Ministries, Departments and Agencies, Health Facilities in the two focal Local Government Areas, CHRICED volunteers, as well as other distinguished persons too many to mention by name here. They all contributed immensely to the successful completion of the study, and this report. However, special mention must be made of Development Partners working in Kano, the Community Discussants, the Maternal Healthcare Practitioners, and other respondents who provided valuable information leading to this report. This is in addition to the traditional institutions, community leaders, non-governmental organisations and other activists who facilitated fieldwork during this study.

Our immense gratitude to the **Bishöpfliches Hilfswerk MISEREOR, e.V** (the German Catholic Bishops' Organisation for Cooperation) and the **Katholische Zentrastelle für Entwicklungshilfe e.V** (Catholic Central Agency for Development Aid) who made this research report and publication possible by their generous support.

Ibrahim M. Zikirullahi, PhD (h.c.), MA, FICM, FIMS, FIIM
Executive Director
Resource Centre for Human Rights & Civic Education (CHRICED)

EXECUTIVE SUMMARY

Introduction

Use of maternal health care in most African countries has been associated with several socioeconomic, cultural, and demographic factors, although contextual analyses of the latter have been few. As a cross-sectional descriptive study, the research explored and evaluated access to health services by women and children in Gwale and Kumbotso Local Government Areas in Kano State. The objectives were centered around an understanding of demographic profiling, maternal and child healthcare service delivery processes; examining the causes of maternal and child mortalities, and what is the potential link among such factors with gaps in accountability functions of health system delivery pertaining to policy gaps or conflicting/discriminatory policies and political commitment; understanding the levels of infrastructure in the delivery of maternal and child health; and lastly, examining the general experiences of women and children while accessing infrastructure in Gwale and Kumbotso Local Government Areas in Kano State.

Methods

A mixed research method was employed; with a qualitative method aided by focused group discussions for 12 women health-seekers. They were split into two groups. With six members each, to represent both local government units. While 10 in-depth interviews were conducted for 10 health officials from both local government units. They were nurses, Heads of Departments among others.

Key Results

The study revealed that Kano State's current fertility rate of 8.1 is above the national fertility rate of 5.74. Within the northwest region, Kano is also the state with the second highest fertility rate in the Zone. Evidently, the women's rate of fertility in the Northwest Zone is increasing. Despite eight years of free maternity services in Kano State, there is still low utilization of maternity services because women in the state feel they do not get the required services they desire when they seek medical services. As the study finds, less than half of the women's population in Kano State utilize antenatal clinics, which is lower than 58% National antenatal clinic attendance. In comparison, Kaduna State, for instance, had 62% antenatal clinic attendance: making Kaduna the highest in the North West Zone. Also, the low figure of skilled birth attendants at hospitals for delivery further stresses the low utilization of maternity services in the State. The figures for both Gwale and Kumbotso LGAs are even much lower than the National figure as home delivery and utilization of Traditional Birth Attendants still remains the norm in the Zone. Also, the low figure of skilled attendants at delivery and hospitals further stresses the low utilization of maternity services in the State. Both Gwale and Kumbotso are much lower than the National figure. Home delivery and utilization of Traditional Birth Attendants is still the norm in the zone, because women in Kano feel they do not get the required services they desire when they seek for these medical services.

Conclusion and Recommendations

The study therefore recommends allocative efficiency and timely disbursement of budgetary resources for the PHC management to address infrastructure deficit, HRH, capacity building and optimal functionality challenges. Secondly, increase community awareness initiatives on citizen's rights to standard healthcare and the services available at the PHCs. Lastly, institute supportive supervision and respond to the interventions from the Government, facility staff and CSOs by visiting the facility promptly as needed.



Pic. 1: Delivery Room in Danbare PHC at Kumbotso LGA, Kano



Pic. 2: Record Room at Wailari PHC, Kumbotso LGA, Kano

1.0 THE ECOSYSTEM OF MATERNAL AND CHILD HEALTH DELIVERY IN KANO STATE

1.1 Background

Health care service delivery is one of the major obligations of governments in developing countries guaranteed by law, the constitution and international treaties. It is an obligation of the government because it guarantees good and healthy living for the citizens when adequately provided. A good health service delivery also protects people from untimely death and provides the vulnerable groups the social safety nets against diseases. While access to effective health care service is guaranteed in most developed countries such as the United States of America, Canada, United Kingdom, France, in most of the developing world particularly in Sub-Saharan Africa, women and children suffer abysmal and inadequate access to health care services—a phenomenon which jeopardizes their right to life and decent living (Dwivedi, Singh & Yadav, 2019; World Bank, 2016). Nigeria is vulnerable to the health care challenges that women and children face in seeking and using public health care facilities. These challenges can be more cumbersome for those living in rural areas and deserts where life is almost cut off from urban public care services.

The World Bank (2016) reported that, though, reforms have been undertaken to improve access to health care services around the world, ‘‘maternal and under-five mortality rates remain very high with about 900,000 women and children dying every year from preventable causes’’. Nigeria accounts for 14% of the global burden of women and children deaths with 576% per 100,000 live births and 128% per 100,000 under-five mortality rates (World Bank 2022). These indices should raise a concern for the Nigerian government in a situation where the government faces the challenge of shrinking resources following the COVID-19 pandemic and a fall in global oil prices. In order to overcome these challenges and move towards the realization of the United Nations Sustainable Development Goals (SDGs) 3 and 5, this goal, adequate knowledge of maternal health is a prerequisite in Nigeria particularly in Kano State which is the focus of this project.

Kano State is located in the North-Western Nigeria with a projected population of 15 million. It is the 2nd most populated state in Nigeria. The state is inhabited by the Hausa and Fulani people of Nigeria but has a large number of other ethnic groups in Nigeria such as the Ibos, Yoruba etc. Given its significance in the history of Northern Nigeria, Kano has remained a melting-pot for the socio-cultural life of the North with its attendant health and economic implications. One of such implications is the increased demand for health care services by the people. Bala et al (2020) noted that Kano State health care service delivery has for a long time been confronted with a myriad of challenges such as inadequate health care facilities to cater for the rising population of the city. They stated that it was in response to the moribund health facilities in Kano State that the Federal Government of Nigeria and Kano State Government adopted the World Health Organization (WHO) Model known as Master Health Facility List (MHFL) and Logistics Information Management System (LIMS) in order to improve access to health care services and keep the records of health users intact. It is well known that higher education is strongly correlated with improved maternal health knowledge but on average, girls in northern Nigeria only attend formal schooling for an average of 2.8 years before they drop out (Orozco-Olvera, 2022 et al.). In northwestern Nigeria, Qur’anic studies, focusing on Arabic and Islamic teachings, is highly valued but less than 20% of women complete primary school (Hannatu, 2021, Galadanchi et. al, 2007)). With only two percent of the world’s population, the World Bank (2022), noted that Nigeria accounts for roughly 14 percent of the global burden of maternal mortality. Global evidence shows that young girls bear a higher burden of maternal mortality and morbidity. Data show that the average age at sexual debut is roughly 15 years of age among adolescent mothers in Nigeria.

Nigeria is by tradition a patriarchal society in which women are discriminated against from infancy. In the rural setting, gender disparity has been observed with women generally receiving less attention than men. Poor access to medical services is compounded by socio-cultural, economic and demographic factors including the behavior of families and communities, social status, education, culture, income, health decision making power, age, access to health facilities, and availability of health services which play vital roles in causing maternal mortality (Yahaya, 2004). Northern Nigeria is primarily Hausa and

Muslim (National Population Commission, 2006). Since men hold the primary decision-making power in the society, the decision to go to a health facility in an emergency must wait until the husband (or in-laws) give consent (Adamu & Salihu, 2002). It is also important to note that non-health sector activities, such as water and sanitation, roads, communication, agriculture, and internal security, also influence maternal outcome (Wall, 1998; NDHS, 2008). Researchers have found that the disparity is more noticed in rural areas than urban areas (Okolocha, Chiwuzie, Braimoh et al, 1998; Chandola & Jenkinson, 2000). This is why many women, particularly rural women, are often trapped in a cycle of ill-health exacerbated by childbearing and hard physical labour (UNDP, 2005).

Maternal health services can be influenced by the socio-demographic characteristics of women, the cultural context, and the accessibility of these services. A number of socio-demographic characteristics of the individual affect the underlying tendency to seek care (Advocacy Brief, 2007). In this regard, some good examples are maternal age and parity, education, poverty, place of delivery and residence. The cultural perspective on the use of maternal health services suggests that medical need is determined not only by the presence of physical disease but also by cultural perception of illness (WHO, 2007). The use of modern health services in such a context is often influenced by individual perceptions of the efficacy of modern health services and the religious beliefs of individual women (Advocacy Brief, 2007). Accessibility of health services has been shown to be an important determinant of utilization of health services in developing countries. In most rural areas in Africa, one in three women resides more than five kilometers from the nearest health facility (Central Bank of Nigeria, 2004). The scarcity of vehicles, especially in remote areas, and poor road conditions can make it extremely difficult for women to reach even relatively nearby facilities. Walking is the primary mode of transportation, even for women in labour (Lambo, 2003).

Studies have shown that education has a well-known effect on lowering fertility. If women get pregnant less and bear fewer children, they are less at risk of maternal death. Women's social status, self-image and decision-making powers may all be increased through education, which may be key in attending maternal health services. Adamu and Salihu (2002) studies in Kano show a low percentage of attendance for maternal health services in rural areas where most of the women did not pass-through western education. Educated women may have more understanding of the physiology of reproduction and be less disposed to accept the complications and risks of pregnancy as inevitable, than illiterate or uneducated women. Education has been described as a medication against fatalism (Royston, 1989; Béhague et al, 2008).

Sociocultural factors also play a key role in influencing women's knowledge and utilization of maternal health services. Time factor is crucial and again women with severe obstetric morbidity identified at different hospitals in Kano state were in critical conditions upon arrival, underscoring the significance of pre-hospital barriers in setting with free and accessible maternal health care. As a mostly Hausa and Muslim setting, men hold the primary decision-making power in the Northern Nigerian society, as such the decision to go to a health facility in an emergency more often waits until the husband (or in-laws) gives consent. This can cause serious obstetric complications and possible death even though the woman might be knowledgeable of maternal health services. It is therefore imperative to understand the individual and community factors that influence women's health care seeking behaviors particularly with regards to increasing women's utilization of maternal health care services (Adamu and Salihu, 2002).

This study was championed by the Resource Centre for Human Rights & Civic Education (CHRICED) as part of activities to implement a three-year project of Strengthening Maternal and Child Healthcare through Accountability Interventions in Kano State. The project is being implemented against the background of the devastating impact of the COVID-19 pandemic on maternal and child health projects in Kano State, funded from the public treasury. The goal is therefore to reduce maternal and child mortality in Gwale and Kumbotso local government areas of Kano State, Northwest Nigeria. The study is significant because it hopes to improve inclusion, transparency and accountability in the planning and management of maternal health budgets and interventions. Specifically, it would be functional in assisting the facilitation and improvement of public service delivery in the maternal and child health

sector while addressing the deep-seated problems of lack of accountability, low citizens' morale, weak community organizing capacity, haphazard governance structure, and general apathy, fueling the negative impacts of corruption on the delivery of key social goods and services. Therefore, to strengthen advocacy and citizen engagement for improved service delivery in the maternal and child healthcare sector in Kano State, CHRICED conducted an in-depth study to understand how the gaps in the accountability process (in terms of standard setting, performance assessment, accountability (or answerability, and enforceability) contribute to the maternal and child health service delivery process, and how those gaps impact on the welfare of women and children. The study thus provides CHRICED and other stakeholders evidence-based basis for citizen advocacy and engagement for improved service delivery in maternal and child health sector in Kano State and accountability for results.

1.2 Overview of Public Health Care Service Delivery in Nigeria

Health care delivery in Nigeria, before now, had been the exclusive responsibility of the government. Government would both fund and equip health care facilities to diagnose disease, treat patients and also provide out-of-hospital services such as public sensitization on infectious diseases. This approach to health care service delivery for many years imposed a heavy burden on the government and the public facilities set up to deliver health care services. The burden constrained government capacity in reaching the poorest people in the society.

As documented in the National Health Facility List (FMOH, 2011), there are 34,173 health facilities across the 36 States of Nigeria and the Federal Capital Territory (FCT) Abuja as at December 2011. These healthcare delivery facilities comprise 30,098 PHC (88%), 3,992 (12%) secondary facilities, and 83 (1%) tertiary facilities. According to the National Minimum Standards guideline for PHCs in Nigeria (NPHCDA, 2007), the delivery of quality health services depends on three pillars. Additionally, figures of historical annual national budgetary allocations to the health sector benchmarked against the Abuja declaration of 2001 can also come in here to provide a succinct panoramic view of the sector. For example, public funding of health care delivery systems in Nigeria is generally poor. The annual budgetary allocations to the health sector as a share of the total government expenditure either at national and subnational level have historically remained low and characterized by poor disbursement and low utilization rates. For example, the Federal Government's spending on health care stood at 4.23% in 2016, slightly dropped to 4.16% IN 2017, and declined to 3.95% in 2018 (Salman 2018:25).

For a long time, the Nigerian health care system had been confronted with a myriad of challenges ranging from inadequate health services, health personnel, lack of drugs as well as shrinking funds to treat major illnesses in the country. In spite of the fact that Nigeria has a population of less than one percent of the world's total, it is responsible for nearly 19 percent of global maternal deaths, with a maternal mortality ratio of 814 per 100,000 live births, according to the World Health Organization (Bongaarts, 2016). While access to high-quality obstetric care is critical for reducing maternal mortality, the National Population Commission (NPoC) reported that Nigeria's maternity care utilization was low in 2013, with approximately 36 percent of births occurring in health facilities and 38 percent requiring the assistance of qualified medical personnel.

Akande and Monehin, (2005) noted that the timely distribution of information about potential health dangers is one of the many concerns that public health is concerned with. Human capital development, achieved via the provision of a competent and efficient health-care delivery system, is also seen as the foundation for economic growth and development in the country of Nigeria. Bala et al., (2020) stated that since the end of the colonial era, this idea has undoubtedly impacted economic planning and development goals worldwide. They further opined that a systemically structured health care delivery system, among other things, is precisely encoded with the key prerequisite for reenergizing a national workforce that is capable of driving development requisites in a manner that maximizes efficiency. In addition, healthy people are more likely to take advantage of development chances when they are prescribed to do so. Health, as necessary but inadequate inputs into national development processes, energizes the populace to tactically take advantage of development opportunities. The natural result of this is that a country that is gifted with healthy people should naturally optimize development activities through the efficient application of technical breakthroughs; however, this is not the case in Nigeria (Bala et al., 2020).

Despite its strategic location in Africa, Nigeria's public health-care system is poorly funded and understaffed, noting that a shortage of health-care facilities (such as health-care institutions, medical personnel, and medical equipment) can be found in rural communities. The Nigerian government's health care reform initiatives are now being implemented at the state and local government levels, but they have not yet been implemented at a much broader scale (Ejembi et al., 2004). Any health care system, on the other hand, must have a sufficient infrastructure in order to improve the delivery of services in an efficient, effective, and timely manner (Innocent, 2014, Mason et al., 2017). The quality of services delivered by such infrastructure is determined by the qualitative and quantitative aspects of the services that are relatively deemed to be acceptable. Beyond the physical attractiveness of health infrastructure, their overall acceptability would be determined by the notion of workability of the complementary technological and human resources, the functionality of road networks, water supply systems, electricity connectivity, the system's readiness to adapt and be reintegrated with other future changes as more complex technological innovations emerge, among other factors (Mason et al., 2017).

According to the National Minimum Standards guideline for PHCs in Nigeria (NPHCDA, 2007), the delivery of quality health services depends on three pillars. These pillars are as follows: Health infrastructures include recommended facilities, buildings, furniture, electricity, water supply, sanitation, staff accommodation and equipment; Human Resources, minimum recommended staff, number and mixture, cadre for each type of health facility; and Service provision: the recommended minimum PHC services for each facility type including the minimum requirement of medical equipment and essential drugs (NPHCDA, 2007). Aside, the absence of surveillance mechanisms in the public health sector might result in widespread health insecurity, which can put national security at risk, among other things. In the past, epidemics of infectious diseases constituted a severe threat to national security, particularly in developing countries. The more reason medical and epidemiological surveillance are critical tasks of public health organizations in order to safeguard the public from serious health hazards such as infectious disease outbreaks, disaster epidemics, and bio-terrorism. To avoid numerous dangers and communication breakdowns that could negatively affect the health sector's ability to execute, it is vital to obtain medical information from an array of sources. With that, disease outbreaks can then be followed and medical treatment and prevention measures be ramped up even before they reach a big population, allowing for earlier intervention.

In Nigeria, there are differences in the quality of healthcare services provided by private and public providers, as well as regional variations. Innocent (2014) concludes that privately owned health facilities are more prepared to provide care than public facilities. Southern Nigerians are better educated and more prone to adopt western lifestyles. Differences in demand for healthcare services and household health-seeking behavior reflect the effects of existing sociopolitical, ethnic, economic, and religious divisions between northern and southern Nigeria (Pharmaccess, 2018).

1.3 Barriers to Effective Health Delivery Service in Nigeria

Nigeria is one of the countries that ranks poorly in health systems performance on the premise of healthcare access and quality of care (Fullman et al. 2017; World Bank 2017). More than half of the population live below the poverty line on less than \$1 a day, and as a result, they are unable to buy health-care insurance. According to studies (Akande, 2004, Bala et al., 2020), there is a deficient referral system across the various tiers of health care, which is most likely due to the ineffective administrative activities of the health care delivery system. Some have devised solutions to the aforementioned flaws at the primary health care level. For instance, several community health financing schemes (Community Based Health Insurance [CBHI]) have been documented as a result of individuals' (taxi drivers, market women, etc.) efforts to meet their communities' health needs. Onwujekwe et al., (2010) reported strong preferences for health care benefits in both urban and rural areas. The CBHI's funding capabilities are extremely limited and insufficient. Despite this, some CBHI have expanded their scope to include registration as Health Maintenance Organizations. Additionally, the NHIS does not have access to the quality of health care provided, although this is a problem for the NHIS as well.

While numerous studies (Welcome, 2011, Mason et al., 2017, Oyekale, 2017, Pharmacess, 2018) have examined various aspects of the Nigerian health care system, no work has been done on disease tracking and Management Information Systems (MIS) techniques to meet the needs of the Nigerian populace in the modern era; in fact, no attention is paid to surveillance systems. As a result, a significant shortcoming of the Nigerian health care system is the absence of adequate information systems for tracking disease outbreaks, mass chemical poisoning, and similar events.

1.4 Issues in Maternal and Child Mortality Rates in Nigeria

Maternal and Child Health (MCH) care remains a very critical development issue affecting citizens, especially at the level of the grassroots. The status of MCH in Nigeria has been on the front burner of the development discourse because it is part of the social and existential issues confronting everyday citizens whose conditions are being accentuated by the problem of poverty. Nigeria recently emerged as the poverty capital of the world according to the World Poverty Clock, with 91,485, 039 citizens living in extreme poverty. Nigeria has been mentioned by the World Health Organisation (WHO) as having one of the highest Maternal, Neonatal and Child mortality rates in the world. In 2017, UNICEF noted that globally about one million babies died the day they were born and 2.5 million babies died in their first month of life. About 26,000 babies die at birth annually in Nigeria, accounting for the World's second highest national total; 257 babies also die within their first month in the country. Lamentably many babies died from preventable causes such as premature birth, complications during delivery and infections like sepsis and pneumonia (UNICEF, 2017).

Nigeria, which is the most populous country within sub-Saharan Africa, has poor maternal, newborn and child mortality indices (Kana et al, 2015). The country has a maternal mortality rate (MMR) of 576 deaths per 100,000 live births, an estimate which indicates that maternal deaths are responsible for about a third of all deaths among women of reproductive age (NPoC, 2014). The situation is much worse within the northern parts of the country, where the MMR is estimated above 1000 deaths per 100 000 live births (Uzundu, 2015). Nigeria's infant mortality and under-5 mortality rates are estimated at 69 deaths per 1000 live births and 128 deaths per 1000 live births respectively (Kana et al, 2015). The maternal, new-born and child health (MNCH) indices in Nigeria are typically worse within rural areas. For example, the MMR is estimated at 828 deaths per 100 000 live births in rural areas in contrast to 351 deaths per 100 000 live births in urban areas (Abimbola et al, 2012). Okereke et al. (2019) also posited that rural communities in Nigeria account for high maternal and new-born mortality rates in the country.

Several reasons have been cited for high child mortality in the country. Most of these new-born deaths are caused by preterm birth, severe infections, asphyxia, maternal complications in labour and birth injuries resulting from poorly managed labour and lack of emergency obstetrics service and can be prevented by reaching high coverage of quality antenatal care, skilled care at birth, postnatal care for mother and baby, and care of small and sick new-born. (Titaley et al., 2012). According to Lancet (2018), three quarters of neonatal deaths usually occur in the first week of life with the first day of birth representing the highest risk of neonatal death. Nevertheless, Ewere and Eke (2020) noted that reducing the rate of mortality in neonates to as low as 12 per 1,000 live births is one of the clearly spelt out aims of the third tenet of the SDG because of its importance to the population dynamics. Okereke et al. (2019) also posited that rural communities in Nigeria account for high maternal and new-born mortality rates in the country. They (Okereke et al., 2019) suggested the need for innovative models of health care service delivery, possibly with greater community engagement to curb the rates of maternal and child mortality in the country. The introduction and strengthening community midwifery practice within the Nigerian primary healthcare system is a clear policy option. The potential of community midwifery to increase the availability of skilled care during pregnancy, at birth and within postpartum periods in the health systems of developing countries has not been fully explored.

Despite the wide range of maternal health services available, maternal mortality in Nigeria continues to rise in some regions. This is partly linked to the weak management and implementation of health policies and services compounded with the socio-economic and cultural factors (Yar'Zever, 2014). Other studies traced the increasing rate of maternal and child mortality in Nigeria to either unavailability

or ineffective health care services for the expectant mother and the newborn. These issues need to be addressed as policies and action plans need to be made to address them in order to curtail the rates of maternal and child mortality in the country.

1.5 Kano State Development Objectives: Institutions, Policies, Infrastructure and People

The Kano state's overall development goal strives to reduce poverty and improve the well-being of its population through the provision of quality, affordable and accessible health services. While the state's health policy thrust and objective is to reduce maternal and childhood morbidity/mortality by improving access to, availability, demand for, and use of appropriate maternal and childhood care. The government has undertaken a number of projects and programs aimed at improving healthcare delivery in the state. In 2016, the Kano State Government launched its revised State Development Plan II, covering the period 2016 – 2025. The vision of this ten-year state development plan (SDP) is “to transform the state to a knowledge base, agriculturally industrialized and commerce friendly society with sustainable growth and appreciable living standards for all citizens”, and was remodeled along six broad objectives, including building a fast-growing and diversified economy, creating a framework for people-centered development and promoting private sector participation in health and economic development.

Box 1: Selected Health Interventions by the Kano State Government and Partners

- a) The establishment of the Kano State Contributory Health Scheme
- b) The employment of over 2500 health workers to improve health service delivery in the state;
- c) Building of eleven PHC Centres in collaboration with Dangote Foundation;
- d) Renovation of thirteen PHC Centres in collaboration with MNCH2;
- e) Adoption of “no embargo on employment of critical staff for the health sector” policy institutionalized by the state. Over 3000 critical healthcare staff were employed by the state between 29th May 2015 – 29th May 2018.
- f) 96 MSS/Sure-P midwives and CHEWs were employed for PHCMB in December 2016;
- g) Expansion of the Drug Revolving Fund (DRF) program for the state where drugs worth more than N6,000,000 were distributed to 44 health facilities. Supply of drugs worth over N270,000,000 in collaboration with MNCH2 for free distribution to pregnant women in the state.
- h) Supply of antimalarial drugs (ACTs and SPs), Rapid diagnostic Test Kit, Insecticide treated bed net, bulbs and other consumables and data tools for free distribution to 748 Health facilities in the state, in collaboration with National Malaria Elimination Program (NMEP) for malaria control and prevention worth over N234,000,000.
- i) Distribution of equipment and consumables worth over N300,000,000 to 131 Health Facilities in the state in collaboration with PATHS and MNCH2.

In the recent past, some of the concrete steps taken by the government include:

- 1) Renovation of existing Primary and Secondary healthcare facilities across the state.
- 2) Upgrade of primary facilities to secondary level
- 3) Two specialist hospital are now under construction expected to be completed by the end of 2019
- 4) In 2018, the sum of 2bn Naira was budgeted for the upgrade of the state’s premier hospital, the Murtala Muhammed Specialist Hospital (MMSH) to international standards
- 5) The construction and renovation of health facilities such as the new Paediatric Hospital at Zoo Road, the Ultra-modern General Hospital at Giginyu, additional ward at maternity wing of Murtala Muhammad Specialist Hospital, and Gwarzo General Hospital.
- 6) Total number of secondary health facilities has increased from 36 to 38 facilities.
- 7) Equipment of secondary facilities; Procurement of MRI C-Scanning, Operating Table Hydraulic, Anesthetic Machines, Ventilators and other sophisticated medical equipment.
- 8) Improvement in health infrastructures and blocks of classrooms in health institutions, one X-ray machine to Muhammad Abdullahi Wase Specialist Hospital, provision of ultrasound machine to Rogo General Hospital

SOURCE: Kano State Development Plan II (2016- 2025)

1.6 Role of Health in the Development of Kano State

In pursuit of the Kano Health Development Priority within the framework of key international, national and state policies, the Kano State Health Policy seeks to strengthen the state health system to provide effective, efficient, quality, accessible and affordable health services that will in turn improve the health status of its inhabitants. The State’s investment in the health sector has been guided by the medium-term sector strategy (MTSS) which aims at ensuring that priority activities are planned within the available resources and geared towards achieving set targets. This is known as results based and it is driven by the idea that results of interventions should be measurable. In pursuing this, the state has deliberately developed a strategic plan based on some pillars. This plan primarily focuses on the basic goal of entrenching PHC delivery in the state, targeting the delivery of qualitative health care services for the teeming population in the state. Strengthen coordination at all levels especially in the following areas:

- 1) Assured harmonization and alignment within the health subsector
- 2) Strengthen the regulatory systems and processes; and
- 3) Enhance multi-sectoral collaboration.

An effective implementation of the above will guarantee improved health delivery particularly in relation to PHC services to the teeming population of the state. In addition, the state through relevant policies and practices also:

- 1) Embarked on the process to develop its long-term strategic health plan SHDP II 2017 -2022.
- 2) At primary health care level, the state has embarked on a policy implementation drive, using the concept of Primary Health Care Under One Roof (PHCUOR). This suggests that the administration, management, monitoring and evaluation of primary health care would be centralized under an agency - Kano State Primary Health Care Board. The Sector has developed its Medium Annual Operational Plans for 2018 which is aligned to the strategic plan, thus guaranteeing that proposed interventions are clearly linked to health needs of Kano people taking cognizance of the vulnerable and the under-served groups.
- 3) Towards the improvement of accountability in the health sector, a Service Charter (Servicom) was developed for the Ministry of Health, Health Management Board and State Primary Healthcare Management Board and Free Maternal Child Health Services.

To further leverage the government leadership role towards creating the much-desired enabling policy and legislative environment to sustain the delivery of quality health services, the Kano State government established the Kano State Drugs and Medical Consumables Supply Agency Law, Kano State Primary Health Care Management Board Law; Kano State Healthcare Trust Fund Law and State Action Committee on AIDS (SACA) Law.

- 4) There have also been steps to regulate private health facilities, especially the proliferation and activities of unregistered practitioners in the state, which is a constraint in the health sector. The institutional arrangement for the involvement of civil society in the policy process of governance is still weak but growing.
- 5) Efforts supported by development partners are ongoing to establish platforms for the engagement of civil society in the policy process of government. The coordination of development assistance is yet another critical responsibility that requires improved commitment by the key stakeholder of the sector.

The essential health care services package comprises a) reproductive, maternal, newborn, child and adolescent health plus nutrition, b) prevention and control of communicable diseases, c) prevention and control of non-communicable diseases, d) health promotion and environmental health).The objectives of these pillars are to increase access to package of essential health care services, create demand for essential health care services, and improve quality of healthcare.

1.6.1 Institutional and policy frameworks on Kano's health care system

The prevailing low health status of Kano citizens is central to the current administration policy thrust. A general look at the Kano State policy thrust on health shows that healthcare delivery has been given high priority in funding by the government as evidenced by increased budgetary allocation. With such massive investments in the health sector by the state government, the projection by the government is that the negative trends bedeviling the health sector will be addressed, and that the MCH subsector in particular would get a boost that will in turn impact the dire figures of maternal and child mortality.

Table 1: Trend of budgetary allocations to the health sector (2015-2023)

Year	Total State Budget	Total Health Allocation	% Allocated to Health
2015	210,761,327,885	18,746,119,819	8.89%
2016	274,329,787,410	27,008,588,066	9.84%
2017	217,931,867,387	26,282,326,265	12.05%
2018	246,608,850,598	32,243,357,720	13.07%
2019	219,970,976,010	33,485,220,496	15.22%
2020	206,267,759,657	31,289,861,047	15.16%

Source: Compiled and computed by PACFah from Kano State Appropriation Laws, 2015-2020³

It is important to note that the situation is gradually improving with increase in priority accorded the sector by the State and the effective contributions from development partners and other donors support for the health sector.

To ensure that health commodities and supplies are constantly available for service delivery, the Kano State government instituted the Drug Revolving Fund (DRF), managed by the Drugs Management, Consumables and Supply Agency. This agency is waxing stronger by the day as it now has a manufacturing plant which has a capacity of producing drugs, syrups, and other consumables.

The Sector also benefits from support and donations of medical consumables by development partners such as DFID funded MNCH2, WHO, UNICEF, Global Fund, CDC-NONSTOP, Women for Health, Save the Children, Save one Million lives program which also provide support in the area of capacity building for health care providers, health planning and budgeting to state and local government levels. With regards to improving skills of the health care providers, the sector has benefited significantly from the capacity enhancement program, following the successful implementation of the administration's flagship program.

Table 2: Proposed programs and interventions to address Kano State's health burden

MNCH Interventions		
Reducing MMR	Reducing IMR*	Reducing CMR
a) Free Maternity Service Program	i. Improvement of Antenatal Clinic Services at the PHC Level	1. Improving on School Health Services
b) Life Saving Skills Training for Providers	ii. Improvement of Immunization Services for all 6 – killer diseases	2. Intensifying Health Education
c) Traditional Birth Attendants Training		3. Embarking on Mass Deworming Programs
d) Establishing New Schools of Midwifery	iii. Community Health Education for mothers and fathers	4. Support Sufferers from Sickle Cell Diseases
e) Increasing Enrolment at School of Midwifery		5. Prevention and treatment of Communicable Diseases
f) Distributing Basic Midwifery Kit	iv. Embarking on breastfeeding education	
g) Community Emergency Transport Scheme		

³ Kano State Approved Budget estimate 2015,2016,2017, 2018, 2019, and 2020

h) Community Health Education i) Strengthening of Family Planning Program j) Provision of modern Equipment in Health Facilities k) Improvement of health infrastructure in the state l) Establishing and strengthening of Ante and Post-Natal Services	v. Raising awareness of traditional and religious Leaders vi. Implementation of Ward-Level PHC Management vii. Provision of essential drugs and consumables	6. Provision of essential drugs and Booster Doses
Malaria Control, HIV/AIDS Reduction and Management, and Other Free Services		
Malaria Control	HIV/AIDS Reduction and Management	Free Services*
A. Pursue more vigorous Health Education B. Regular fumigation of residential areas C. Provision of effective Anti-Malarial and Preventive Drugs D. Provision of Insecticide Mosquito Treated Nets E. Malaria Control Unit to involve community in control of the environment F. Inter-sectoral collaboration with other ministries and agencies to control the environment	i. Provision of free Anti-Retroviral Drugs and Tuberculosis ii. Safe Blood Transfusion Centre iii. Increase coverage of prevention of Mother to Child Transmission iv. Effective disposal of infected items v. Retraining and re-kitting of traditional Barbers vi. Family Life and HIV Education Improvement of Palliative Care vii. Fighting stigma and discrimination	<ul style="list-style-type: none"> ● Free Maternal, Neonatal and Child Health care services in Secondary and Primary Healthcare centers since 2000. ● Over 1936 Traditional Birth Attendants drawn from the 44 LGAs of the state were trained to assist in identifying most especially the nine danger signs in pregnancy and refer clients to appropriate health facilities. ● Free Accident and Emergency services. ● Deferral and exemption component of the State Sustainable Drug Supply System (SDSS) ● Provision of Free Antiretroviral Drugs and Tuberculosis Drugs.

SOURCE: Kano State Development Plan II (2016 - 2025)

Note: The target is to reduce the infant mortality rate, which now stands at 113/1000 live births, by ten percent by 2018. It is also worthy of mention that the Kano State government is providing a lot of free health services.

1.6.2 Public health delivery service in Kano State

The Kano State Primary Healthcare Management Board (PHCMB) has a total of 1200 Primary Health Centres (PHCs) it is catering for. In these PHCs, the board only takes care of the facilities, while the responsibility for the staff is placed on the shoulders of respective local councils, who pay their salaries and other benefits. This is for the simple reason that the board was not designed to fully cater for the health facilities. Official files of staff members working in the 1, 200 health facilities are abandoned somewhere in containers as they do not have proper offices or stores within the premises of the board, situated along Zaria Road, in the Kano the metropolis. All staff files are kept or at best abandoned in containers (Guardian, 2017).

In addition, the Kano State PHCMB with support from eHealth Africa (eHA) created Kano Connect (a mHealth platform). The platform was created for the effective management and supervision of health services delivery by health workers in Kano state. Kano Connect focuses on strengthening Routine Immunization (RI) using communication and information management systems such as electronic RI supportive supervision checklists, a mobile application through which supportive supervision officers can send reports and a dashboard which supervisors and managers can use to follow up on action points. Furthermore, the platform contains an up-to-date directory of all the health workers and health facilities within Kano state, allowing for effective communication and supervision. Recently, an eLearning resource center was added to the platform to provide health workers in Kano state with texts, courses and presentations which would improve their delivery of quality RI services. The courses are available in audio formats and in the local language, Hausa for convenience and ease of understanding; and can be accessed using the Kano Connect android phones anywhere. (<https://www.ehealthafrica.org/kano-connect-case-study>).

In 2016, the United States Centers for Disease Control and Prevention (CDC), in collaboration with the Nigeria National Malaria Elimination Program (NMEP), established the Malaria Frontline Project (MFP), a three-year intervention project with the goals of strengthening the LGAs' health workers technical capacity, improving malaria surveillance, and facilitating evidence-based decision-making in malaria control and prevention.



Pic. 3: Labour Room at Durumin Danwake PHC, Gwale LGA

The project was implemented in the Nigerian states of Kano and Zamfara, which are located in the country's north west geopolitical zone. Several inadequacies in the list of facilities in DHIS2 and MHFL were apparent during the course of the project's deployment. However, because the facility was not on the list of facilities in DHIS2, data from new facilities was being submitted on a monthly basis but could not be put into the system. Facilities that are not part of the MHFL are not listed on the DHIS2 portal. Seven percent of Kano State's PHCs are staffed by doctors, although these institutions are classified as Comprehensive Health Centers instead of Primary Health Centers.

1.7 Gaps in Maternal and Child Health Service Delivery in Kano State

In the Maternal and Child mortality index, there is consensus that the rate is very high in Kano State, as available records show a maternal mortality ratio of 1025 out of every 100,000 and that only 5.1% of children are delivered by health professionals. This disturbing situation has captured the attention of individuals and organizations within and outside Nigeria, particularly considering the fact that it has been attributed to inadequate health financing and poor service delivery in its Primary Health Centres. Several efforts have been made by organizations both within and outside Nigeria through different interventions aimed at improving health financing in the State. Most of these efforts are meant to complement the Kano State Government Health Budget which, over a period of time, has increased its budgetary allocation on health and health related issues, particularly as it affects Maternal and Child Healthcare delivery in the state. The extent to which this marginal increase has impacted on the life of the ordinary citizens accessing health facilities in the state, remains a question to be answered. This underscores the need for this baseline research, which would provide a basis for the validity or otherwise of tracking health care budget, releases, expenditure and actual spending on MNCH in the State with a view to establishing the extent of the impact it is having directly on the lives of the end users.

Despite the free maternity services, utilization of maternity services is still poor in Kano state especially in the rural areas (Jido et al, 2004). Only about 50% of women in the northwest zone of Nigeria attend ANC1 which is lower than the National average of 60% (NPC and ORC Macro, 2004). Home delivery is still the norm in the area with as high as 85.3% of women delivering at home¹. These figures are higher than the national figure of 58% of women delivering at home (NPC and ORC Macro, 2004).

1.8 Theoretical Framework – Political Economy Theory and the Right-Based Theory

This work is anchored on meta-theoretical perspectives namely: the political economy approach and human rights-based approach. Examining maternal and child mortality in Kano state from political economy highlights the health consequences of social inequality (Adamu and Salihu, 2002), which Carey emphasizes are “created by social relations at the local level which are shaped in turn by larger scale political-economic and sociocultural forces in the state”. Although not formally a disease of poverty, maternal mortality is undoubtedly affected by socioeconomic inequalities, political disenfranchisement, power differentials, and structural violence is an undeniable factor in the death of mothers. As coined by Galtung (1969), structural violence refers to the systematic manner in which social structures, such as racism, sexism, and classism, are institutionalized within a society in such a way that it results in the legitimized suffering of some members. Looking again at the glaring disparity of maternal mortality rates among city centers in Kano, one can see an obvious disconnect between urban and rural health outcomes, which is linked with the availability, acceptability, and utilization of maternal care services, which prevent marginalized women from obtaining the prenatal and obstetric care they seek as health facilities are disproportionately concentrated in wealthy, more affluent sectors of society and reflect biomedical models of health. This lack of continuity is directly influenced by economic inequality, particularly within the framework of neoliberal economic policies in which health is a marketable commodity, and is further compounded by social exclusion as dictated by ethnic discrimination and gender inequality. Undoubtedly, the social exclusions constructed and compounded as a result of new health policies are further exacerbating existing health disparities as well as reinforcing social and structural inequalities.

Accordingly, health-seeking decisions are not based solely on health maintenance efforts but also influenced by political and economic factors. Yet, although the framework of political economy often

focuses on the individual as a victim stripped of agency, this is not wholly the case. This is clearly illustrated within the context of pregnancy and childbirth, which are biological events contextualized in sociocultural environments that dictate related beliefs, practices, and procedures. Thus, in addition to these political and economic factors framing pregnancy and childbirth, and the decision-making surrounding these events, socially and culturally rooted factors also play important roles. The Human Rights-based Approach (HRBA) used in this study highlights the health consequences of unequal access of women and children to health care services. It conceives access to health as a fundamental right of every person, which is guaranteed by law and recognized by international treaties. By denying women and children the right to health care services and timely intervention for the treatment of illness faced by them, the HRBA thinks that women and children are automatically denied the right to live a decent living attainable if the government is alive to its responsibility (London, 2008).

In order to overcome the challenge of maternal and infant mortality in society, the government and other stakeholders must put in place viable health care policy and design clearly the process of attaining the outcomes of the policy. The Human Rights-Based approach holds that one of the major reasons why maternal and infant mortality persists and is pervasive in developing countries, is lack of synergy between health care goals, health care process (facilities) and the outcomes set by government and the international community for the attainment of sustainable health care services for women and children in developing countries (London, 2008). Meier et al (2015) held that the rights-based approach focuses more on the underlying social, economic, political and cultural causes of diseases rather than the provision of medicine for the treatment of patients. Unlike the political economy, it digs deep into the relationship between the political, economic and social structures, and access of citizens to health care services. In societies where structures of inequity exist between the ruling class and the ruled, citizens must not expect equal access to health care facilities. The implication of this theory for the study of maternal mortality and access of women to health care facilities in Kano State, links women and children's inadequate access to healthcare services to the social, cultural, and religious structures of Kano State. Kano, being a patriarchal society empowers men more than women by placing men at the helm of society and subjecting both the access to health facilities to the socio-cultural contexts of the political system. Though this practice may have slightly changed, the patriarchal nature of Kano society is still a significant predictor of women's access to health care facilities.



Pic. 4: Pregnant Women Receiving Antenatal Lessons at Zara PHC, Kumbotso LGA



Pic. 5: Zara PHC Building, Kumbotso LGA, Kano

2.0 METHODOLOGY

This section presents the research methodology of the study comprising the research design, study location, research questions, research objectives, methods of data collection and analysis of data. It details the processes by which data for the study was collected and documents the profiles of the respondents in the study.

2.1 Research Questions

1. What is the demographic profiling, maternal and child healthcare service delivery processes in Gwale and Kumbotso Local Government Areas of Kano State?
2. What are the levels of infrastructure in the delivery of maternal and child health in Gwale and Kumbotso Local Government Areas of Kano State?
3. What are the causes of maternal and child mortality and what is the potential link among such factors with gaps in accountability functions of health system delivery pertaining to policy gaps or conflicting/discriminatory policies and political commitment in Gwale and Kumbotso Local Government Areas of Kano State?
4. What are the general experiences of women and children while accessing infrastructure in Gwale and Kumbotso Local Government Areas of Kano State?

2.2 Research Design

This study employed a mixed method of social research comprising a cross sectional survey of health care practitioners and women in the study. The second leg of the study comprises the key informant interviews (KIIs) conducted to gauge the experiences of health practitioners. The KIIs consisted of structured questionnaires that were administered to selected individuals who were directly responsible for health budget, releases, expenditures etc. in the State. The questionnaire was open-ended to enable the research team to ask follow-up questions, to give proper meaning, and understanding to the information gathered from the documents earlier collected and reviewed. The selection criteria were based on purposive sampling allowing individuals with relevant contributions to make to the areas of the research focus to give open and valuable information aimed at meeting the objective of the baseline study. In this category, Heads of Ministries, Departments, Agencies, Health facilities in the selected Local Government Areas, and relevant non-state actors were purposely selected.

The Focused Group Discussion was organized to provide a perfect understanding of the core issues and problems affecting the delivery of quality maternal health programs, particularly as it affects maternal and healthcare delivery in the state. This was meant to provide a good opportunity for the research team to elicit further information from all the relevant stakeholders in the health sector. Specifically, Heads of Departments were interviewed. This was employed with a sample size of 12 respondents who were put in two groups.

The questionnaire was open-ended to enable the research team to ask follow-up questions to give proper meaning and understanding to the information gathered from the documents earlier collected and reviewed. The selection criteria were based on purposive sampling allowing individuals with relevant contributions to make to the areas of the research focus to give open and valuable information aimed at meeting the objective of the baseline study. In this category, Heads of Ministries, Departments, Agencies, Health facilities in the selected Local Government Areas, and relevant non-state actors were purposely selected. The quantitative aspect was employed with 100 respondents.

While doing this, emphasis was given to earlier reports and studies on related areas from MDAs, CBOs, NGOs, etc. This was in addition to a literature review of earlier studies in the area of maternal and child healthcare services. The analysis of these documents provided a reliable and credible basis to develop a good understanding of the relevant available data on maternal health.

2.3 Location of the Study

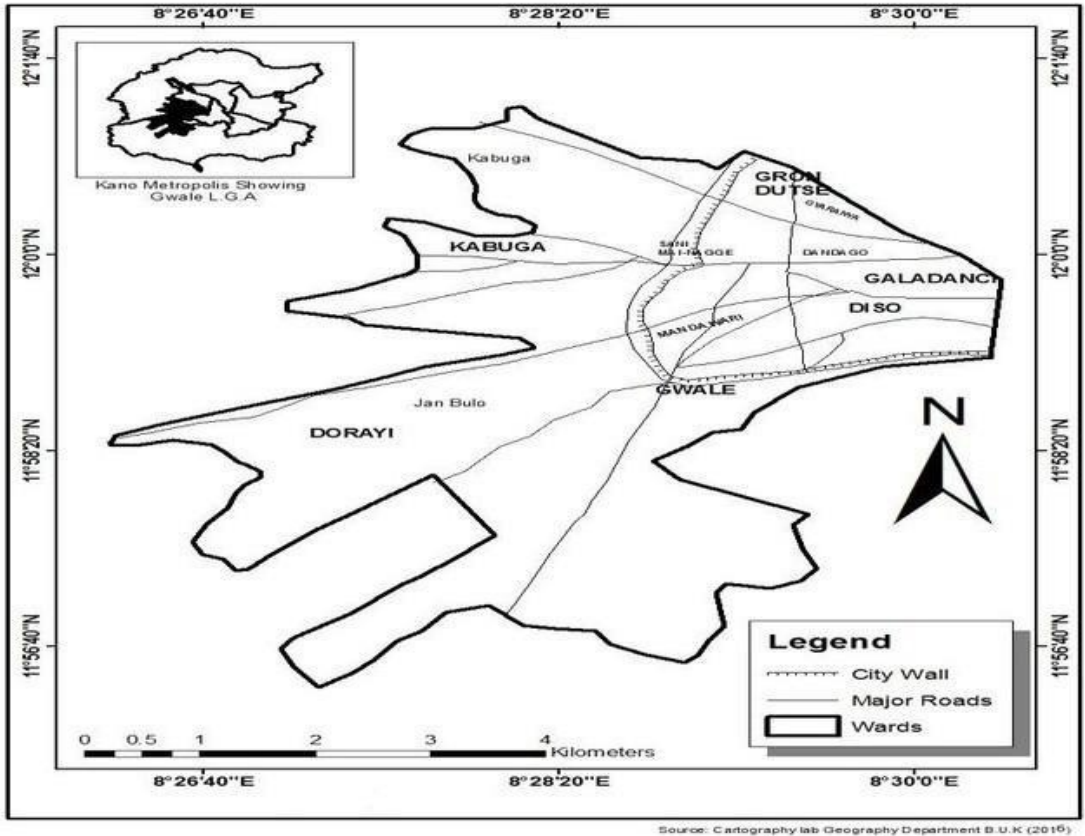
Kano State is one of the preeminent Northern states in Nigeria. It was created by the military government of General Yakubu Gowon in 1967. It has a population of about 9,410,288 based on the

official 2006 National Population and Housing Census, which makes it the most populous state in Nigeria¹. It has 44 local governments, with an area of about 20,479.6 square kilometers. The population density is about 458 persons per square kilometer². It borders Katsina to the North-West, Jigawa to the northeast, and Bauchi and Kaduna states to the South. Kano State is one of the largest industrial centers in Nigeria. It is the commercial nerve center of Northern Nigeria. Kano State is noted for its famous markets, and it is the leading industrial center in the north. All these add to the population of the state, making the availability and accessibility of health facilities very challenging. As a result of this, several efforts have been made at improving health financing in the State both by governmental and non-governmental organizations.

These efforts have led to marginal gains in the governmental efforts at improving healthcare provisions for the teeming population in the State. One of such improvements is the marginal gain/increase by the Kano State Government in Health Allocations, particularly as it relates to maternal, newborn, and child healthcare (MNCH) delivery in the state. This is in addition to several far-reaching steps taken by the State Government towards addressing Maternal Mortality and Child Health care challenges in the State. More so, there are several other interventions and support by non-state actors (Foreign Donors, iNGOs, NGOs, CBOs individuals, etc.) in support of health financing in the State.

Within the Kano metropolis, 2 local government units (Gwale and Kumbotso Local Government Areas) were used for this study. Gwale is a Local Government Area in Kano State, Nigeria within the Greater population and surface area at the center of the Kano city. Its headquarters are in the suburb of Gwale around the Kofar Na'isa Area. It has an area of 18 km² (see Map 1) and a population of 362,059 at the 2006 census.

¹Report of the Kano State-Wide Rapid Health Facility Assessment in preparation of the Mother-to-Child Transmission of HIV. June 2013 www.fhi360.org/sites/default/files/media/documents/kano%20RHFA%20report.pdf ²Brief History of Kano State. Placing.org/situation_room/sr/wp-content/uploads/2015/02/kano.pdf



Map 1: Sampling site at Gwale Local Government Area, Kano State.

Kumbotso is a Local Government Area in Kano State, Nigeria. Its headquarters are in the town of Kumbotso. It has an area of 158 km² (see Map 2) and a population of 409,500 based on the 2016 population projection.



Map 2: Sampling site at Kumbotso Local Government Area, Kano State

3.0 RESEARCH FINDINGS

Findings from this study are based on four identified themes that capture all the research objectives.

- Theme 1: Demographic profiling of Gwale and Kumbotso LGA
- Theme 2: Budgeting for Maternal and Child Services
- Theme 3: Health facility infrastructure
- Theme 4: Access to Maternal and Child healthcare services
- Theme 5: Causes of maternal and child mortality
- Theme 6: General experience of women and children while accessing infrastructure

3.1: Demographic Profiling of Gwale and Kumbotso

In this subsection, we are describing the types of facilities assessed, the health services being rendered at facilities, and the level at which the health facilities are utilized.

3.1.1 Health facility types, health services rendered and health facility usage indicators at assessed facilities

In this study, 50 facilities were assessed in Gwale LGA (24) and Kubotso (26) in Kano state. In Gwale LGA, we found that there were 11 healthcare services being provided in health centers and all of these services are free (Table 4). However, only 8 healthcare services are provided in health posts and health clinics. Of these, 88% of the services are free. While in Kumbotso LGA, 75% of the 10 healthcare services being provided at basic health centers are free. Health centers have 12 health care services, 88% being free. In health posts, it was reported that there are 10 services with 63% being free. Model PHCs 88% of provided services (9) as free. Only Kumbotso LGA rendered both basic health care and model primary health care services whereas such services were not available in Gwale. However, the figure shows that Gwale had 18 Health Centers while Kumsotso LGA had 12 meaning that the HC in Gwale exceeded those in Kumbotso LGA. With reference to Health Post, Kumbotso LGA had 4 while Gwale had 2. Comparatively, it could be concluded that only in Kumbotso LGA that all the types of the facilities could be found.

Table 3: Facility type by the LGAs

LGA	PHC Type	Number of Facilities
Gwale	Health center	19
	Health Post	4
	Maternity Health Clinic	1
Gwale Total		24
Kumbotso	Basic Health Care	1
	Health center	14
	Health Post	10
	Model Primary Health care	1
Kumbotso Total		26
Grand Total		50

Table 4: Services rendered at facilities monitored in Gwale and Kumbotso LGAs, Kano

s/n	Health care services	Gwale LGAs			Kumbotso LGAs			
		Health Center	Health Post	Maternity HC	Health Center	Health Post	Basic HC	Model PHC
1	ANC/PNC rendered	19	4	1	14	9	1	1
1b	Free ANC/PNC services	18	4	1	12	8	1	1
2	Cesarean Section (CS)	0	0	0	2	0	0	0
2b	Free CS	0	0	0	0	0	0	0
3	Under 5 vaccination	19	4	1	14	9	1	1
3b	Free Under 5 vaccination	18	4	1	14	8	1	1
4	COVID19 vaccination	7	1	0	11	2	1	1
4b	Free COVID19 vaccination	7	1	0	11	2	1	1
5	Labor/delivery	12	0	1	9	1	1	1
5b	Free Labor/delivery	12	0	1	9	0	1	1
6	Pharmacy services	18	1	0	12	5	1	1
6b	Free Pharmacy services	7	0	0	4	0	0	0
7	Family Planning	19	4	1	14	8	1	1
7b	Free Family Planning	18	4	1	14	7	1	1
8	Scanning	6	0	0	3	0	0	0
8b	Free scanning	3	0	0	2	0	0	0
9	Health education services	19	4	1	14	9	1	1
9b	Free Health education services	18	4	1	14	8	1	1
10	Nutrition & Drugs	19	3	1	11	4	1	1
10b	Free Nutrition & Drugs	14	3	1	10	3	1	1
11	PMTCT services	15	0	1	10	1	1	0
11b	Free PMTCT services	14	0	1	10	0	1	0
12	Registration	19	4	1	14	10	1	1
12b	Free Registration	17	4	0	9	7	0	0

3.1.2 Utilization of maternal and child healthcare services

The majority of the respondents stated that they have used the facility, and they are of the consensus opinion that they all used it when the need arises, such as going for a check-up and other medical observations. Most of the respondents reported that they mostly go to the health facility when they fall sick, for antenatal and postnatal, while some reported that they use to take their children for medical care.

Majority of the respondents are of the opinion that the system put in place in dealing with maternal complications are: first line treatment such as Injection called magnesium sulfate that controls convulsion. They also stated that they do not treat women with pregnancy complications; what they do is to give first-line treatment and refer the patient to secondary hospitals for proper treatment due to lack of adequate equipment and drugs in the PHCs. According to the majority of the respondents, maternal complications are: miscarriage, infection, Anemia, retained placenta, prolonged bleeding, post partum hemorrhage (PPH), prolonged labour, ruptured uterus, pre-eclampsia. The way they handled it in the past is by giving patients first line treatment and they refer them to secondary hospitals. Some respondent had this to say:

“in Jaen PHC, they do admit pregnant woman with complications because they have the necessary instruments that can deal with maternal complications” another facility user stated that “in Dr. Shamsudeen Health center, Mammara PHC, and Daurayi PHC they all provide services such as CS and other critical maternal services, especially Dr. Shamsudeen health center they provide all these services for free that is why I always use the facility” (KII, Government Official, MoH, Kano State)

and...

“due to insufficient magnesium sulfate injection and insufficient drugs that can deal with maternal complications, we always refer patients to secondary hospitals for proper care” (FGD, Doctor, Gwale LG, Kano State)

3.2 Budgeting for MNCH: Average Amount Received for the Year

In Gwale LGA, the average amount received by the Primary Health Centers is N63, 316 in 2020 and 2021 each. There was no information on the amount received in other facilities such as Health post and Maternity health centers. Likewise, all monitored facilities in Kumbotso LGA have no report on the estimated amount received for PHC health care.

In 2020, BHCPH facilities in Gwale utilized an average amount of N255,702 while N356, 654 was utilized in 2021, this is a 39% increase in budget utilization. Kumbotso recorded the same level of budget utilized (N130 125) in 2020 and 2021 as reported by the BHCPH stakeholders interviewed.

3.2.1 Procurement of drugs/pharmaceuticals

The study showed that 38 (75%) of monitored facilities reported to have purchased drugs from the Kano State Drugs Management and Consumables (KSDMC) supply in both LGAs. 100% of the purchase was based on request. Of the 38 facilities that reported purchasing drugs from the KSDMC

- 28 facilities shared information of the period they made the last request before the day of monitoring
- In both LGAs, most of the facilities made their most recent orders to the Kano state drugs management 6 months prior to the day of monitoring.

In Gwale LGA, it was reported that 20 of 24 (83%) of monitored facilities have forecasts for MCH needs. Thus, it can be deduced that facilities use data for decision making. Also, 20 (73%) of monitored facilities in Kumbotso reported that their facilities have forecasts for MCH needs. Long Lasting Insecticide Nets (LLINs), Antibiotics, paracetamol and anti-malaria drugs are the commodities with the largest quantity of forecast.

However, it was found that all monitored facilities had experienced stock out (SO) of at least one MCH commodity in 2020 and 2021. The SO of anti-malaria related drugs occurred more frequently in Gwale LGA. Likewise, Kumbotso facilities had experienced stock out (SO) of at least one MCH commodity in 2020 and 2021. The SO of ORS and anti-malaria related drugs occurred more frequently in Kumbotso LGA.

3.3 Health Facility Infrastructure

The infrastructure of the PHCs selected for monitoring were assessed; it was found that the building, laboratory, fence, waiting area, water supply and pharmacy section were rated “high”. This connotes strengthened commitment across all levels to sustain the interventions that are connected to improved infrastructure. Table 5 shows the assessment of PHC infrastructure in Gwale and Kumbotso LGAs in Kano State. The table shows that the health center was the lowest rated facility followed by the labour room and electricity generator in the health facilities. The building however had the highest rating implying that most of the health buildings in the Gwale and Kumbotso LGAs were in good condition.

Table 5: Assessment of PHC Infrastructure

PHC infrastructure	Very good	Good	Poor	Very poor	Total
Building	3	30	11	6	50
Laboratory	3	17	14	12	46
Theatre	1	5	5	24	35
Ward	3	16	8	14	41
Beds	4	21	9	13	47
Fence	3	23	10	11	47
Waiting area	2	27	8	9	46
Hand washing station	2	18	9	16	45
Toilets	2	19	15	10	46
Water supply	8	16	7	16	47
Electricity_Generator	6	13	15	13	47
Pharmacy	4	22	12	11	49
Labour room	3	15	10	16	44
GOPD	2	20	14	6	42

3.3.1 Amount of time it takes to reach the nearest facility

In Gwale LGA, the majority (59%) of the women got to the nearest facility to them within 16-15 minutes while 31% used less than 10 minutes to get to the nearest facility. This implied that the proximity of the health care facility in Gwale LGA was not far from where most of the women in the area lived.

Table 6: Amount of time it takes to reach the nearest facility/proximity to the Health Center

LGA	Time category	Frequency	Percent
Gwale	Less than 10 mins	59	31
	16-30 minutes	110	59
	31minutes -1hr	10	5
	More than 1hr	2	1
	No response	7	4
Gwale Total		188	100
Kumbotso	Less than 10 mins	83	45
	16-30 minutes	81	44
	31minutes -1hr	12	7
	More than 1hr	4	2
	No response	4	2

Kumbotso Total		184	100
Grand Total		372	100

3.3.2 Distribution of health workers across the facilities

In this study, it was found that there were more health workers in the health center than any of the other facilities. It further indicates that the least places with health workers were health post and maternity center. Of all the categories of health workers listed, doctors were the least available in the two LGAs with two in Gwale and none in Kumbotso (Table 7).

As of the period of this study, two doctors were available at health centers; 3 Nurses and midwives; 4 CHEWS and 2 JCHEWs in Gwale LGA. On the other hand, at Kumbotso, no doctor was reported to be available, while 2 nurses, 1 midwife, 4 CHEWS and 2 JCHEWs were available. Two health workers in Gwale (1) and Kumbotso (1) reported to have experienced a delay in Salary in 2021. The period of delayed salary was within 6 months. Four health workers in Gwale (1) and Kumbotso (3) reported to have experienced a delay in Salary in 2020. The period of delayed salary was within 3- 8 months.

Table 7: Distribution of Health Personnel/Health Workers in the Health Facilities in Gwale and Kumbotso

Health workers	Gwale			Kumbotso			
	Health center	Health post	Maternity Health	Basic Health Care	Health center	Health Post	Model Primary Health care
Doctors	2	-	-	-	-	-	-
Nurses	3	-	-	-	2	-	-
Midwives	3	2	1	-	1	-	-
Nutritionists	4	2		3	2	1	2
Admin staff	2	-	-	-	1		2
Cleaners	2	1	3	2	2	2	3
CHEWS	4	3	5	3	4	2	4
JCHEW	2	1	1	-	2	1	-
TBAs	7	3	2	10	3	6	2
Pharmacists	1	-	-	-	1	1	4
Drivers	1	-	-	-	-	-	-
Permanent staff	-	-	-	11	10	4	12
Temporary staff	-	-	-	8	18	5	7

3.3.3 Challenges experienced by healthcare workers

The challenges faced by the health facilities in the two local government areas are funding, low supplies of drugs, personnel, security, community and management of patients seemed to be faced by health facilities in the two local government areas but Kumbotso faced the greatest of all these challenges with funding and management of patients ranking highest in the list of the problems confronting the LGA.

In Kumbotso, poor water supply, inefficient generators, and electricity are some of the major challenges facing health care facilities in Kumbotso LGA. The GOPD, water supply, generator and electricity were in bad shape in the health facilities in Gwale LGA. What this implies is that the government needs to pay attention to the supply of water and electricity in Gwale LGA in order to increase access of women and children to health care service delivery.

3.4 Causes of Maternal and Child Mortality

One of the objectives of this study was to examine the cause of maternal and child mortality in Kano state, and findings reveal from the key informant interviews that majority of the respondents indicated that poor management from the person in charge of the PHCs, frequent delays in paying salaries, and lack of proper training workshop and seminars for health workers, while others are of the opinion that lack of division of labour among the facility staff, excess workload, and lack of facility equipment and drugs are what inhibits their ability to proffer adequate health care services to the patients.

3.4.1 Inadequate trained and competent manpower

One of the respondents who is a health worker from Kabuga PHC indicated that some of the health workers are of the opinion that the factors that affect the effective delivery of healthcare services to their patients are inadequate trained personnel. Others identified lack of drugs and equipment, and facility structure - In this regard, some of the respondents reported that some PHCs are very small in size like Chiranchi PHC which has only two room and some respondents complained about a lack of toilets, labour room, waiting room, electricity supply, and water in other facilities. Poor transportation systems were also noted, like bad roads and non-availability of ambulances in case of referral to secondary and tertiary health facilities in emergency cases.

Responses to capture this problem are:

“all the PHC don’t have medical doctors, nurses or midwives. They are headed by Community Health Extension Workers (CHEW) and majority of their workers are volunteers and temporary staff” (FGD, Nurse, Gwale LG, Kano State)

“all of the PHCs in Kano State are below standard which will indirectly affect the effective service delivery to patients.” (FGD, Doctor, Kumbotso LG, Kano State)

“I find it difficult to serve my patients effectively due to the overload work I do in the facility and lack of proper equipment and drugs when attending to emergency complications. One day, due to anger and overwork, I slapped a woman who was in labour and ask her to quickly give to birth I have some place to attend to” while another respondent stated that “I have been working in the health facility for more than 10 years as a temporary staff without adequate salary and I do most of the work in the facility without recognition” (FGD, Nurse, Gwale LG, Kano State)

3.4.2 Poverty

Another major challenge that leads to maternal and child mortality is poor human resource and secondly community health challenges because we still have communities where people don’t come to the hospital to deliver because of socio-cultural beliefs and because of the challenge of access to funds. Majority of the respondents were of the opinion that insufficient finance is a major challenge confronting all the PHCs in Gwale and Kumbotso because without finance; nothing can be done in the PHCs. They also identified insufficient finance as the root cause of other problems confronting the PHCs such as lack of equipment and drugs, understaffing and delay in payment of salaries. As one respondent stated;

“I have worked for several months without salary, sometimes I borrowed money that I use as transport to the health facility, which directly affected my attitude towards work.” (FGD, Nurse, Gwale LG, Kano State)

3.4.3 Ignorance

There is also the issue of delay, which has bearing with ignorance; and this is as a result of the value system of northerners. Most especially, the wives, who must act on the instructions of their husbands. In another dimension, ignorance could also be traced to health workers, and according to some of the respondents, the major causes of maternal death are: negligence from some of the health workers; failure of the government to make adequate provisions for the proper functioning of the facilities, patients’

relatives who due to their traditional and cultural beliefs prevent women from accessing healthcare; and lack of adequate care from the pregnant women.

A respondent had this to say.

“You see for instance, at home, in our culture, a woman should not go out until she seeks permission from her husband. So, sometimes because of ignorance again, a woman will not be allowed to go out until she seeks permission from her husband. So that is a delay. Sometimes, the husband might not be in town or even be around if she needed to go to the hospital. But even according to our culture and even our religion, that rule holds when all things are equal. But in a case of emergency, you don’t wait for permission from your husband to go out and seek help. But this is all due to ignorance” (KII, Government Official, MoH, Kano State)

3.4.4 Equipment and transportation network

Majority of the respondents indicate that the challenges are inadequate equipment and qualified personnel, the limited operating time of the PHCs (8:30am – 2:30pm), poverty, bad roads, cultural practices/beliefs, lack of good facilities and equipment in the health centers. Majority of the respondents stated that most of the PHCs in Kano State are below standards and the PHCs lack adequate equipment that can deal with maternal and child health emergencies. While few respondents indicate that there are few equipment such as anti-shock garments that are used in treatment of postpartum hemorrhage. Most of the respondents reported that they don’t have relevant equipment and professional personnel that can handle maternal and child health complications/emergencies, what they do in the PHCs is just first aid before referring patients to general hospitals. It was further noted that in all of the PHCs in Gwale and Kumbotso LGAs there are no Ambulance services that can be used in case of maternal health emergencies or complications.

For emergencies, I wouldn’t say we are up to the level we expect ourselves to be. It is still a far cry because for you to run an emergency unit, you need 24 hours service, and less than 20 percent of PHCs in Kano run 24 hours, you need a functional referral system and you need well trained staff. In terms of emergency, we are not there, but efforts are being put in place by the government to address these inadequacies. According to the majority of the respondents, there is a lot of equipment that is lacking in almost all of the PHCs in both Gwale and Kumbotso and the absence of such equipment poses a big challenge when dealing with patients with maternal health complications. Some of the equipment identified to be lacking include: scanner, microscope, weighing scale, P.V.C Apparatus, and anti–shock garment. (KII, Government Official, MoH, Kano State)

According to a service users:

“I always wanted to patronize medical health care, but the system of their operation made me consider other means of medical care, and sometimes lack of access to good roads is another major challenge especially for us who live in the rural areas.” (FGD, Community Leader, Kumbotso LG, Kano State)

“Due to the absence of an Ambulance that can be used in case of referral in the PHC, pregnant women with complications always lose their lives and that of the unborn baby when trying to access a secondary hospital by tricycle due to bad roads and delay in attending maternal health care service.” (FGD, Doctor, Gwale LG, Kano State)

3.4.5 Protocols

Majority of the respondents are of the opinion that the processes are cumbersome. They reported that starting from registration and card collection, they spend an average of between 4 and 5 hours before they are allowed to see the doctor, that is, if the doctor is available in the health center. Majority of the respondents lamented the way they were attended to in the maternity or health care centers. They reported that the way health workers do behave to patients in the labour room is very worrisome as patients do receive all kinds of insults from the health workers during childbirth. Majority of the respondents indicated that it is cumbersome. This is because, beginning from the registration process,

they have to join long queues before they are attended to. Majority of the respondents in both Gwale and Kumbotso reported the same delivery and labour process which are checking of the scanning result, blood pressure check, antenatal results and finally hospital card registration. Some respondents however stated that when they go to access labour and delivery services in some PHCs, they are asked to bring razor blades, detergent, hand gloves, and other things.

3.4.6 Poor maternal health services

Majority of the respondents indicated having cases of maternal mortality in their various health centers; many of the respondents are of the opinion that lack of good management from the government by not providing maternal health care equipment such as anti-shock garment, ambulances, drugs are the factors responsible, while other believe that lack of qualified health workers such as doctors, nurses, and midwives is mainly responsible for maternal mortality in their facilities. A few of the respondents believe that: excessive bleeding after delivery, prolonged labour, lack of lifesaving gowns, and failure to go for antenatal during pregnancy and postnatal after delivery are the factors responsible.

One of respondents however indicated that

“Sometimes, maternal mortality problems are man-made. It is due to the negligence and lack of seriousness from the health worker that lead to the death of most pregnant women in the facilities”. (FGD, Doctor, Kumbotso LG, Kano State)

Respondents stated that the facilities and equipment that would have prevented it are: anti-shock gowns, scanning machines, modern laboratory and testing equipment, and lifesaving gown. It was also reported that another major challenge they face from family members of the patients is as a result of misinformation from the government that everything is free regarding maternal health. This information they said often emanates from announcements by government officials on radio, newspapers, television and social media that everything is free for pregnant mothers and under five years old children, whereas, there are no adequate provisions by government in the PHCs to render the free services they announce in the media. As a result of this misinformation, when relatives of patients ask for free medication or service, and the health workers decline on account that there is provision for free drugs by the government, this often lead to fight or verbal abuse because they believe that since the government announced it on media, they have definitely provide them. A respondent from Gwale LGA explained that

“you may have in a facility that has 100 to 150 women attending ANC, delivery, post natal care in a month and government will provide delivery kit/drugs for 30 or 45 patients both women and under five years children in the facility, how can they explain it to them that this is what is happening”. (FGD, Doctor, Kumbotso LG, Kano State)

Majority of the respondents in Gwale and Kumbotso rated the health care services rendered in the various PHCs on a scale of between 10-20% out of 100%.

“to me I will rate my PHC as zero in terms of services rendered due to what I witness in the health center, in Samigu PHC for example, you will not take your goat there not to talk of human being for health care due to the level of low standard in instrument, drugs and lack of doctors or nurses.” (FGD, Community Member, Gwale LG, Kano State)

Majority are of the opinion that healthcare personnel are not fast in attending to health emergencies related to maternal health complications, while some of the respondents are of the opinion that in some of the PHCs, the healthcare personnel are fast in attending to patients with complications and other emergency issues.

In general, most of the respondents reported negative experiences when using the primary health care facilities. They all lamented about the negative attitude of the health workers. Beside the refusal of health workers in receiving pregnant women that are in labour and attending to maternal complications, their services are generally reported to be very poor and the PHCs are said to generally lack adequate equipment and personnel. Respondents from Kumbotso stated that they visit Kabuga PHC, Murtala and Jakara, Sabuwar Gandu and Sharada PHC, Gaida PHC while some from Gwale stated Imam Wali PHC,

Jaen PHC, Madakin Gini PHC. Some of them stated their reasons as the one that is close to them, some enjoy the services provided in the facility, while some have more confidence in the health personnel in their chosen facilities; others reported that they go there because of the equipment and expertise in the health facility.

It was also gathered from the study that what they dislike most is the nonchalant attitude of the health workers towards patients, while others are on the opinion that what they dislike is the way most of the health centres employ unqualified health personnel to attend to serious emergency complications, and lack of urgent attention from the health workers when the need arises. Some respondents also decried the operating time of the PHCs which they reported most of the PHCs operate between 8:30 am and 2:30pm. The implication of this according to the respondents is that any pregnant woman who needs urgent medical attention after 2:30pm is at risk of not getting the required attention. Some of the respondents also complained about the fact that most PHCs lack capacity to handle minor pregnancy-related complications. All they do is referral and when they are referred to secondary and tertiary facilities, there are no ambulances to convey them. As such, most of them whose family do not have cars to convey them rely on tricycles to convey them to the hospitals to which they have been referred. Some respondents have this to say:

“in Jaen PHC, a health worker refused to attend to me when I was about to give birth, she left me on the delivery bed without any assistance. It was when the baby is about to come out and I shouted for assistance that is when someone came to my rescue” (FGD, Community Member, Kumbotso LG, Kano State)

Another respondent stated that

“I lost my sister due to the negligence of the health worker. When my sister was about to give birth, it came with little complications that needed urgent and careful attention. There is a need for her to have an Episiotomy (tear) because the baby is very big. After the surgery, the health worker forgot a sanitary pad in her front after some times she started smelling before we went back to the health center, it was already too late and that is how I lost my sister.” (FGD, Community Member, Kumbotso LG, Kano State)

Furthermore, respondents also shared their experiences which lead to the death of their children, mothers, brothers and relatives due to the negligence, bad attitude and failure of health workers to prescribe the right drugs to patients. While another respondent lamented on the way health workers treated her after giving birth in the facility, by sending her away from the labour room half naked without considering the people outside. The excuse she gave was that she wanted to wash the labour room. Also, the majority of the respondents lamented about the way some of the health workers treat patients in some of the health facilities. While another respondent lamented about the way health workers in the labor room slapped her and asked her to be quick in delivering her baby because she has some important thing to attend to.

A respondent stated that

“sometimes before they attend to you, you have to bribe them or before they attend to you, they will look at your dressing to see if you can afford the price and your level of exposure” (FGD, Community Member, Gwale LG, Kano State)

A few of the respondents indicated that they prefer traditional maternal and child care because they no longer have trust in the medical health care facility close to them. As one respondent stated that

“During my first child birth I was using one PHC in Gwale LGA where they gave a wrong diagnosis that it was not time for my expected date of delivery (EDD) and I ended up giving birth at home that is why I now prefer traditional maternal and child care.” (FGD, Community Member, Kumbotso LG, Kano State)

4.0 DISCUSSION OF FINDINGS

The current fertility rate for Kano of 8.1 is higher than the National figure of 5.74 and is also the second highest for the North West Zone. Sokoto State is the only state in the Zone with a higher figure of 8.74 (Abouahr and Wadlaw, 2021). This is clear evidence that the fertility rate of women in the Zone is increasing. In 2004, a study reported a fertility rate of 6.7 for the Zone. It is not surprising that the CPR of Kano State is only 2%, which is much lower than the National figure of 10% and also lower than the average figure for North West Zone of 3%. Kaduna State has the highest CPR of 8% in the Zone (Yar'zever and Said, 2013).

Despite eight years of free maternity services in Kano State, there is still low utilization of maternity services. As discovered in this study, less than half of the state population of women in the State utilize antenatal clinics. This is lower than 58% National antenatal clinic attendance and Kaduna State had 62% antenatal clinic attendance as the highest in the North West Zone.

As the qualitative study pointed out, the low figure of skilled attendants at delivery and hospitals further stresses the low utilization of maternity services in the State. Both outlets are much lower than the National figure. Home delivery and utilization of Traditional Birth Attendants is still the norm in the zone, because women in Kano feel they do not get the required services they desire when they seek for these medical services. This is in consistency with the report by WHO (2017); that traditional birth attendants are also likely to remain as delivery care attendants for some time because of difficulties experienced in posting trained professionals to rural areas in many developing countries. This is unfortunate given that greater use of services (skilled attendant at birth) is a key step in reducing the half million maternal deaths in developing countries each year (UNICEF, 2014).

Consultation fees, as discussed in the FGDs and KIIs are the most regressive form of healthcare financing available; they contribute to the unaffordable cost burdens imposed on poor households and they represent one facet of the social exclusion experienced by these households, inclusive of women and children in Kano state. Hence, the move by Kano State to remove user fee is justified. Though important, removing fees is not a simple exercise. Without supportive action, the policy of Free Maternity Care can itself add to the performance problems of the health system. Thus, it is important to pay careful attention to the processes and strategies through which any policy change is implemented. Although Kano State has been increasing its funding for the free maternity services over the years, the funding for health has not been proportionate to the substantial increase in utilization of the health system, little wonder, mortality rates, among women and children have been on the increase. Without increased funding for health care, these increases could well lead to falling quality of care generated by drug shortages and staff difficulties in manning increased workloads.

This explains the present situation of free maternity care service in the State. With so much increase in workload and no appropriate compensating remuneration, there is bound to be a negative impact on the morale of health care workers, which will in turn reduce the quality of care they provide. Apart from this, the study also found that clinics and health centers in Kano run out of crucial medicine such as anti-malaria and oxytocin, which raises women's risk of dying. Therefore, there is a need to plan adequately for the implementation to avoid exhaustion of drug supply as utilization increases.

Although the free maternity service improved access of women to the maternity care services as evidenced by the increased number of antenatal clinic attendance and hospital deliveries in our participating hospitals, there has not been any major impact on the health indices of the state. This may not be unconnected to several other social factors that influence maternity care that free maternity services do not address. These factors include low literacy level of the women in the community. Other social factors include cultural factors and general lack of health education of the community. Inadequate coverage and low quality of essential obstetric care underlie the high maternal and newborn deaths seen in the country.

4.1 Summary of Findings

1. The healthcare services available at most PHCs are quite comprehensive. The services are appropriate and also align with the PHC standard care.
2. Most healthcare services are free. Paid services include pharmaceutical, registration, and scanning
3. The PHC centers serve the highest number of communities across both LGAs, thus the highest number of patients.
4. All facilities accessed purchase drugs and consumables from the KSDMC on request
5. Most facilities practice commodity forecasts. However, all facilities still experienced SO of at least a commodity in 2020 and 2021.
6. The SO of anti-malaria drugs occurred more frequently in Gwale LGA
7. The average amount required by PHC for healthcare in 2021 increased by 57% as compared to 2020
8. The average amount utilized by BHCHP in 2021 increased by 28% as compared to 2020
9. Citizens in Gwale and Kumbotso LGAs have had to implement some initiatives to foster the functionality and effectiveness of the PHCs
10. Facilities in Kumbotso have more covid19 forecast needs, this can be justified by the population variations across both LGAs.
11. The major challenges encountered during the administration of COVID 19 vaccine borders around four categories. These are: Poor misconception amongst citizens, low perceived relevance of the vaccine, PHC infrastructure challenges and logistics and weak support for human resource
12. It was found that the building, laboratory, fence, waiting area, water supply and the pharmacy section were rated “high”
13. The PHC functionalities are majorly limited by the funding constraints
14. On average, two doctors are available at health centers; 3 Nurses and midwives; 4 CHEWS and 2 JCHEWs in Gwale LGA.

4.2 Recommendations

Government

1. Allocate and release more funds for the PHC management to address (infrastructure, HR, capacity building and functionality challenges
2. Establish a health service uptake system that will promote health-seeking needs among community members
3. Establish a service accountability system
4. Adopt the use of technology for health facility record keeping

Facility staff

1. Engage in capacity building sessions for reformed health service delivery and attitude
2. Advocate for the use of technology for health and administrative record keeping
3. More community awareness initiatives on citizen’s rights to standard healthcare and the services available at the PHCs
4. Establish a service accountability system

CSOs

1. More community awareness initiatives on citizen’s rights to health and the services available at the PHCs
2. Advocate for the use of technology for health and administrative record keeping
3. Continuous monitoring of health facility for accountability and improved care

Community Members

1. Respond to the interventions from the Government, facility staff and CSOs by visiting the facility promptly as at when needed
2. Demand for healthcare service accountability from facility staff and government

REFERENCES

- Abimbola, S., Okoli, U., Olubajo, O., Abdullahi, M. J., Pate, M.A. (2012.) The Midwives Service Scheme in Nigeria. *PLoS Med.* 9(5): e1001211.
- Adamu Y.M, Salihu H.M., (2002) Barriers to use of antenatal and obstetric care services in rural Kano, Nigeria. *J Obstet Gynaecol.*, 22(6), 600–603.
- Advocacy Brief, (2007) Integrated Approach to Improved Maternal, Newborn and Child Health Action Points for the Media. Produced by the Federal Ministry of Health with support from ENHANCE project/USAID.
- Akande, T., & Monehin, J. (2005). Health Management Information System in Private Clinics in Ilorin, Nigeria. *Nigerian Medical Practitioner*, 46(5). <https://doi.org/10.4314/nmp.v46i5.28739>
- Bala, U., Ajumobi, O., Umar, A., Adewole, A., Waziri, N., Gidado, S., Mohammed, A. B., Uhomobhi, P., Muhammad, B., Ismail, M., Kachur, S. P., Cash, S., & Asamoah, K. (2020). Assessment of health service delivery parameters in Kano and Zamfara States, Nigeria. *BMC Health Services Research*, 20(1). <https://doi.org/10.1186/s12913-020-05722-4>
- Béhague DP, Kanhonou LG, Filippi V, Légonou S, Ronstmans C: Pierre Bourdieu and transformative agency (2008): A study of how patients in Benin negotiate blame and accountability in the context of severe obstetric events. *Sociol Health Illn*, 30:489-510.
- Bongaarts, J. (2016). WHO, UNICEF, UNFPA, World Bank Group, and United Nations Population Division Trends in Maternal Mortality: 1990 to 2015 Geneva: World Health Organization, 2015. *Population and Development Review*, 42(4), 726–726. <https://doi.org/10.1111/padr.12033>
- Chandola T, Jenkinson C.,(2000) The new UK National statistics socio-economic classification (NS-SEC) investigating social class differences in self-reported health status. *J Public Health Med*.22 (2):182–190.
- Dwivedi, A.; Singh, A. K. and Yadav, K. V. (2019) Health Facilities in Developing Countries: A case Study of Mau, India, UK, Cambridge Scholars Publishing.
- Ejembi CL, Alti-Muazu M, Chirdan O, Ezeh HO, Sheidu S. (2004). Utilization of maternal health services by rural Hausa women in Zaria environs, northern Nigeria: Has primary health care made a difference? *J Comm Med Prim Health Care*, 16, 47–54
- Ewere, F., Eke, D.O (2020). Neonatal Mortality and Maternal/Child Health Care in Nigeria: An Impact Analysis. *J. Appl. Sci. Environ. Manage.*, 24 (7) 1299-1306.
- Fullman N, Yearwood J, Abay SM, Abbafati C, Abd-Allah F, Abdela J et al. Measuring performance on the Healthcare Access and Quality Index for 195 countries and territories and selected subnational locations: a systematic analysis from the Global Burden of Disease Study 2016. *Lancet*. 2018 Jun 2;391(10136):2236-2271. PubMed | Google Scholar
- Galandanci H, Ejembi C, Iliyasu Z, Alagh B, Umar, U (2007). Maternal health in Northern Nigeria—a far cry from ideal. *BJOG*, 114, 448–452.
- Galtung, J. (1969). Violence, Peace, and Peace Research. *Journal of Peace Research*, 6(3), 167–191. <https://doi.org/10.1177/002234336900600301>
- Hannatu, H. (2021) The Status of Hausa Muslim Women in Northern Nigeria Today: A Three-Dimensional Perspective. *International Journal of Sciences: Basic and Applied Research (IJSBAR)* Volume 56, No 1, pp 386-409
- Hassan, S. (2012) “The paradox of vaginal examination practice during normal childbirth: Palestinian women’s feelings, opinions, knowledge and experiences,” *Reproductive Health* 9/16
- Innocent, E. O. (2014). Building a Solid Health Care System in Nigeria: Challenges and Prospects. *Academic Journal of Interdisciplinary Studies*, 3(6). <https://doi.org/10.5901/ajis.2014.v3n6p501>
- Kana M. A, Doctor H. V, Peleteiro B, Lunet N, Barros H. (2015) Maternal and child health interventions in Nigeria: a systematic review of published studies from 1990 to 2014. *BMC Public Health*. 15.
- Kano State Government (2026). *Revised Kano State Development Plan II (2016-2025)*. Kano State Printing Press.
- Kano, A. A. (2017). Failing primary healthcare in Kano. *The Guardian Nigeria News - Nigeria and World News*. <https://guardian.ng/sunday-magazine/failing-primary-healthcare-in-kano/>
- Kols, A, 2003, ‘A Rights-Based Approach to Reproductive Health’, UNFPA/Programme for Appropriate Technology in Health, New York

- Lambo E, (2003) Breaking the cycle of poverty, ill-health and underdevelopment in Nigeria, paper presented at a special Guest Lecture of the College of Medical Sciences, University of Benin, Benin City, Nigeria.
- London, L. (2008) What is a human-rights approach to health, and does it matter? *Health and Human Rights Journal*, <https://www.hhrjournal.org/2013/09/what-is-a-human-rights-based-approach-to-health-and-does-it-matter/>
- Mason, P., Mayer, R., Chien, W.-W., & Monestime, J. (2017). Overcoming Barriers to Implementing Electronic Health Records in Rural Primary Care Clinics. *The Qualitative Report*, 5(1). <https://doi.org/10.46743/2160-3715/2017.2515>
- Meier, B.J.; Gable, L. ; Getgen, J. E. & London, L. (2015) Rights-based approaches to Public Health Systems, <https://bmeier.web.unc.edu/wp-content/uploads/sites/700/2015/07/2010-Meier-et-al-Rights-Based-Approaches-to-Public-Health-Systems-Ch.2.pdf>.
- National Population Commission (Nigeria) and ORC Macro. Nigerian Demographic and Health Survey (2003). Key Findings. Calverton, MD: National Population Commission and
- National Population Commission (NPC) (2014) ICF Macro. Nigeria demographic and health survey 2013. Abuja, Nigeria: National Population Commission and ICF Macro.
- NDHS (2008) Key findings of NDHS Teenage childbearing determinants Studies in fertility rate and mortality 24:102- 9.
- Nigerian Central Bank (2004) Nigerian Central Bank Annual Report Statement of Accounts. Abuja, Nigeria: Nigerian Central Bank.
- Okereke, E., Ishaku S.M, Unumeri G., Mohammed B. and Ahonsi, B. (2019) “Reducing maternal and new-born mortality in Nigeria”—a qualitative study of stakeholders’ perceptions about the performance of community health workers and the introduction of community midwifery at primary healthcare level in Human Resources for Health. <https://doi.org/10.1186/s12960-019-0430-0>
- Okolocha C, Chiwuzie J, Braimoh S, Unigbe J, Olumeko P.,(1998) Socio-cultural factors in maternal morbidity and mortality: a study of a semi-urban community in southern Nigeria. *J Epidemiol Commun Health*.52:293–297.
- Onwujekwe, O., Onoka, C., Uguru, N., Nnenna, T., Uzochukwu, B., Eze, S., Kirigia, J., & Petu, A. (2010). Preferences for benefit packages for community-based health insurance: an exploratory study in Nigeria. *BMC Health Services Research*, 10(1). <https://doi.org/10.1186/1472-6963-10-162>
- Orozco-Olvera, Victor H. and Rascon Ramirez, Ericka Gabriela (2022), Improving Enrollment and Learning Through Videos and Mobiles: Experimental Evidence from Northern Nigeria Available at SSRN: <https://ssrn.com/abstract=4221220> or <http://dx.doi.org/10.2139/ssrn.4221220>
- Oyekale, A. S. (2017). Assessment of primary health care facilities’ service readiness in Nigeria. *BMC Health Services Research*, 17(1). <https://doi.org/10.1186/s12913-017-2112-8>
- Pharmaccess. (2018). A Closer Look at The Healthcare System in Nigeria Healthcare Financing. <https://www.pharmaccess.org/wp-content/uploads/2018/01/The-healthcare-system-in-Nigeria.pdf>
- Jido, T. Sarkinfada, H.S Galadanci, I.D.G. (2004) Prevalence and Associated factors in the non-utilization of Maternity Care Services in a Rural Area of Kano State. *Highland Med. Res. J.* 2(2) 2004:29-36.
- Royston, E and Armstrong, S. (eds.) (1989) Preventing Maternal Mortality. World Health Organisation, Geneva.
- Salman, et al (2014). Right to Health in Nigeria: A Review of Key Health Development Policies Against Federal Health Budgets 2009 – 2013. Abuja: Centre for Social Justice Publication.
- Titaley, C.R., Dibley, M.J., Roberts, C. L. (2012). Type of delivery attendant, place of delivery and risk of early neonatal mortality: analyses of the 1994–2007 Indonesia Demographic and Health Surveys. *Health Policy and Planning*, 27, (5), 405–416.
- UNICEF (2014) maternal mortality in 2000. Estimates developed by UNICEF, WHO, UNFPA. World Health Organization, Geneva, Switzerland.
- Uzundu C.A, Doctor H.V, Findley S.E, Afenyadu G.Y, Ager A. (2015) Female health workers at the doorstep: a pilot of community-based maternal, newborn, and child health service delivery in northern Nigeria. *Glob Health Sci Pract.* 2015;3(1):97–108.

- Wall LL., (1998) Dead mothers and injured wives: the social context of maternal morbidity and mortality among Hausa of northern Nigeria. *Stud Fam Plann.*29(4):341–359.
- Welcome, M. O. (2011). The Nigerian health care system: Need for integrating adequate medical intelligence and surveillance systems. *Journal of Pharmacy and Bioallied Sciences*, 3(4), 470. <https://doi.org/10.4103/0975-7406.90100>
- World Bank (2022) Adolescent Sexual and Reproductive Health in Nigeria. Available at: <https://openknowledge.worldbank.org/handle/10986/21626?locale-attribute=en>
- World Health Organization (WHO), (2007) Maternal Mortality in 2005: Estimates Developed by WHO, UNICEF, UNFPA, and the World Bank, Geneva.
- World Health Organisation (2013). Research for universal health coverage. The world health report
- World Health Organization (WHO), (2017) Maternal Mortality: Estimates Developed by WHO, UNICEF, UNFPA, and the World Bank, Geneva.
- Yar' Zever, I. and Said, I. (2013) Knowledge and Barriers in Utilization of Maternal Health Care Services in Kano State, Northern Nigeria. *European Journal of Biology and Medical Science Research*, 1 (1), 1-14.
- Yar'zever S. I, (2014) Temporal Analysis of Maternal Mortality in Kano State, Northern Nigeria: A Six-Year Review. *American Journal of Public Health Research*, 2(2) 62-67. doi: 10.12691/ajphr-2-2-5.
- World bank. UHC service coverage index-Nigeria. 2017. Accessed on Jun 3, 2020.

About CHRICED

Established in 2006, with offices in Abuja and Kano, the Resource Center for Human Rights and Civic Education is a registered Nigerian non-profit promoting human rights and advancing a democratic, representative, and inclusive political culture in Nigeria. CHRICED work is anchored on the United Nations Universal Declaration of Human Rights, the African Charter on Human and People's Rights, and the Nigerian Constitution. CHRICED is a reputable organization with a track record of partnering with foundations, religious organizations, and development partners across Europe and North America, including Bishöpflichches Hilfswerk MISEREOR, e.V (the German Catholic Bishops' Organisation for Cooperation) and the Katholische Zentrastelle für Entwicklungshilfe e.V (Catholic Central Agency for Development Aid), the John D. and Catherine T. MacArthur Foundation, and Open Society Foundation, to mention a few.

For core programming, CHRICED uses civics, research and publication, advocacy, information sharing, grassroots organizing, networking and outreach to mobilize vulnerable and marginalized segments of the population to implement innovative grassroots-focused programs aimed at energizing community action to resist injustice, curb corruption and foster accountability; and bring about fundamental changes in societal norms and behaviors, which fuel injustices and corruption.

Over the years, CHRICED has amassed the requisite experience and track record in project management in the areas of human rights promotion, deepening accountability and mobilizing marginalized groups to amplify their concerns in governance processes. In terms of strategic alliances, CHRICED has a strong relationship with community actors across Nigeria, including youth networks, indigenous people's groups, farmers' collective, women activists, traditional leaders and social influencers. CHRICED also has a name recognition, which would boost its ability to convene stakeholders on the demand and supply side of human rights, including inhabitant self-determination groups. Also, as a result of the consistency of its messaging on human rights, and accountable governance, CHRICED has become a credible voice in the debate on the democratic process in Nigeria.

CHRICED's key philosophy is that civic education dissemination is cardinal to the empowerment of the citizens.



Resource Centre for Human Rights and Civic Education (CHRICED)

Professor Abubakar Momoh House

Hse 5, Malcolm X Street, First Avenue

Gwarimpa, Abuja, Federal Capital Territory (FCT), Nigeria

Upper Floor, Ahmadiyya Hospital Building

52 Bompai Road, Kano, Kano State, Nigeria

Phone: +234 909.999.9014, 802.313.3924

Email: info@chriced.org.ng

Website: www.chriced.org.ng

facebook.com/chricedng

Twitter: @chricedng

Skype ID: chriced Nigeria

INDEX

A

Absence, 8, 15–16, 35
Abuja Declaration, 14
Accountability, 13–14, 19, 39–40, 43
Administration, 9, 19, 39
Advocacy, 4, 43
Africa, 13, 15
Agencies, 9, 26
AIDS, 6
Ambulances, 34–37
Anemia, 31
Anesthetic Machines, 18
Antenatal, 30, 36, 40
Antenatal Clinics, 10, 38
Antibiotics, 31
Anti-Malaria, 31, 38
Assessed Facilities, 5, 29
Assessment, 1, 3, 32

B

Babies, 8, 16, 37
Barriers, 5, 15, 40–42
Bio-Terrorism, 15
Birth, 8, 14, 16, 34, 37–38
Blood Pressure, 34
Booster, 21
Budget, 31
Budgetary Allocations, 20, 23
Budgeting, 5, 8, 20, 29, 31
Building, 15, 17–18, 32, 39–40

C

Campaigning, 4
Cesarean Section, 6, 30
Challenges, 5, 12, 14, 33, 35, 40
CHEWs (Community Health Extension Workers), 18, 33–34, 39
Childbearing, 13
Childbirth, 24, 35
Child Mortality, 5, 8, 10, 13, 16–17, 19, 23, 26, 34
Children, 8, 10, 12–14, 20, 23–24, 26, 29–30, 33, 36–38
Citizens, 12, 16–17, 24, 39
Commodities, 31, 39
Communities, 12, 15, 21, 33–34, 38–39
Community Leader, 9, 35
Community Member, 36–37, 39
Community Midwifery, 16
Consumables, 18, 20–21, 39
Corruption, 8, 14
Culture, 12, 35
Cycle, 13

D

Deaths, 8, 12–13, 16, 23, 36–37
Decent, 12, 24
Delay, 33–35
Delivery, 10, 13–16, 18–19, 22, 26–27, 36–38
Demographic Profiling, 5, 10, 26, 29
Deprivation, 1, 3
Disbursement, 11
Discrimination, 21
Diseases, 12, 20, 23–24
Disparity, 13, 23
Doctors, 23, 31, 33–36, 39–40
Documents, 26
Drug Revolving Fund (DRF), 18, 20
Drugs, 8, 18, 31, 33–34, 36

E

Ecosystem, 5, 12
Education, 12–13, 20
Electricity, 15, 32–33
Emergency, 13, 35
Employment, 18
Enforceability, 14
Engagement, 14, 19
Epidemics, 15
Equipment, 5, 15, 18, 21, 34–37
Evaluation, 1, 3, 19
Expenditures, 23, 26

F

Facilities, 5, 11, 13, 18, 21–24, 29–31, 33–34, 36–37, 39
Factors, 8, 10, 15, 23, 26, 34, 36, 38
Failure, 34, 36–37
FCT (Federal Capital Territory), 4, 6, 14
Fence, 32, 39
Fertility Rate, 10, 38
Findings, 5, 29, 34, 38–39
Framework, 17–18, 23
Free Maternity Services, 10, 23, 38
Functionality, 15, 39
Funding, 19, 33, 38

G

Gaps, 5, 8, 10, 14, 23, 26
Gender Inequality, 23
Generator, 32, 33
Grassroots, 16
Gwale, 1, 3, 5, 8, 10, 27, 29, 31–36

H

Health, 5, 14–15, 17–21, 23–24, 33, 38–41

Health Budget, 26
Health Care, 12, 14-15, 33, 36, 38
Health Care Services, 12, 14, 24, 29, 36
Health Centers, 29, 32-33, 35-39
Health Facilities, 9, 12-15, 18, 21-24, 26-27, 29-30,
32-34, 37, 39-40
Health Infrastructures, 15, 18, 21
Health Personnel, 14, 37
Health Policies, 16, 23
Health Sector, 14, 18-20, 26
Health Services, 5, 8, 10, 12-13, 18, 20, 29
Health Systems, 16, 38
Health Workers, 5, 18, 22, 33-37
HIV Education, 21
Home delivery, 10, 23, 38
Hospitals, 10, 13, 34-35, 37-38
Human Resources, 6, 15, 39
Human Rights-based Approach (HRBA), 6, 23-24

I

Ignorance, 34-35
Illness, 13, 24
Immunization, 20, 22
Implementation, 16, 19-21, 38
Improvement, 13, 18-21, 18
Infant mortality, 8, 16, 21, 24
Infections, 16
Information, 8-9, 12, 14-16, 22, 26, 31, 36, 43
Infrastructure, 8, 10-11, 15, 17, 21, 26, 29, 32, 39
Injection, 31
Insecticide, 18, 21, 31
Institutions, 9, 15, 17-18, 23
International treaties, 12, 24
Interventions, 13, 18-20, 23, 27, 32, 39

K

Kano State, 8, 10, 12-14, 17-21, 22-24, 26-29, 31-32,
34-38
Kumbotso, 8, 10, 11, 13, 24-37, 39

L

Laboratory, 32, 36, 39
Labour, 13, 16, 22, 31-32, 34-37
Labour room, 22, 32, 34-35, 37
Law, 12, 19, 24
Life, 8, 12, 16, 20, 21, 23
Live Births, 8, 12, 14, 16, 21
Logistics Information Management System (LIMS),
12

M

Malaria Control Unit, 21
Malaria Frontline Project (MFP), 22
Management Information Systems (MIS), 16
Master Health Facility List (MHFL), 12
Maternal, 12-14, 16-17, 19, 21, 23-24, 26-27, 29-31,
34-38
Deaths, 11, 13, 36

Health Services, 9-10, 14, 34
Mortality, 9, 11, 13-14, 20-22, 24, 34
Maternity, 7, 11, 15, 18, 20, 26-28, 30-31, 33, 36-37
Medical Care, 28, 33
Medication, 10, 34
Medicine, 24, 38
Midwifery, 16, 20
Midwives, 18, 33-34, 36, 39
Miscarriage, 31
Mortality, 8, 12-14, 16-17, 19, 21, 23-24, 26-27, 29,
34, 36, 38

N

National Malaria Elimination Program (NMEP), 18,
22
National Population Commission (NPC), 13, 14
Negligence, 34, 36-37
Newborn, 16-17, 19, 27, 38

O

Obstetric Care, 14, 23, 38

P

Pharmacists, 33
Pharmacy, 30, 32, 39
Pillars, 14-15, 18-19
Planning, 13-14, 20-21, 30
Policies, 10, 16-19, 23, 26
Postnatal, 16, 30, 36
Poverty, 13, 15-17, 23, 34-35
Pregnancy, 13, 16, 21, 24, 31, 36-37
Prevention, 15, 18-22
Primary Health Care, 15, 19, 29, 33, 36
Primary Health Centers, 23, 31
Procurement, 18, 31
Project, 12-13, 22-23
Provision, 14-15, 17-18, 21, 24, 36
Public Health, 12, 14-15, 22

Q

Quality Health Services, 14-15, 19

R

Referral, 15, 34-35, 37
Registration, 15, 30, 35-36, 39
Risk, 13, 15-16, 37-38

S

Security, 13, 15, 33
Sickle Cell Diseases, 20
Stakeholders, 24, 26, 31
State Development Plan (SDP), 17-19, 21

T

Treatment, 24, 31, 35
Tuberculosis Drugs, 21

V

Ventilators, 18
Violence, 23

W

Ward, 18, 21, 32
Water Supply, 15, 32-33, 39
World Bank, 12, 15
World Health Organization (WHO), 8, 12, 14