



**INTERSECTIONAL FACTORS INFLUENCING THE USE OF REPRODUCTIVE
AND MATERNAL HEALTH SERVICES BY WOMEN AND GIRLS IN NIGERIA**

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NIGERIA

**58th Master of Public Health/International Course in Health
Development**

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INTERSECTIONAL FACTORS INFLUENCING THE USE OF REPRODUCTIVE AND MATERNAL HEALTH SERVICES BY WOMEN AND GIRLS IN NIGERIA:

A thesis submitted in partial fulfillment of the requirement for the degree of Master of Science in Public Health

by

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ABSTRACT

Background

Nigeria has a high maternal mortality rate, currently accounting for approximately 23% of maternal deaths worldwide. There are regional differences in maternal mortality levels in the country. Many intersecting factors contribute to the disparities in use of reproductive and maternal health services by women and girls in Nigeria. These intersecting factors affect women and girls in different ways, and can influence their decision making power on use of reproductive and maternal health services. This study seeks to explore how these factors combine to create inequalities in use of reproductive and maternity health services by women and girls in Nigeria..

Methodology:

The study is a descriptive literature review. A systematic approach was adopted to search for published literatures using the VU library, PubMed, and Google Scholar. Hand searching of the reference lists of retrieved literature was done using snowballing techniques to retrieve additional published literatures that fits the inclusion and exclusion criteria defined for the literature search.

Results:

Maternal education, employment, wealth/income, ethnicity, religion, traditional beliefs, gender inequality, quality of care, cost of assessing care, insufficient health infrastructure and health workforce emerged as key factors influencing the use of reproductive and maternal health services in Nigeria. Further, findings reveal that living with disabilities, being an adolescent, living in rural areas, experiences of child marriage, intimate partner violence contributes to power differentials that limit opportunities for use of reproductive and maternal health services.

Discussion:

The findings from the study show that there are multiple intersecting factors that influence the use of reproductive and maternal health services in Nigeria. A multisectoral approach is recommended to address the barriers limiting the use of reproductive and maternal health services by women and girls in Nigeria.

Keywords: *Maternal Health, Reproductive health, Intersectional factors, Access, Use*

Word count: 10,542

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ABBREVIATIONS

ANC: Antenatal care

CHEW: Community Health Extension Workers

FBA: Faith Based Organization

GDP: Gross Domestic Product

HCI: Human capital Index

IPV: Intimate Partner Violence

LMIC: Low and Middle Income countries

MMR: Maternal Mortality ratio

NDHS: Nigeria Demography Health Survey

NHIS: National Health Insurance Scheme

OOP: Out of Pocket expenses

PHC: Primary Health Centre

SDG: Sustainable Development Goals

SSA: Sub-Saharan Africa

TBA: Traditional Birth Attendance

THE: Total Health Expenditure

OPERATIONAL DEFINITIONS

Maternal Health: Maternal health refers to the health of a woman during the period of pregnancy, child delivery and post-natal periodⁱ

Maternal Mortality: Maternal mortality is defined as deaths related to complications from pregnancy or childbirthⁱⁱ

Antenatal care: Antenatal care (ANC) is the care given to a pregnant women by a skilled provider during the trimesters of pregnancy. This includes health education, and screening, and preventive treatmentⁱⁱⁱ

Facility-based delivery(Institutional delivery): Facility-based delivery (FBD), also known as institutional delivery refers to child birth or delivery taking place in the health facilities^{iv}

Postnatal care: Refers to skilled care provider to a mother and her child immediately after delivery up to 6 weeks (42 days) post delivery^v

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- i. WHO, Maternal Health https://www.who.int/health-topics/maternal-health#tab=tab_1
 - ii. UNICEF, Maternal Mortality <https://data.unicef.org/topic/maternal-health/maternal-mortality/>
 - iii. UNICEF, Antenatal care <https://data.unicef.org/topic/maternal-health/antenatal-care/>
 - iv. Mshelia SE, Analo CV, Booth A. Factors influencing the utilisation of facility-based delivery in Nigeria: a qualitative evidence synthesis. *Journal of Global Health Reports*. 2020;4:e2020100. doi:10.29392/001c.17961
 - v. WHO technical consultation on postpartum care <https://www.ncbi.nlm.nih.gov/books/NBK310595/>

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Women are not dying because of untreatable diseases. They are dying because societies have yet to decide that their lives are worth saving¹.”

Mahmoud Fathalla, past president of the International Federation of Obstetricians and Gynaecologists and former Chair of the WHO Advisory Committee on Health Research

INTRODUCTION

The Sustainable Development Goals (SDGs) of the United Nations place a high priority on ensuring equal access to and use of reproductive and maternal healthcare services². Maternal deaths have decreased globally by 44% during the previous 25 years³. However, regional and national progress remains uneven, with Nigeria and India accounting for more than one-third of all maternal deaths worldwide in 2015³. Health is acknowledged as a fundamental human right⁴, which implies that everyone should have equal access to healthcare tailored to their individual needs or peculiarities, regardless of gender, race/ethnicity, culture, age, economic situation, place of residence, occupation, religion, disability, or level of education. Unfortunately, this is not the case in the vast majority of low- and middle-income countries, where many factors worsen maternal mortality and foster inequality⁵.

Previously, I have worked on donor-funded projects to expand access to reproductive and maternal health care services in rural underprivileged communities in Nigeria. The project strategy is usually centered on strengthening health systems and removing demand and supply-side barriers hindering the use of services. However, one critical lesson learned from my previous projects is that to have a long-term impact, interventions to increase the use of reproductive and maternal health services must be holistic and consider the dimensions of multiple intersecting factors contributing to the unique disadvantages for the most vulnerable women and girls in Nigeria.

Northern Nigerian women and girls are the most vulnerable, recording maternal deaths than the national average⁶. The uptake of antenatal and hospital-based delivery services is higher in southern Nigeria than in northern Nigeria⁶. Between Northern and southern Nigeria, there are geographic differences as well as gender, sociocultural and economic differences. These disparities manifest in a variety of dimensions that create inequality and may influence how women and girls obtain and use services for reproductive and maternal health.

This is what inspired this study to explore the intersectional factors that influence the use of reproductive and maternal health services across regions in Nigeria. The United Nations SDG Goal 3.1 aims to lower maternal deaths to below 70 per 100,000 live births globally by 2030⁷. An intersectional understanding of the variables impacting inequities in the use of reproductive and maternal health services is essential to accelerating progress toward this goal. In addition, it will guide the development of equity-based reproductive and maternal health policies.

This study is organized into ten chapters. Chapter one provides the context setting for the study, highlighting the background information about the demography, macro and socioeconomic situation, and the health systems of Nigeria. Chapter two presents a summary of the problem statement including the existing body of knowledge on the study, and highlights the knowledge gaps that this study intends to fill. The general objective and specific objectives of this study are also included in chapter two. Chapter three describes the methodology and the conceptual framework employed to guide the synthesis of findings and analysis of results. The result of this study is split into several

chapters (from chapter four to chapter eight). The discussion of the study is presented in chapter nine and chapter ten includes the conclusion and recommendation

1.0 CHAPTER ONE

CONTEXT SETTING: BACKGROUND INFORMATION ON NIGERIA

This chapter describes the background of Nigeria including the demography, macroeconomic and socioeconomic conditions, socio-cultural norms, characteristics of the health systems, and the reproductive and maternal health situation in Nigeria.

1.1. Geography and Demography

Nigeria, located in West Africa, has the continent's largest population. It covers an area of about 923,769 square kilometers⁸. The estimated population as of 2022 is more than 200 million people, making it one of the top seven most populous countries⁹. At an estimated population growth rate of 3.2%, the population figure is projected to reach 400 million by 2050¹⁰

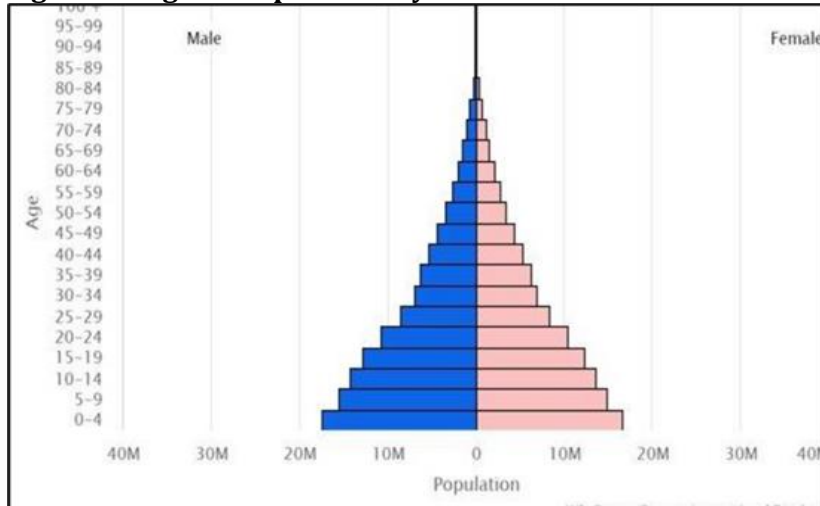
Nigeria is a diverse country with 36 states and the Federal Capital Territory¹¹ (see figure 1, map of Nigeria). Nigeria is divided into 19 northern states and 17 southern states. The North and South are further subdivided into six geopolitical regions: Northeast, Northwest, Northcentral, Southeast, Southwest, and South-South. These geopolitical regions are home to around 250 ethnic groups and over 500 languages¹². There are significant distinctions between the regions in terms of physical topography, climate, and vegetation, as well as socio-cultural, religious, and traditional beliefs¹³.

About half of the population of Nigeria lives in rural areas¹⁴. The country has a substantially youthful population. Children aged below 15 years make up about 42% of the population, young people aged 15-24 represent about 20% of the population, while the elderly aged 65 represent less than 4%¹² (see figure 2 showing population pyramid). Within the population group, women of reproductive age (15-49 years) stand at approximately 40 million representing about 20% of the total population¹⁵. Nigeria is a country with a low life expectancy and high fertility rate and this is reflected in the broad base of the pyramid.

Figure 1- Map of Nigeria¹¹



Figure 2- Nigeria Population Pyramid¹²



1.2. Macro-economic and Socioeconomic condition

As a result of the global COVID 19 pandemic, Nigeria experienced its worst recession in two decades in 2020, but growth resumed in 2021 as pandemic restrictions were eased and oil prices recovered¹⁶. Nigeria's economic outlook remains uncertain due to the country's over-reliance on income from oil export as its major source of revenue. The inability to diversify the economy, address infrastructural deficits, build effective institutions, address governance issues, curb corruption, and enhance public finance management systems have impacted negatively on the growth of the economy¹⁶

Despite having the largest GDP in Africa, Nigeria's per capita income is low with a highly unequal distribution of income and wealth which exacerbates inequity in health¹⁷. Nigeria exemplifies poverty amid plenty¹⁷. It ranked 150 out of 157 countries in the World Bank's Human Capital Index 2020¹⁸. Approximately 40% (83 million) of Nigerians live in poverty¹⁹. This figure is projected to rise by 12 million between 2019 and 2023, widening the equity gap¹⁶. The poverty level is higher in the Northern region compared to the Southern region with the majority of the poor living in rural areas^{20, 21 22}

Inequality exists in terms of income and employment opportunities between the northern and southern regions with the south being the most economically developed part of Nigeria^{16,23}. All of the country's major industrial centres, oil reserves, as well as seaports, are concentrated in the southern region leaving significant infrastructural deficits in the Northern region²⁴.

1.3. Sociocultural, Religion, and Traditional Practices

Nigeria is an ethnically diverse country with a rich cultural and traditional heritage that differs across the various regions. Nigerian traditional society is characterized by patriarchy and social norms in which men tend to hold positions of power due to social stratification and cultural beliefs that undervalues women^{25,26}. The manifestation of patriarchy prevents women from participating in as many socio-political and economic activities as their male counterparts. As a result, gender-based and intimate partner violence are pronounced in Nigeria²⁷Nigeria is a religious nation. The two dominant religions are Christianity and Islam. The religious demography of Nigeria is such that the North is predominantly Islam while the South is predominantly Christian. Religious beliefs influence health-seeking behaviors in Nigeria²⁸. Due to religious beliefs, care-

seeking for reproductive and maternal health services in Nigeria varies disproportionately across the northern and southern divide of the country²⁹. Traditional harmful practices vary greatly across Nigeria's regions. Early child marriage, child labour, and female genital mutilation are the most common harmful traditional practices in Nigeria³⁰. These practices are deeply rooted in cultural and religious beliefs and engender discrimination against women³¹.

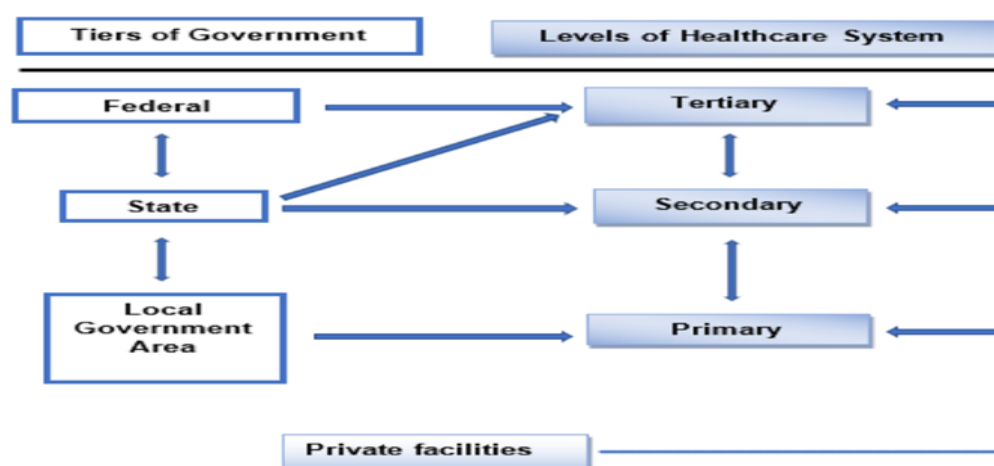
1.4. Health Profile and Health System Structure

Nigeria's health indicators are among the worst in the world and Sub-Saharan Africa¹⁷. Nigeria's mortality rate and general health status are among the worst in Africa, reflecting the state of the health system³². The average life expectancy at birth is 55 years³³. According to the Nigeria demographic health survey 2018, MMR is 512 per 100,000 live births, and under 5 mortality is 132 per 1000 live births³⁴. These health indicators are worst in the northern part of Nigeria³⁴. While preventable maternal and child illnesses are the leading causes of death in Nigeria, the burden of non-communicable disease has continued to rise³⁵.

Nigeria's health care system is faced with numerous challenges, as evidenced by the lack of coordination among the three tiers of government concurrently responsible for healthcare, scarcity of resources including drugs and supplies, insufficient and decaying infrastructure, insufficient human resources for health, inequity in resource distribution and access to care, and very poor quality of care³². Despite several donor-funded health system strengthening projects, the health system continues to underperform³⁶.

The healthcare system in Nigeria is managed by three levels of government (See figure three: structure of health system. The local government, in collaboration with the state government, is in charge of the primary health care system. The state government manages the secondary health care system, which consists of general hospitals. Tertiary health care is provided by teaching hospitals and specialist hospitals. These specialized teaching hospitals are managed by the federal government ³⁷⁻⁴⁰.

Figure 3 Levels of the healthcare system in Nigeria⁴¹



1.5. Financing for healthcare in Nigeria

Inadequate government funding has had a significant impact on Nigeria's health system, slowing the country's progress toward UHC⁴². The budgetary allocation to health has been decreasing over the last decade (see table 1, Annex A), and it stood at 4.2 percent in 2021⁴³. This is significantly less than the Abuja Declaration's recommendation of 15%.

Due to the government's inability to adequately fund the health system, out-of-pocket (OOP) spending has dominated the Nigerian health financing landscape. OOP now accounts for approximately 70% of total health expenditure (THE) in the country^{44,45}. High OOP payments encourage inequity, causing poor people to avoid health care, arrive late at health facilities, or use low-quality informal providers⁴⁵.

To afford healthcare, the poor and vulnerable are often forced to sell their valuables, incur debts, or lose family assets, a phenomenon known as catastrophic health spending, which exacerbates the cycle of poverty^{46,47}. Nigeria established the National Health Insurance Scheme (NHIS) in 2005 to pool risks and reduce OOP spending^{48,49}. Despite this, the scheme has only reached 4% of Nigerians, mostly in the formal sector, after more than a decade^{50, 51}.

1.6. Reproductive and Maternal Health Services in Nigeria

In Nigeria, the reproductive and maternal health care system is pluralistic, with formal public and private health providers, including faith-based providers, as well as informal providers such as traditional birth attendants and patent medicine vendors⁵². During pregnancy, some women visit prayer houses to seek spiritual support for pregnancy-related complications⁵². The leading cause of maternal mortality in Nigeria is obstetric hemorrhage⁵². With adequate access to and utilization of reproductive and maternal health services, complications of pregnancy can be treated and deaths prevented⁵². The maternal health service delivery structure in Nigeria is bedeviled with many challenges. Low retention of skilled maternal health professionals, the poor quality of maternal health care, weak coordination and referral systems, and inadequate funding are key challenges that need to be addressed to improve maternal outcomes⁵²

2.0. CHAPTER TWO:

PROBLEM STATEMENT, JUSTIFICATION, OBJECTIVES

This chapter includes the problem analysis and the justification for this study. The chapter also includes the general objective and specific objectives of this study.

2.1. Problem statement and Justification of the study

In 2015, developing countries accounted for nearly all maternal deaths worldwide, with Sub Saharan Africa (SSA) accounting for around 66% of these deaths⁵³. The majority of these deaths may be avoided if women had access to high-quality antenatal, delivery, and postpartum care, but sadly reducing maternal mortality and achieving universal coverage of maternal health services remains a problem in most SSA nations⁵⁴⁻⁵⁶. Among regions of the world, women in SSA face the highest lifetime risk of maternal death of 1 in 38, compared to 1 in 5,400 in high-income countries⁵⁷. Narrowing the gap in maternal deaths between developed and poor nations requires that women in SSA can obtain prompt treatment and management of pregnancy complications⁵³.

In comparison to SSA, maternal mortality in Nigeria is alarming, with the country accounting for up to 23% of all maternal deaths worldwide in 2017⁵⁸. A woman's death during delivery causes emotional depression in her immediate family and the community at large. Preventable maternal deaths are a flagrant violation of the fundamental human right to life, and they highlight the healthcare system's inability to respond to women's health needs through equity-focused interventions that increase access to and coverage of maternal health services⁵⁹. According to the NDHS, only 39% of Nigerian women had their last live delivery in a health institution⁶, and the Nigeria Near-Miss and Maternal Death Survey found that delays in accessing health facilities and poor intra-hospital quality of care are major factors in the occurrence of maternal deaths⁶⁰.

Maternal mortality rates (MMR) differ significantly across Nigeria, with northern Nigerian women having a higher risk of maternal death than southern Nigerian women⁶. Ensuring equitable access to and use of quality maternal services among women living in different regions within countries is essential to enhancing overall maternal outcomes⁶. Northern Nigeria accounts for the highest fertility rate in Nigeria and the lowest use of hospital-based pregnancy and childbirth delivery services⁶. Previous studies conducted in different regions and states in Nigeria have reported some of the factors influencing access to maternal health services across regions in Nigeria to include high transportation costs to facilities, low level of education, low income, lack of female mobility, and ethnic diversity, and spousal support⁶¹⁻⁶⁴. The WHO also associated the high rate of maternal mortality in Nigeria with disparities in access to and use of health care since women in resource-poor settings are less likely than their counterparts in wealthy nations to obtain adequate, timely, and affordable health care from qualified professionals⁶⁵.

Other studies reveal that the high rate of maternal death in Nigeria is linked to the three types of maternal delays described by Thaddeus and Maine⁶⁶⁻⁶⁷. These include delay in deciding to seek maternal health care, delay in locating and arriving at a medical facility,

and a delay in receiving expert pregnancy care after the woman arrives at the health institution. These delays are influenced by power differentials and the lack of women's ability to make independent decisions about their health. The differentials in power are driven by intersecting factors that lead to both inequality and inequity in the use of reproductive health and maternal health services by the most vulnerable and disadvantaged women⁶⁸⁻⁶⁹.

In Nigeria, policies on reproductive and maternal health are generally structured on tactics to improve the quality of care in health facilities. While the rationale for lowering maternal mortality through better treatment quality is pertinent, it is not sufficient for reducing maternal deaths. This has been shown by various studies conducted in Nigeria and other countries that improved quality of care at a health facility does not always correlate with increased utilization of services⁷⁰⁻⁷³.

The decision-making power of women and girls concerning the use of reproductive and maternal healthcare differs based on their social identities, conditions, and peculiarities which lead to different forms of social discrimination. Using an intersectional lens to better understand how multiple dimensions of intersecting factors create a unique experience of disadvantage for women in obtaining reproductive and maternal health services is critical for effective programming and intervention in reproductive and maternal health. Intersectional analysis considers a group of factors that affect an individual in combination. It broadens knowledge of the diversity and nuance in how people wield the power to decide things for themselves. It recognizes the diversity and multidimensionality of people's lives, positing that the social oppression women face emanates from the intersection of multiple dimensions of social identities as well as their unique peculiarities and conditions⁷⁴. As a consequence of their social identities and unique peculiarities and conditions, some women are pushed to the extreme margins and experience profound discrimination and limitation.

Nigeria will only make appreciable progress towards the SDG target of reducing maternal deaths if corresponding progress is made in ensuring access to and use of reproductive, and maternal care for all women in Nigeria regardless of their social identities, conditions, and individual circumstances. To develop and implement equity-focused maternal health policies and interventions, it is essential to gain a broader knowledge of how the social identities, social conditions, and individual circumstances of women and girls influence their decision-making power in reproductive and maternal health care. This study seeks to add to the knowledge base by taking an intersectional approach to explore the multiple dimensions of factors that influence the use of reproductive and maternal health services by women and girls in Nigeria. Further, this study will offer programmatic insights for projects aiming to improve reproductive and maternal health utilization in Northern Nigeria

2.2. General Objective

To explore the intersectional factors influencing the use of reproductive and maternal health services by women and girls in Nigeria in order to provide policymakers with evidence-informed recommendations for policy revision.

2.3 Specific Objectives

1. To explore the socioeconomic factors influencing the use of reproductive and maternal health services in Nigeria.
2. To describe the socio-cultural factors influencing the use of reproductive and maternal health services in Nigeria.

3. To examine the gendered dynamics influencing the use of reproductive and maternal healthcare services in Nigeria.
4. To explore the health systems factors influencing the use of reproductive and maternal healthcare services in Nigeria.
5. To review a promising intervention to scale up the use of reproductive and maternal health services in Nigeria.

3.0. CHAPTER THREE:

METHODOLOGY AND ANALYTICAL FRAMEWORK

This chapter provides an overview of the methodology for this study and the analytical framework used to guide the analysis of the findings. The chapter also highlights the inclusion and exclusion criteria taken into consideration.

3.1 Methodology

This study is a descriptive literature review. A systematic approach was used to search for peer-reviewed scientific literature using the VU library, PubMed, MEDLINE and Google Scholar. Boolean strings “AND”, “OR”, were used in combination with keywords and synonyms of keywords relevant for this study. The keywords are derived from the title of the study, the objectives of the study, and the analytical framework used to guide the synthesis of findings.

Additional grey literature published online were identified through searching of international organization websites. This included relevant data and information from project reports, books, fact sheets, policy documents, guidelines, and protocols. For relevant retrieved literature, hand searching of the reference list was done using snowballing techniques to retrieve additional literature. The description of the combinations of the keywords used for literature search is presented in table 3 (see ANNEX)

Literature retrieved were subjected to screening by reviewing the title, reading the abstracts, and executive summary in order to identify those that fits the inclusion and exclusion criteria adopted for the for the literature search. The literatures not meeting the inclusion and exclusion criteria were screened out. Details of the inclusion and exclusion criteria are described below

3.2. Inclusion Criteria

Only studies published in English the language were included in the study. Studies and literatures published from the year 2000 to current year 2022 were included in the study. The basis for this was to track all relevant published literature from the onset of the MDG era in 2000 through to the current SDG era in order to generate robust evidence and to consolidate historical findings spanning more than 20 years on the subject of the study to date. The search focused on studies conducted in Nigeria on women’s use of reproductive and maternal health services and factors or barriers limiting access and use. Although the focus was Nigeria, studies conducted in other SSA and low and middle income countries(LMIC) were included to provide additional contexts or fill the gap where there is a paucity of literature to fully articulate the findings. Studies that adopted a quantitative, qualitative, and mixed-method approach were included in order to triangulate findings from different methods .

3.3 Exclusion criteria

Published literature that are opinion statements and do not adopt a scientific or methodological approach were excluded . This is to prevent the risk of including bias and world view of the author in the synthesis of findings. Literatures in which the full version are not assessable were excluded. Published literature on other aspects of

women's health and not focused on pregnancy and maternal health as defined by the WHO were excluded.

3.4 Analytical framework

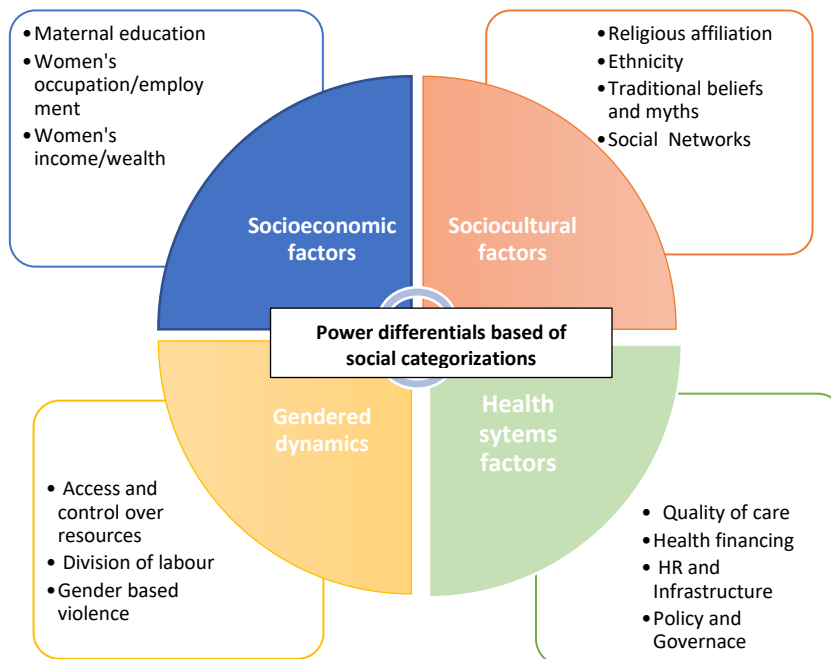
There was no existing model that entirely combines socioeconomic, sociocultural gendered dynamics, and health systems factors in an illustrative manner to study how these factors intersect to create differences in power and decision-making in use of reproductive and maternal health services. Therefore taking into consideration key elements/metrics in the second inner cycle of the intersectional wheel developed by Simpson⁷⁵ (see figure 4) in combination with a review of literature on key indices for measuring socioeconomic, sociocultural gendered dynamics, and health systems factors, a framework was constructed to guide the synthesis of findings. The second inner cycle of the intersectional wheel represents aspects of social identity and categorizations such as education, occupation, religion, gender, geographic location, disability, individual life experiences among others as shown in the wheel. The constructed framework (see figure5) contains four domains, socioeconomic, sociocultural, gendered dynamics, and health systems factors.

The socioeconomic domain incorporated elements such as maternal education, women occupation/employment and women income/wealth status. For the sociocultural domain, the key elements included in the framework included religious affiliation, ethnic diversity, Traditional beliefs and myths and social networks. The gendered dynamics domain includes access to and control of resources, division of labour and gender based violence while the health system domain includes quality of care, health financing , human resources and infrastructure, and policies. A cross-cutting element traversing all the four domains is power. Depending on the social category and experiences of women and girls, they could be empowered or disempowered in respect of their ability to make a decision about care seeking and use of reproductive and maternal healthcare services. The strength of this constructed framework is that it provides a way to analyse how the four different domains intersect to empower or disempower women in decision making and care-seeking for reproductive and maternal healthcare.

Figure 4 : Intersectional Wheel: A Toolkit for Applying Intersectionality⁷⁵



Figure 5 : Constructed Analytical framework to guide analysis of findings



4.0 CHAPTER FOUR

RESULTS

SOCIOECONOMIC FACTORS INFLUENCING THE USE OF REPRODUCTIVE AND MATERNAL HEALTH SERVICES IN NIGERIA

This chapter presents findings related to the first objective of this study which aims to explore the socioeconomic factors influencing the use of reproductive and maternal health services in Nigeria. Socioeconomic status is widely conceptualized as a combination of economic and social status using the level of education, employment status, and wealth index as key indicators. An intersectional lens using women's social identities, living conditions, and peculiarities are taken into consideration in the reporting of findings.

4.1 Maternal education

According to a study by Oye-Adeniran et al, In Nigeria, maternal education was found to be positively associated with female contraceptive use⁷⁶. According to Stephen et al, women who are more educated than their spouses use contraception more frequently than women who are less educated⁷⁷. Another study found that women living in areas with a predominance of highly educated women were almost five times more likely to use contraception than those living in areas with less educated women (28% vs. 6%)⁷⁸. A secondary analysis of the 2013 NDHS data by Zacharie and colleagues found that a woman's educational attainment was positively and strongly associated with the number of antenatal visits⁷⁹. This result is consistent with that of other studies conducted in Nigeria and other SSA countries, which found that the frequency of antenatal service usage increases among highly educated women.⁸⁰⁻⁸⁵

Results from NDHS 2018 showed that mothers with at least secondary education were more than five times more likely to give birth in a health facility compared to women with no education⁶. According to a study by Ijeoma Nkem and colleagues, women with secondary education were about twice as likely to give birth in public health facilities than women with only secondary education⁸⁶. An association between women's education and facility-based delivery was seen in other studies carried out in Nigeria and SSA nations⁸⁷⁻⁹⁰. In a secondary data analysis of the NDHS data in 2013, Somefun reported that 61% of women who did not use postpartum services had no formal education⁹¹. Other similar quantitative studies conducted in Nigeria have confirmed this finding, reporting that women with formal education had increased use of postnatal services compared with women without education⁹²⁻⁹³.

From an intersecting perspective, the extent to which female subgroups are disadvantaged with respect to educational success varies by social identity, condition and characteristics. There are other constraints on girls' educational progress based on gender inequality, sociocultural factors and geographic location of residence (urban/rural). Llyod and Hewett reported in their study that out-of-school children were disproportionately female and were at a disadvantage of not being educated if they came from poor environments and lived in rural areas⁹⁴.

Girls exposed to child marriage drop out of school due to the early onset of their maternal responsibilities, limiting their educational attainment⁹⁵. Child marriage is reported to make a girl more susceptible to intimate partner violence (IPV)⁹⁶. Two studies reported that a woman who experienced IPV during pregnancy was less likely to use maternal and child health services⁹⁷⁻⁹⁸. Women and girls with disabilities are particularly vulnerable and at risk of human rights violations⁹⁹. Girls with disabilities are more likely to be illiterate and unable to attend school⁹⁹. There is a significant disparity in the use of reproductive and maternal health services between women with disabilities and women without disabilities¹⁰⁰.

Findings from the literature suggest that women whose life circumstances reflect axes of social disadvantages and oppression with respect to lower education, child marriage, and intimate partner violence may not have the power to make decisions that affect their reproductive and maternal health

4.2. Women's Occupation/Employment status

Arogundade et al. reported that women's employment status was strongly and positively associated with facility-based childbirth, with working women using more facility-based births¹⁰¹. Confirming these findings, Olufunmilayo et al argue that working women have greater decision-making power and are more likely to seek qualified antenatal care, however, women's ability to use maternal health services was reported to be determined by the level of autonomy they have over money earned from employment¹⁰². In contrast, Agopian et al reported that working women experience time constraints that limit their opportunities to use antenatal care¹⁰³. Three different studies conducted in India also reported that employment status was not a significant factor for use of maternal health service¹⁰⁴⁻¹⁰⁶.

In Nigeria, the out-of-pocket system for health services is a major obstacle to care seeking for maternal health services by unemployed women without any means of livelihoods¹⁰⁷. Women and girls from different social statuses and situations experience inequalities in employment opportunities and occupations. Employment opportunities are influenced by social status and geographic location. Rural women have fewer employment opportunities than women living in metropolitan areas¹⁰⁷. Women with disabilities are underrepresented in the labor force¹⁰⁸. Compared with other women without disabilities, women with disabilities are more likely to be unemployed, have higher barriers to accessing financial assistance, and live in poverty¹⁰⁹. They also have lower education rates, less access to basic sanitation facilities, and less access to maternal and child health services¹⁰⁹.

As shown in findings from the literatures summarized above, rural geographic location of residence, poverty, and individual life circumstances and conditions like disability intersects to create unique disadvantages for women impacted by these factors. This in turn may likely place them in a disadvantaged position regarding power to make decisions about their reproductive and maternal health.

4.3 Women's income and wealth status:

Saheed Olayiwole and colleagues reported that low- and middle-income women were less likely to use contraception than high-income women¹¹⁰. Adeniyi Francis et al investigated the relationship between wealth and the use of ANC. They found that poor women were significantly less likely to use ANC. Also, these women belong to the least

educated category and lived in rural areas¹¹¹. A study conducted by Bolarinwa and colleagues showed that wealthy women were more likely to give birth in Nigerian health facilities¹¹². This is in line with a study conducted in Ghana that found that wealthier women were more likely to use health facilities for childbirth¹¹³

According to a study by Somefun et al. The higher the household wealth index, the more likely a woman is to use postnatal care services⁹¹. Other studies confirmed these findings that women in the wealthy quintile are significantly more likely to use maternal health services compared with middle class and poor women. ¹¹⁴⁻¹¹⁶.

Wealth and income inequality in Nigeria have been shown to vary according to geography and rural-urban disparities. According to one study, out of the thirty six states in Nigeria, ten states with the highest percentage of households in the poorest quintile are found in northern Nigeria¹¹⁷. In northern Nigeria, intersecting factors such as early marriage and childbearing, low levels of education and low employment status for women and girls exacerbate poverty and limit autonomy and decision-making power¹¹⁷. A quantitative study by Blessing Babalola found that more non-poor rural women used ANC services than poor rural women¹¹⁸. This is consistent with findings from Ghana, where there are large variations in access to and use of ANC between rural and urban populations and between geographic regions, and these differences are attributed to differences in wealth status¹¹⁹.

The findings from these studies show that inequality in use of reproductive and maternal health services is connected with wealth inequality and other intersecting factors/circumstances. The combined effects of poverty, illiteracy, unemployment may limit the decision making power of vulnerable women and girls in using reproductive and maternal health services.

5.0 CHAPTER FIVE

RESULT

SOCIOCULTURAL FACTORS INFLUENCING THE USE OF REPRODUCTIVE AND MATERNAL HEALTH SERVICES IN NIGERIA

This chapter presents findings related to the second objective of this study which aims to describe the sociocultural factors influencing the use of reproductive and maternal health services in Nigeria. The findings from the literature on the influence of social cultural factors on contraceptive use, use of antenatal care services, facility-based delivery, and use of post-natal care services are presented in the subsections below.

5.1. *Religious Affiliation*

Phillip Obasohan studied the relationship between ethnicity and religion on the current use of contraceptives among women of reproductive age in Nigeria. The study found that the use of modern contraceptives is significantly lowest among Muslim women and highest among Christian women¹²⁰. This is in agreement with findings by Izugbara and Ezeh who reported that Islamic religious beliefs discourage the use of contraceptives and drive high fertility¹²¹. In another study, it was found that among Christian women, non-Catholics have higher odds of using a modern contraceptive method than Catholics¹²². However, Muslim women were found to have significantly lower odds of using a modern contraceptive compared to women who belong to the Catholic faith¹²².

Bola Solanke et al. examined the relationship between religious affiliation and use of ANC services in Nigeria. Chi-square statistics showed a significant association between religious affiliation and ANC visits and institutional deliveries ($P < 0.05$). A Christian woman visited the ANC almost four times more than a Muslim woman¹²³. Christian women were also found to be more likely than Muslim women to seek institutional delivery¹²³. Breaking down utilization by region, Bola Solanke and her colleagues found low use of antenatal care and facility deliveries in the three northern zones of the country where Islam (Muslim) is the predominant religion¹²³. Another study found that Catholic women used ANC services less than other Christian women, but the difference was not significant¹¹⁸.

According to study by Adigun, there is a strong association between women's religious affiliation and their attendance at postnatal care. Women who professed Islam were less likely to attend postpartum care, per the study, than women who were Christians¹²⁴. In contrast, another study indicated that Muslim women were more likely to use postpartum care services than Christian women¹²⁵. An additional study revealed no statistical association between religion and the use of postnatal services¹²⁶. Overall, the review of literature reveals conflicting findings regarding the relationship between religiosity and the use of post-natal services. To confirm these results, additional research is necessary.

Studies have shown that religious barriers place unmarried adolescent girls at a more social disadvantage to using maternal health services than other women. In a qualitative exploratory study conducted by Awawu Nmadu et al, the authors found that religious beliefs prohibited use of contraceptives by unmarried adolescents and prevented them from seeking reproductive and maternal health care services¹²⁷

The above findings suggest that negative faith-based teachings and convictions could disempower women and limit their ability to make an informed decisions about their reproductive and maternal health.

5.2. Ethnicity/Race

Ethnicity/Racial differences is a social factor that reflects the cultural makeup of defined populations and has been shown by several studies to influence maternal health care use and pregnancy outcomes in both developed and developing countries¹²⁸⁻¹³³. A study by Abubakar Umar found statistically significant differences between ethnicity and use of maternal health services within and between geopolitical zones in Northern and Southern Nigeria. The highest percentage of women who had 4 or more ANC visits were in Yoruba (Southwest), Ecotte (South-South), Igala (North-Central), Ibibio (South-South), and Igbos (South-East). The lowest ranks belonged to Kanuri/Baribari (Northeast), Hausa (Northwest) and Tiv (Central North)¹³⁴.

The Fulanis ethnic group of the Northeastern and Northwestern zones had higher proportion of women who visited the ANC compared to women belonging to the Ijo/Izom ethnic group in the South-South . In addition, the study showed an association between ethnicity and place of birth. The highest proportions of women who gave birth in health facilities (>70%) were in south-west Yoruba (78.7%), north-central Igala (75.9%), and south-east Igbo (73, 8%). The lowest were Fulani in the Northeast (7.9%), Kanuri/Baribari in the Northeast (8.6%) and Hausa in the Northwest (9.6%). Yoruba women (southwest) are 35 times more likely to give birth in health facilities than Hausa women (northwest)¹³⁴.

A study by Babalola Fatusi found that Yoruba women in the Southwest were significantly more likely to seek postnatal care than Hausa women in the Northwest¹³⁵. In another study, ethnic diversity was significantly associated with the use of a health facility for childbirth. Comparing living in ethnically homogeneous areas to living in very ethnically diverse communities, it was found that the likelihood of giving birth in a medical facility was higher in the latter¹³⁶. Results suggest that interventions to improve facility birthing in Nigeria should address the cultural practice of home birth in ethnically homogeneous communities¹³⁶.

Evidence of disparities in the usage of modern contraceptives among racial groupings has been found in other studies conducted in sub-Saharan African (SSA) nations. Tonga women use modern contraceptives less frequently than Nyanga women, according to a study conducted in Malawi¹³⁷. Furthermore, in Senegal, women of the Diola ethnic group are less likely than those of the Wolof ethnic group to utilize a modern method of contraception¹³⁸. Adolescent females from the Ewe Ga Dagme and Mole-Dagbani ethnic groups were more likely to abstain from the use of contraception than those from the Akan ethnic group, according to research on ethnic differences in contraceptive use conducted in Ghana¹³⁹.

As findings from literature suggests, ethnicity as a social identity is a key factor use of reproductive and maternal health care use. Being born or growing up in different ethnic groups could lead to differential power regarding the ability to seek maternal health care.

5.3. Traditional beliefs/cultural practices and myths

Studies show that cultural beliefs and traditions driven by ethnoreligious diversity influence uptake of maternal health services. In a cross-sectional descriptive study conducted among women of reproductive age (WRA) in Northwestern Nigeria, more than half (58%) of the respondents agree the use of contraceptives contradicts their cultural beliefs. About 26% held the belief that contraceptives make women promiscuous¹⁴⁰. In another study 35% of respondents held the belief that contraceptive services are for only married people¹⁴¹. This cultural belief system and myths particularly place unmarried women and adolescents at a social disadvantage with respect to care seeking and use of contraceptive services compared to other women¹⁴². While it has been reported in chapter one that women with disabilities are impacted disproportionately by socio-economic inequalities, study also show that they are disadvantaged due to myths that considered them asexual, thus limiting their access to contraceptives and maternal health services¹⁴³.

Cultural practices like child marriage have been shown to be associated with use of maternal health services. Studies show that women married as children were less likely to make a minimum of four antenatal care contacts with a health care provider, have skilled attendance at delivery, give birth in a health facility, and receive postnatal care from a skilled medical care provider in a health facility¹⁴⁴. As was reported through findings highlighted in chapter one, child marriage limits educational attainment and economic opportunities of women and girls. This could as well impart limit their decision-making power. In another study conducted in Nigeria, Onyejose, Kenneth e tal reported that some cultures consider birth by Caesarian section as a sign of laziness, and would rather use a traditional birth attendants (TBAs) for birth delivery¹⁴⁵. In Ghana, cultural beliefs on safe disposal of placenta was reported to be driving preference for home births in rural areas¹⁴⁶. Evidence from studies suggest that rural and uneducated women may be more impacted by cultural beliefs and social norms that encourage home deliveries¹⁴⁷. For this category of women, their decision making power may be suppressed by the communal traditional belief system.

5.4. Community social network

A study conducted in Ghana shows that women who had positive experiences of health facility delivery previously tend to encourage other women in their social network to give birth in the health facility ¹⁴⁸. Other studies conducted in Ethiopia and Kenya demonstrated that women received some form of emotional, informational and instrumental support from their network members during pregnancy which enhanced health facility delivery ^{149,150}. However, study shows that women with disability are at greater risks of being socially excluded from community networks due to stigma and discrimination against them¹⁵¹. Social exclusion suffered by this category of women could limit their participation to receive information that could empower them to seek reproductive and maternal healthcare. Women living with HIV have also been reported to be victims of social exclusion¹⁵². This could limit their access to information on reproductive and maternal health.

6.0 CHAPTER SIX

RESULT

GENDERED DYNAMICS INFLUENCING THE USE OF REPRODUCTIVE AND MATERNAL HEALTH SERVICES IN NIGERIA

This chapter focuses on exploring the how gender power relation at the household level influence decision making for use of reproductive and maternal health services

Findings from literature are presented in the subsections below:

6.1. *Access and control over resources:*

In a qualitative study conducted by Sani Yaya and colleagues, findings showed that men had more access and control over household financial resources. Most women were financially dependent on their husbands for health-related expenses¹⁵³. Therefore, the timing and type of care a wife received depended on her husband's financial situation. Women indicated that this delayed access and use of skilled antenatal care. Participants identified men as the primary decision-makers regarding the timing and type of care women receive during pregnancy. A similar study in Nigeria showed that pregnant women who have access and control over financial resources are more likely to seek ANC and facility based delivery services¹⁵⁴. Interestingly, another study contradicts this finding, showing an inverse relationship between women with income control and access to skilled midwifery services.¹⁵⁵ Namasivayam et al. made a distinction between earning money and having the power to decide how that money is spent¹⁵⁶. They explain that for some women the decision on how their earnings are spent is determined by their husbands or partners. This constitute a barrier that limit their decision making power to seek healthcare.

6.2. *Division of labour:*

Cultural ideas about the gendered division of labour assigns breadwinner roles to men and reproductive and housekeeping roles to women¹⁵³. As a result of gendered social norms around division of labour and the combined effects of poverty, women were still expected to undertake physically strenuous farm work and household chores when pregnant¹⁵³. A heavy workload limited women's opportunity to access and utilize healthcare services¹⁵³. A similar study in rural Gambia confirmed this finding, reporting that rural women were still expected to endure heavy workloads while pregnant and because of this they had limited opportunities and resources to access ANC¹⁵⁷. Men's involvement during pregnancy has been shown to positively impact maternal health seeking behaviour, such as skilled medical care use.¹⁵⁸ A similar study in Malawi showed that when men played active roles in pregnancy care for their wives, they were better informed and aware of pregnancy-related risks, they encouraged women to attend ANC visits and accompanied them¹⁵⁹.

6.3. Gender-based Violence

In a qualitative study conducted by Yaya and colleagues, participants interviewed described incidents of violence against pregnant women. Participants reported that intimate partner violence against women negatively affected their decision making power to seek health care while pregnant¹⁵³. It has been demonstrated that gender norms that give men more authority and value increase the likelihood of gender-based violence, which has a detrimental effect on maternal health¹⁵⁶. Men's position in the household as primary decision-makers could hinder women's autonomy, their capacity to bargain, and their ability to access timely reproductive and maternity treatment at healthcare facilities¹⁵³.

The NDHS 2018 shows a the link between intimate partner violence and socioeconomic status of women. The report indicate women who have more than a secondary level education are less likely to have experienced IPV compared to women with lower educational levels. Similarly, women in the highest wealth quintile are less likely than women in the lowest wealth quintiles to have experienced IPV. It can be inferred from this finding that the higher the socioeconomic status of women, the higher the likelihood they will be able to resist IPV , and exercise autonomy and decision making that affect their maternal wellbeing during pregnancy.

7.0 CHAPTER SEVEN

RESULT

HEALTH SYSTEMS FACTORS INFLUENCING THE USE OF REPRODUCTIVE AND MATERNAL HEALTH SERVICES IN NIGERIA

This chapter presents the findings from literature on the health systems factors influencing use of reproductive and maternal health services in Nigeria.

7.1. Quality of care:

Respectful care during childbirth has been described as a universal human right that encompasses the principles of ethics and respect for women's feelings, dignity, choices and preferences¹⁶⁰. In a quantitative studies conducted on barriers to ANC use in Nigeria, Fagbamigbe and colleagues reported that factors comprising of unavailability of quality drugs and medical supplies, skilled health workers, and poor attitude and unprofessional conduct of the health workers made up 27.5% of the reasons why the pregnant women did not attend ANC services¹⁶¹.

Other qualitative findings have reflected several factors that points to low quality of care as the reasons women shy away from using health facilities for maternal healthcare. In the study by Okafor et al 36% of women reported physical abuse during childbirth¹⁶². It was also found that more than half of women (54.5%) reported non-consented procedures such as labour augmentation, shaving of pubic hair, sterilization, caesarean delivery and blood transfusion¹⁶². Women also reported disclosure to third parties of age (16.1%), medical history (1.8%) and HIV status (1.8%) without their consent¹⁶². Lamina et al. in a cross sectional study reported 16.5% of women mentioned their privacy is being violated by presence of medical students in the delivery rooms¹⁶³.

Other studies found that majority of women reporting disrespect and abuse were uneducated and of low socioeconomic status¹⁶⁴⁻¹⁶⁶. These studies came to a similar conclusion and posited that educated women are empowered , and understand their rights thereby reducing the likelihood of being subjected to disrespectful and abusive behavior by health workers. In another study, education was reported to increase self-confidence thereby reducing power differential between health providers and women¹⁶⁷ Lamina et al also commented on the higher rate of hospital deliveries in educated women postulating they were less likely to be disrespected thereby increasing their level of utilization¹⁶³. Similarly, studies have found that uneducated, rural women of low status in Ghana were especially likely to experience abuse¹⁶⁸. Hierarchical differences between health workers and clients, based on education and/or class, contributed to female clients' silence even when they are being abused by health workers¹⁶⁸.

7.2. Cost of Maternal healthcare

An important barrier to respectful care at childbirth as well as skilled delivery service is the financial status of the woman¹⁶³. Some women indicated that they report to hospitals late or not at all because of the costs involved and this might often get health providers angry who then react in an abusive and disrespectful way¹⁶⁵. In a cross-sectional study on the pattern of financing for maternal care , the majority of the women who did not

receive ante-natal care cited financial difficulty as the main reason¹⁶⁹. Notably, none of the respondents was covered by any form of health insurance¹⁶⁹. Other studies have also shown that the cost of seeking facility based care can act as a barrier preventing poor women from using reproductive and maternal health services. deterrent in the case of poor households and there is evidence that medical expenses can push even non-poor households below the poverty line¹⁷⁰⁻¹⁷¹.

7.3 Human resource and Infrastructure deficit

According to a study, health provider shortages was reported to influence behaviour of health workers. The study reported that when health workers are overworked, they get tired and becomes easily irritable towards clients¹⁷². In facility survey of PHCs, poorly designed hospital environment with minimal privacy and lack of equipment and infrastructure was reported as contributing factors to disrespect and abuse of women¹⁷³. In another study, it was found that health facilities lack adequate infrastructure to cater for the needs of women living with disabilities¹⁷⁴.

7.4. Policies and governance

Moore et al speculated that policies that protect the rights of women are hardly enforced and providers are rarely held accountable for their actions resulting in unchecked cases of disrespect and abusive¹⁶⁷. According to Igboanugo et al, weak leadership and supervisory structure is a contributing factor to non-performance of health facilities as there is no coordinated mechanism to conduct performance appraisal¹⁷³.

8.0 CHAPTER EIGHT

PROMISING INTERVENTION TO IMPROVE USE OF REPRODUCTIVE AND MATERNAL HEALTH SERVICES IN NIGERIA

This chapter provides an overview of one of the most successful maternal health intervention in Nigeria termed *Abiye*, and the lessons learned as well as opportunities to adopt the model for scale up especially to rural Northern Nigeria, a region with high maternal deaths. The sub sections below summarizes are the findings from two evaluation studies of the *Abiye* initiative¹⁷⁵⁻¹⁷⁶.

8.1. Overview and objective of the Abiye Initiative:

The *Abiye* (meaning safe Motherhood) program is a comprehensive and strategic health policy launched in 2009 to address Ondo state maternal health problems. It was also launched as part of the state government effort to achieve the Millennium Development Goals by 2015. The *Abiye* initiative aims to reduce child and maternal mortality rates and to make access to maternal health services in the province efficient and effective. The initiative aims to reach out to the individuals, communities and health systems responsible for maternal mortality in Ondo State, southwestern Nigeria.

8.2. The Four strategic component of the Abiye initiative

For the first component, recognizing the high illiteracy rate of the population, particularly in rural areas, and the lack of adequate information on maternal health issues, the Government has designed a proactive measure to reach women, especially pregnant women, in the state. It launched a maternal health literacy and educational program. Community health extension workers (CHEW), termed health rangers were trained and tasked with responsibility of reaching all pregnant women living in rural underserved areas in the state. The CHEW educated the women on maternal health issues dispelling traditional myths and barriers limiting access and use of reproductive and maternal health services To make the CHEW effective, each of them had oversight for only twenty five pregnant women. The CHEW visited the women regularly to assess their condition, identify risk and referred them to the health facilities for further check-up. The government also used messaging on radio to reach rural pregnant women with information on safe motherhood practices.

The second strategic component involves setting up new primary health centres (PHC) in underserved communities to improve access and ensure that pregnant women have health facility in close proximity to where they lived. The old PHCs were refurbished and equipped with human and material resources. This involved massive overhaul and upgrades of public health facilities within the state. Drugs and medical consumables for prompt and proper care of pregnant women were made available in the newly constructed and refurbished health facilities Furthermore, additional health workforce were recruited and provided with good incentives.

The third component addressed financial difficulties women encounter and which discourage use of maternal health services. User fee was exempted for all pregnant women in all public health facilities. The fourth strategic component was focused on strengthening referral services the CHEW received tricycles, could served as ambulances to convey women in rural areas to the health To discourage home births by unskilled providers, a conditional cash transfer programme was initiated to incentivise Traditional births attendant (TBAs) to refer pregnant women the facilities for skilled pregnancy and delivery care.

8.3. The Impact of the *Abiye* Initiative

The *Abiye* Initiative is the greatest advance in obstetric care in Nigeria. Based on an evaluation report of the program between 2010 and her 2012, Ondo's maternal mortality rate decreased by 45%, the number of registered patients increased by 58%, and the number of live births in facilities increased by 96%.¹⁷⁶. The initiative also led to a marked increase in births by trained midwives and qualified health workers. reduced the burden of disease and improved vaccination coverage in the state. The project had a positive on reducing child mortality. An increase of 26% has was recorded in paediatrics admission in, which has resulted in corresponding 26% reduction in child mortality in the State¹⁷⁶.

8.4. Challenges of the *Abiye* Initiative

While the government made effort recruit health workers for the initiative, the number of recruited were not sufficient. Lack of adequate funding was also another challenge encountered. As more pregnant women sought maternity care facilities, additional funding for the expansion of infrastructure and deployment of more health workers became imminent in order to sustain the gains of the initiative.

8.5. Lessons Learned and Opportunities for scale up

The *Abiye* program is a clear example of how a multiple pronged approach can be used to address preventable maternal deaths. The community engagements component of the strategy using CHEW to reach pregnant women in their locality serves to address the sociocultural factors and gender barriers impeding use of reproductive and maternal health care. The waiving of user fees addresses the socioeconomic barrier women face due to lack of finance. The revitalization of the health facilities and recruitment and incentivization of health workforce are critical initiatives to strengthen the health system. Scaling up this initiative to rural underserved communities particularly in Northern Nigeria could be a springboard to accelerate progress on reduction of maternal deaths in Nigeria.

9.0 CHAPTER NINE

DISCUSSION

This study explored the intersectional factors influencing the use of reproductive and maternal health services in Nigeria. The findings from literature show that the combination of socioeconomic, sociocultural, gender and health system factors influences use of reproductive and maternal health services in Nigeria. Women are impacted differently depending on their status, identity and conditions. This chapter contains the discussion of key findings and the strengths and limitations of the study.

9.1. Discussion of key findings

Maternal education emerged from different literature as a significant socioeconomic factor influencing power and decision to use reproductive and maternal health services by women and girls in Nigeria. It enhances capacities and has a relationship with other socioeconomic factors like income, wealth, and occupation, which are interrelated factors reported in this study to influence the use of reproductive and maternal health service. Education is a vital instrument for social and economic integration of women in the society. Unfortunately access to education for women and girls in Nigeria is severely hampered by gender inequality and harmful sociocultural practices.

Child marriage which is more common in the Northern Nigeria limit educational attainment for girls. According to the NDHS 2018 survey report⁶, there are disparities in educational attainment for women and girls in Nigeria. Women and girls living in Northern Nigeria are the least educated. The NDHS 2018 report also shows that the use of reproductive and maternal health services is lowest in the three Northern Nigeria region. In the same vein, Northern Nigeria account for highest number of maternal deaths in the country. This underscores the need to invest in girl child education in Northern Nigeria as an empowerment initiative. Educated women are more likely to affirm their sexual reproductive health and right to make decisions on issues related to their maternal health.

Employment status of women was also reported in the studies as important factor that influence power and decision making for use of maternal healthcare. Women who earn money from employment are economically empowered and therefore likely to have more power and autonomy to decide on issues relating to their maternal health care. However, due to the patriarchal nature of the Nigeria society, uneducated women may not have control over income earned from employment. Earning an income is not sufficient, but having control over income earned is an important determinant of women's decision making power within the household. Community based sensitization of community gate keepers like traditional and religious leaders could be explored as a means to gradually disrupt the deep rooted patriarchal norms.

Women's wealth index/status also emerged from literature as a factor influencing use of maternal health services. Findings from studies show that women in the wealthiest quintile are more likely to use reproductive and maternal health services. There exist wealth and income inequality in Nigeria. Rural poor women are among the most vulnerable in Nigeria as they have limited access to income compared with women in

more urbanized areas. Practices such as child marriage limit education and employment opportunities and predispose women to a life time of poverty. This could limit their decision making power on matters related to their reproductive and maternal healthcare. Women living in rural areas have limited opportunities for employment and income generating activities.

Religious affiliation emerged consistently across literature as a factor influencing use of reproductive and maternal health in Nigeria. Overall studies show that Christian women use reproductive and maternal health services than Muslim women. The reason for higher use of maternal health services by Christian women in Nigeria may be due to higher level of education among women in southern Nigeria who are predominantly Christians compared with women in Northern Nigeria. Among Christian women groups, the use of contraceptives is lower among Catholics compared to other Christian women. Catholic teachings and doctrine that discourage use of modern contraceptives could be responsible for this difference. Religion is central to life in many parts of Africa, therefore the positive virtues of religion should be optimally exploited to promote maternal health. Religious beliefs can cause several Nigerian women to ignore vital maternal health care services, refuse to be attended to by male health personnel, and instead seek traditional medicine. More initiatives involving adequate sensitisation and mobilisation of religious organisations will not only improve maternal health outcomes, they will also contribute to clearing misconceptions surrounding some maternal health issues.

Disparities in use of reproductive maternal health services were reported among ethnic groups. The highest use of maternal health services is found among the Yoruba and the lowest is among the Hausa/Fulani in the Northern region. The Yoruba ethnic group are the most educated in Nigeria, compared to the Hausa/Fulani who represent the least educated. Further child marriage practices that limit educational attainment for girls is more prevalent among the Hausa/Fulani. Ethnic diversity reflects differences in rooted traditional and cultural practices which could affect the decision making power of women in the use of maternal health services. Cultural and traditional beliefs prevalent in rural areas that suppress the decision making power of women on issues relating to their health, as they are bound by tradition to respect customs and tradition. Cultural practices like child marriage prevalent in Northern Nigeria create a wide gap in power between the child bride and her husband. Further traditional beliefs and myths that discourage use of health facilities for childbirth place a barrier on women who are bound by such practices. Highly educated women are more likely to resist being bound by traditional practices. As most traditional and cultural practices are endemic in rural areas, community led intervention to reorientate key influencers like traditional leaders to support adoption of safe motherhood practices will be critical for ensuring disadvantaged women and girls can get better access to and use of reproductive and maternal health services. Studies also show the influence of community social networks on power and decision making for reproductive and maternal health services. Informational exchanges take place among members in a social network or relation. Findings from the study reveal that social network could encourage or dissuade use of maternal health services. Interventions that target providing accurate messages on safe motherhood practices could provide women and girls with the right information.

The findings presented in this study reflect how gender power relations at the household level influence ability to assess and use maternal health services. Men have more access to resources and make decisions on how resources are spent. This places women in a subordinate position and they are often unable to decide themselves when to seek care.

Uneducated, unemployed and poor women are more likely to be vulnerable to the negative effect of male dominance.

Poor quality of care, cost of care, shortage of health workforce, and inadequate infrastructure was reported to influence use of maternal health services. Findings from studies highlight that non dignified and disrespectful care at health facilities is a deterrent to use of hospital based services. Further findings from the study highlights that socioeconomic status of women can influence how they treated at health facilities. Uneducated and poor women are reported to be more likely to experience disrespectful care. This may be due to differentials in power compared to health workers.

Overall findings from this study show that a multipronged and multisectoral approach is needed to address the intersecting factors limiting the decision making power of women regarding use of reproductive health services. The *Abiye* initiative in Ondo is an example of an initiative that addresses multiple factors influencing access and use of reproductive and maternal health services . The waiving of user fee for pregnant women serves to tackle the socioeconomic barrier that could prevent poor women from accessing services. The deployment of CHEW into the communities for safe motherhood health promotion campaigns serves to disrupt traditional and sociocultural and gender related barriers that prevent women from seeking services at health facilities. The revitalization and reconstruction of PHCs serves to reposition the public health facilities for quality services delivery. The scale up of the *Abiye* initiative across Nigeria could be modified for implementation across states and region Nigeria.

9.2. Limitation and strength of the study:

This study relied on a number of qualitative explorative studies conducted by authors in regions in Nigeria and SSA were the sample size are not nationally representative. Therefore findings may not be generalized to the entire population. Analysis from NDHS 2018 survey and other quantitative studies included in this review are presented as descriptive statistics using simple percentages, so findings may not be generalizable. This study included findings from literature from other SSA and LMIC countries, however since only studies conducted in English language were included in this review, as per the inclusion criteria, studies reported in other languages that could have provided broader contexts may have been missed.

A key strength of this study is that the constructed framework provided a means to do an intersectional analysis of the socioeconomic, sociocultural, gender and health systems factors influencing use of reproductive and maternal health services to understand how these factors lead to differential in power and decision making for maternal health care.

10.0 CHAPTER NINE

CONCLUSION AND RECOMMENDATION

The conclusion and recommendation are presented in the sub sections below

10.1. CONCLUSION

10.1.1 Socioeconomic factors influencing the use of reproductive and maternal health services.

The findings show that maternal education, employment and wealth had an influence on use of reproductive and maternal health services . The use of reproductive and maternal health services were found to be higher in women who are educated, employed and in the higher wealth quintile. These three factors are interconnected and influence the decision making power of women to seek maternal health. Experiences of disabilities, child marriage and living in rural was found to create unique disadvantages for women in this category and this could limit their decision making power in using reproductive and maternal health care. Women and girls who by life circumstances experience social disadvantages with respect to lower education, child marriage, and intimate partner violence may not have the power to make decisions that affect their reproductive and maternal health.

10.1.2 Sociocultural factors influencing the use of reproductive and maternal health services.

The studies found sociocultural factors related to religious affiliation, race/ ethnicity, traditional beliefs and practice and community social networks influence the use of reproductive and maternal health services. Overall, the findings reported higher use of reproductive and maternal health services among Christians compare to Muslims, Ethnic diversity was also reported to be one of the factors influencing use. Yoruba women from the South were reported have the highest use while Hausa women from the North were reported to have the lowest use. Differences in cultural beliefs, traditions and myths, socioeconomic conditions of education, wealth inequality intersects to influence decision making power among of women from different ethnic groups.

10.1.3. Gendered dynamics influencing the use of reproductive and maternal health services

Unequal access to and control over resources was reported to influence decision making within the household. Studies show men as the primary decision maker in the home. Due to patriarchal culture of communities, women may not get the permission and support they need to access and use maternal health care. Gender role of division of labor was also reported to play a role as women may be overburdened with household chores leaving little time to access reproductive and maternal healthcare from facilities.

10.1.4 Health systems factors.

Disrespectful attitude of health workers to women are among the factors identified in this study. Further, the shortage of health workforce and infrastructure deficits were

reported as deterrent to use of services. Uneducated women are reported to be more susceptible to abuse by health workers. This is likely due to the power differentials between them and the health workers. Apart from the quality of care, cost of assessing care was reported to deter use of maternal health services. This connects with findings from this study that highlights that women have less access to and control of resources compared to men. Uneducated, unemployed and poor women may therefore lack the financial power to pay the out of pocket expenses for seeking care in facilities.

10.1.5: Promising Intervention

This study reviewed the Abiye initiative and it emerged from findings of the review that a multipronged approach was employed to tackle multiple socioeconomic, cultural and health systems factors influencing the use of maternal health services by pregnant women in Ondo state. Such multi-pronged approach represent a best practice for tackling the socioeconomic, sociocultural, gender and health system barriers to service use by women and girls in Nigeria.

10.2 RECCOMENDATION

In line with the finding of this study, it is evident that a multisectoral approach is required to address factors that place barrier to use of reproductive and maternal health services by women and girls in Nigeria. Nigeria is currently not on course to achieve the SDG target of reducing MMR to less than 70 per 100,000 live births in 2030. In order to accelerate progress, the task cannot be select to the ministry of health alone. Other agencies of government have collaborative role with the ministry of health to tackle the barriers highlighted in this study

10.2.1 Girl Child Education:

Government led programme to increase enrolment of girls in school in recommended. This is necessary in Northern Nigeria where the level of education among women is lower. The three tier levels of government in Nigeria need to work with the Ministry of education to design a sustainable plan to achieve increased enrollment of girls in school. Funding for this initiative should be appropriated in the annual budget. Additional resources could be mobilized through collaboration with civil society organizations.

10.2.2 :Women empowerment programme

Government led programme on capacity building of women is recommended for the most disadvantaged women in Nigeria. Women in rural areas and women with disabilities should be prioritized for training in skill acquisition to increase their social capital and earning power. This initiative should be led by Ministry of women affairs and funding for the initiative should be appropriated in the annual budget.

10.2.3 :Community engagement campaigns

Government led community engagement campaigns to communities where sociocultural factors and gender norms limit women from using reproductive and maternal health services. Advocacy visits to community influencers like religious leaders, traditional leaders and community leaders is necessary to educate them on the benefit of allowing pregnant women to use services available for pregnancy care in health facilities. This

initiative should be led by Ministry of communication with support from ministry of women affairs

10.2.4 :PHC revitalization

The PHC systems need to be repositioned to provide good quality and dignified care to women seeking services. Accountability mechanisms should be put in place for proper management and use of basic healthcare provision fund. More skilled provider should be deployed to PHCs to ensure services provided are of high quality standard. Quality improvement teams should be set up in PHCs to monitor service delivery and ensure it is of high standard.

10.2.5 :Policy review: The government needs to reevaluate existing policies and make revisions to ensure that the most disadvantaged women are reached with reproductive and maternal health services

REFERENCES

1. Fathalla MF; Human rights aspects of safe motherhood. *Clin Obstet Gynecol.* 2006; 20: 409-419
2. Dahab, R. Sakellariou, D. Barriers to Accessing Maternal Care in Low-Income Countries in Africa: A Systematic Review. *Int. J. Environ. Res. Public Health* **2020**, *17*, 4292. <https://doi.org/10.3390/ijerph17124292>
3. World Health Organization; *Trends in maternal mortality: 1990 to 2015*: estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. Geneva: World Health Organization; 2015.
4. World Health Organization; *Human Rights and Health Factsheet* 29 December 2017. Available at <https://www.who.int/news-room/fact-sheets/detail/human-rights-and-health> Accessed on May 30, 2022
5. Sk, M.I.K., Paswan, B., Anand, A. *et al.* Praying until death: revisiting three delays model to contextualize the socio-cultural factors associated with maternal deaths in a region with high prevalence of eclampsia in India. *BMC Pregnancy Childbirth* **19**, 314 (2019). <https://doi.org/10.1186/s12884-019-2458-5>
6. National Population Commission (NPC) [Nigeria] and ICF. 2019; *Nigeria Demographic Health Surveys Key Findings*. Abuja, Nigeria and Rockville, Maryland, USA: NPC and ICF.
7. United Nations ;Resolution adopted by the General Assembly on 6 July 2017; Work of the statistical commission pertaining to the 2030 Agenda for Sustainable Development; (2017) A/RES/71/313
8. Akinyemi, Akanni Ibukun; Isiugo-Abanihe, Uche C. "Demographic dynamics and development in Nigeria". *African Population Studies* (24 March 2014). 27 (2): 239-248. doi:10.11564/27-2-471.
9. World Population Review; *World Population by country*; 2022 Available online at <https://worldpopulationreview.com/> [Accessed: 7 July 2022].
10. Statista; Demographics of Nigeria, *Statistics and Facts* Published online 5 April 2022 Available from: <https://www.statista.com/topics/6477/demographics-of-nigeria/>[Accessed: 7 July 2022]
11. World Atlas; *Map of Nigeria*. Published online February 24, 2021 Available at <https://www.worldatlas.com/maps/nigeria> [Accessed: 7 July 2022].
12. The World Factbook; *Central Intelligence agency*, Last updated July 1, 2022. Available at <https://www.cia.gov/the-world-factbook/countries/nigeria/> [Accessed: 7 July 2022].
13. Raheem, Wasiu M, Oyeleye, Oyewale I, Adeniji, Margaret A, Aladekoyi, Opeyemi C; Regional Imbalances and Inequalities in Nigeria: Causes, Consequences and Remedies; *Research on Humanities and Social Sciences* www.iiste.org ISSN (Paper)2224-5766 ISSN (Online)2225-0484 (Online) Vol.4, No.18, 2014

14. The world bank; *Rural population Nigeria, Estimates based on the United Nations Population Division's World Urbanization Prospects: 2018 Revision* Available at <https://data.worldbank.org/indicator/SP.RUR.TOTL?locations=NG> [Accessed: 7 July 2022].
15. UNICEF, Nigeria; *Situation of Women and Children in Nigeria*; Available at <https://www.unicef.org/nigeria/situation-women-and-children-nigeria> [Accessed: 7 July 2022].
16. The World Bank: *Nigeria Country Overview*; published on October 11, 2021, Available from <https://www.worldbank.org/en/country/nigeria/overview#1>: [Accessed: 7 July 2022].
17. The Lancet Commission Nigeria; *Investing in health and the future of a Nation*; Published Online March 15, 2022, Available at [https://doi.org/10.1016/S0140-6736\(21\)02488-0](https://doi.org/10.1016/S0140-6736(21)02488-0) [Accessed: 7 July 2022].
18. The World bank; *Human Capital project*. Available at <https://www.worldbank.org/en/publication/human-capital#Index> Accessed: 7 July 2022].
19. The National Bureau of Statistics (NBS) "2019 *Poverty and Inequality in Nigeria*
20. Afeez Olalekan Jaiyeola, Ireem Choga; Assessment of poverty incidence in Northern Nigeria, *Journal of Poverty 2021*, 25:2, 155-172, DOI: 10.1080/10875549.2020.1783424
21. Sowunmi F. A. , Akinyosoye V. O. Okoruwa V.O. , Omonona B. T; The Landscape of Poverty in Nigeria: A Spatial Analysis Using Senatorial Districts- level Data, *American Journal of Economics 2012*, 2(5): 61-74 DOI: 10.5923/j.economics.20120205.0
22. Awojobi, Oladayo & Nathaniel,. (2014). Sustainable Rural Development in Nigeria within the Context of the Millennium Development Goals. 1. 2308-1365. *International Journal of Contemporary Applied Sciences* Vol. 1 No. 1 September 2014, ISSN: 2308-136
23. Dennis, Ewubare, Kelechi Nnamdi Unemployment and Income Inequality in Nigeria.; *Journal of Social Science and Humanities* (2020). ISSN: 2456-297124.
24. Reuben Kenrick , Ajayi, J.F. Ade , Kirk-Greene, Anthony Hamilton Millard and Falola, Toyin O.. "Nigeria". *Encyclopedia Britannica*, 24 Apr. 2022, <https://www.britannica.com/place/Nigeria>. Accessed 10 July 2022.
25. Ugwu, N.U., de Kok, B. Socio-cultural factors, gender roles and religious ideologies contributing to Caesarian-section refusal in Nigeria. *Reprod Health* 12, 70 (2015). <https://doi.org/10.1186/s12978-015-0050-7>
26. Makama, Godiya Allanana, PATRIARCHY AND GENDER INEQUALITY IN NIGERIA: THE WAY FORWARD *European Scientific Journal* June 2013 edition vol.9, No.17 ISSN: 1857 – 7881
27. Fakunmoju, S. B., & Bammeke, F. O. (2017). Gender-Based Violence Beliefs and Stereotypes: Cross-Cultural Comparison Across Three Countries. *International Journal of Asian Social Science*, 7(9), 738–753. <https://doi.org/10.18488/journal.1.2017.79.738.753>
28. Noah Olasehinde; Healthcare Seeking Behavior in Nigeria; *Journal of Population and Social Studies*, Volume 26 Number 3, July 2018: 207-218 DOI: 10.25133/JPSSv26n3.015 207

29. Solanke, B.L., Rahman, S.A. Multilevel analysis of factors associated with assistance during delivery in rural Nigeria: implications for reducing rural-urban inequity in skilled care at delivery. *BMC Pregnancy Childbirth* **18**, 438 (2018). <https://doi.org/10.1186/s12884-018-2074-9>
30. Timilehin Olayinka Omoniyi Appraisal of harmful traditional practices in Nigeria: magnitude, justifications and interventions *Journal of Social, Humanity, and Education (JSHE)*ISSN: 2746-623X, Vol 1, No 1, 2020, 67-78 <https://doi.org/10.35912/jshe.v1i1.335>
31. Olanike Adelakun; The effect of religion and culture on the implementation of Women's right in Africa, Challenges and Prospects, *International Journal of Comparative law and legal philosophy* Vol 1, No 1 (2019)
32. Welcome, Menizibeya Osain. "The Nigerian health care system: Need for integrating adequate medical intelligence and surveillance systems." *Journal of pharmacy & bioallied sciences* vol. 3,4 (2011): 470-8. doi:10.4103/0975-7406.90100
33. The world bank; *Life expectancy at birth, total(years) Nigeria*, Available at <https://data.worldbank.org/indicator/SP.DYN.LE00.IN?locations=NG> (accessed July 7, 2022)
34. National Population Commission (NPC) [Nigeria] and ICF. 2019. 2018 Nigeria DHS Key Findings. Abuja, Nigeria and Rockville, Maryland, USA: NPC and ICF.
35. Maiyaki MB, Garbati MA. The burden of non-communicable diseases in Nigeria; in the context of globalization. *Ann Afr Med* 2014;13:1-10
36. Olusoji Adeyi Health System in Nigeria: From Underperformance to Measured Optimism, *Health Systems & Reform*(2016), 2:4, 285-289, DOI:10.1080/23288604.2016.1224023
37. Adeyemo DO. Local government and health care delivery in Nigeria: A Case Study. *J Hum Ecol.* 2005;18:149–60.
38. Omoruan AI, Bamidele AP, Phillips OF. Social health insurance and sustainable healthcare reform in Nigeria. *Ethno Med.* 2009;3:105–10.]
39. Awosika L. Health insurance and managed care in Nigeria. *Ann Ibadan Postgrad Med.* 2005;3:40–6.]
40. Akande TM. Referral system in Nigeria: Study of a tertiary health facility. *Ann Afr Med.* 2004;3:130–3.
41. Technical working group (TWG)-National Strategic Health Development Plan Framework.The National Strategic Health Development Plan Framework (2009-2015). 2009.
42. Arnold Ikedichi Okpani, Seye Abimbola; Operationalizing universal health coverage in Nigeria through social health insurance *Nigeria Medical Journal.* 2015 Sep-Oct; 56(5): 305–310.doi: 10.4103/0300-1652.170382
43. Dachi I. Arikpo, Peter S. Ubi, Agnes S. Antai: The National Health Financing Policy and Access to Healthcare in Nigeria: *International Journal of Research and Innovation in Social Science (IJRISS)* |Volume V, Issue VI, June 2021|ISSN 2454-6186
44. Olaniyan, O. and C. Oburota, Equitable Health Care Financing and Universal Health Care Coverage in Nigeria. 2019. 8: p. 25-31
45. Adelakun Edward Oduyemi: The Implications of Health Financing for Health Access and Equity in Nigeria; August 2021 Available from <https://www.intechopen.com/chapters/78273> Accessed June 1, 2022
45. Qin, V.M., et al., The impact of user charges on health outcomes in low-income and middle-income countries: a systematic review. *BMJ Glob Health*, 2018. 3(Suppl 3): p. e001087

46. Aregbeshola, B.S. and S.M. Khan, Determinants of impoverishment due to out of pocket payments in Nigeria. *Journal of Ayub Medical College Abbottabad*, 2017. 29(2): p. 194-199
47. Adebisi, S.A., J.M. Odiachi, and N.A. Chikere, The National Health Insurance Scheme (NHIS) in Nigeria: Has the Policy Achieved its Intended Objectives? *Academic Journal of Economic Studies*, 2019. 5: p. 97+
48. Ogaboh, A., N. Osuchukwu, and E. Ushie, National Health Insurance Scheme (NHIS) and Employees' Access to Healthcare Services in Cross River State, Nigeria. *Global journal of health science*, 2010. 10: p. 9-16
49. Enabulele, O. Achieving Universal Health Coverage in Nigeria: Moving Beyond Annual Celebrations to Concrete Address of the Challenges. *World Medical & Health Policy*, 2020. 12(1): p. 47-59
50. Olaniyan, O. and C. Oburota, Equitable Health Care Financing and Universal Health Care Coverage in Nigeria. 2019. 8: p. 25-31
51. Paul Adepoju. The Lancet Nigeria report Vol 399 June 4, 2022 Available at [https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(22\)01008-X.pdf](https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(22)01008-X.pdf)
52. Izugbara, C.O., Wekesah, F. M. & Adedini, S. A. (2016) Maternal Health in Nigeria: A Situation Update. African Population and Health Research Center (APHRC), Nairobi, Kenya
53. Alkema L, Chou D, Hogan D, et al Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: a systematic analysis by the UN Maternal Mortality Estimation Inter-Agency Group. *Lancet* 2016;387:462–74. [doi:10.1016/S0140-6736\(15\)00838-7](https://doi.org/10.1016/S0140-6736(15)00838-7)
54. EmebetGebre, Alemayehu Worku Fawole Bukola; Inequities in maternal health services utilization in Ethiopia 2000–2016: magnitude, trends, and determinants *Reproductive Health* volume 15, Article number: 119 (2018)
55. Anthony Cu, Sofia Meister, Bertrand Lefebvre Valéry Ridde Assessing healthcare access using the Levesque's conceptual framework– a scoping review *International Journal for Equity in Health* volume 20, Article number: 116 (2021)
56. Benedict Oppong Asamoah, Anette Agardh; Inequality trends in maternal health services for young Ghanaian women with childbirth history between 2003 and 2014 *BMJ Open* 2017;7:e011663. <http://orcid.org/0000-0001-7308-1698>
57. UNICEF Data Warehouse .Maternal death (estimated) [Internet], 2019. Available: <https://data.unicef.org/topic/maternal-health/maternal-mortality/>
58. World Health Organization. *Trends in maternal mortality 2000 to 2017: estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division*. 2019

59. Kumar S. Reducing maternal mortality in India: policy, equity and quality issues. *Indian J of Public Health*. 2010;54(2):57–64.
60. Nigeria near miss survey, Available from <https://www.who.int/news/item/25-06-2019-maternal-health-in-nigeria-generating-information-for-action> (Accessed July 7, 2022)
61. Sharma V, Brown W, Kainuwa MA, Leight J, Nyqvist MB. High maternal mortality in Jigawa State, Northern Nigeria estimated using the sisterhood method. *BMC Pregnancy Childbirth*. 2017;17(1):163. 10.
62. African Population and Health Research Center. *Maternal Health in Nigeria: Facts and Figures*, June 2017. <http://aphrc.org/wp-content/uploads/2017/06/APHRC-2017-fact-sheet-Maternal-Health-in-NigeriaFacts-and-Figures.pdf>. Ac
63. Nwankwo ON, Ani OE, Akpoke M, Ugwa EA. Determinants of choice of place of delivery among women attending two referral hospitals in Kano North-West Nigeria. *Niger Med J* 2019;60:68-75 16.
64. Yoshito Kawakatsu et al Socioeconomic barriers to facility-based delivery in urban poor communities of Lagos: Wealth, linguistic capacity, and residential area, *Health Policy OPEN* Volume 1, December 2020, 100019
65. World Health Organization. *Sexual and Reproductive Health. Maternal Health in Nigeria: Generating Information for Action*. Available from <https://www.who.int/reproductivehealth/maternal-health-nigeria/en/>
66. Okonofua F, Ntoimo L, Ogungbangbe J, Anjorin S, Imongan W, Yaya S. Predictors of women's utilization of primary health care for skilled pregnancy care in rural Nigeria. *BMC Pregnancy and Childbirth*. 2018;18:1-15. [doi:10.1186/s12884-018-1730-4](https://doi.org/10.1186/s12884-018-1730-4)
67. Yaya S, Okonofua F, Ntoimo L, et al. Increasing women's access to skilled pregnancy care to reduce maternal and perinatal mortality in Rural Edo State, Nigeria: A randomized controlled trial. *BMC Global Health Research and Policy*. 2018;3:1-10. [doi:10.1186/s41256-018-0066](https://doi.org/10.1186/s41256-018-0066)
68. Decker MR et al Gendered power dynamics and threats to sexual and reproductive autonomy among adolescent girls and young adult women: A cross-sectional survey in three urban settings. *PLoS One*. 2021 Nov 29;16(11):e025700
69. Hamal, M., et al. Social determinants of maternal health: a scoping review of factors influencing maternal mortality and maternal health service use in India. *Public Health Rev* **41**, 13 (2020). <https://doi.org/10.1186/s40985-020-00125-6>.
70. Yaya S, Bishwajit G, Uthman A, Amouzou A. Why some women fail to give birth at health facilities: A comparative study between Ethiopia and Nigeria. *PLoS One*. 2018;13:1-11. [doi:10.1371/journal.pone.0196896](https://doi.org/10.1371/journal.pone.0196896)
71. Lubbock A, Stephenson B. Utilization of maternal health care services in the department of Matagalpa, Nicaragua. *Rev Panam Salud Publica*. 2008;24:75-84. [doi:10.1590/S1020-49892008000800001](https://doi.org/10.1590/S1020-49892008000800001)

72. Babalola S, Fatusi A. Determinants of use of maternal health services in Nigeria - looking beyond individual and household factors. *BMC Pregnancy and Childbirth*. 2009;9:1-13. doi:10.1186/1471-2393-9-43
73. Srivastava A, Avan BI, Rajbangshi P, Bhattacharyya S. Determinants of women's satisfaction with maternal health care: A review of literature from developing countries. *BMC Pregnancy and Childbirth*. 2015;15:1-12. doi:10.1186/s12884-015-0525-0
74. Wyatt TR, etal . Intersectionality: a means for centering power and oppression in research. *Adv Health Sci Educ Theory Pract*. 2022 Apr 2. doi: 10.1007/s10459-022-10110-0. Epub ahead of print. PMID: 35366113
75. Simpson J. 2009. *Everyone Belongs: A Toolkit for Applying Intersectionality*. Ottawa, Ontario
76. Oye-Adeniran, B., I.F. Adewale, A.V. Umoh, A. Oladokun, A. Gbadegesin, and E.E. Ekanem. 2006. "Community-based study of contraceptive behavior in Nigeria." *African Journal of Reproductive Health* 10 (2):90-104.
77. Stephen, A.A., and P.M. Enoch. 2014. "Modern contraceptive use, sex refusal, spousal difference in level of education among married women in Nigeria: Are they interrelated?" *International Journal of Humanities* 4 (6):217-230.
78. Ejembi, Clara Ladi, Tukur Dahiru, and Alhaji A. Aliyu. 2015. *Contextual Factors Influencing Modern Contraceptive Use in Nigeria*. DHS Working Papers No. 120. Rockville, Maryland, USA: ICF International
79. Zacharie Tsala Dimbuene *WOMEN'S EDUCATION AND UTILIZATION OF MATERNAL HEALTH SERVICES IN AFRICA: A MULTI-COUNTRY AND SOCIOECONOMIC STATUS ANALYSIS* November 2017 *Journal of Biosocial Science* 50(6):1-24 DOI:10.1017/S0021932017000505
80. Xu, Y., Peng, M.Y.P., Ahuru, R.R. *et al*. Individual and community-level factors associated with non-institutional delivery of women of childbearing-age in Nigeria. *Humanit Soc Sci Commun* 9, 197 (2022). <https://doi.org/10.1057/s41599-022-01168-7>
81. Nwosu, C.O., Ataguba, J.E. Socioeconomic inequalities in maternal health service utilisation: a case of antenatal care in Nigeria using a decomposition approach. *BMC Public Health* 19, 1493 (2019). <https://doi.org/10.1186/s12889-019-7840-8>
82. Bolarinwa OA, Fortune E, Aboagye RG, Seidu AA, Olagunju OS, Nwagbara UI, Ameyaw EK, Ahinkorah BO. Health facility delivery among women of reproductive age in Nigeria: Does age at first birth matter? *PLoS One*. 2021 Nov 4;16(11):e0259250. doi: 10.1371/journal.pone.0259250. PMID: 34735506; PMCID: PMC8568178.
83. Babalola S, Fatusi A. Determinants of use of maternal health services in Nigeria—looking beyond individual and household factors. *BMC Pregnancy and Childbirth*. 2009;9(1):43. doi: 10.1186/1471-2393-9-43
84. Afework MF, Admassu K, Mekonnen A, Hagos S, Asegid M, Ahmed S. Effect of an innovative community based health program on maternal health service utilization in north and south central Ethiopia: a community based cross sectional study. *Reproductive Health*. 2014;11(1):28. doi: 10.1186/1742-4755-11-28
85. Dankwah E, Zeng W, Feng C, Kirychuk S, Farag M. The social determinants of health facility delivery in Ghana. *Reproductive health*. 2019;16(1):1–10. doi: 10.1186/s12978-018-0662-9

86. Ijeoma Nkem Okedo-Alex et al. Determinants, reasons for choice and willingness to recommend birthing facility among mothers in public and private health facilities in Ebonyi, Nigeria. *Pan African Medical Journal*. 2021;38:289. [doi: 10.11604/pamj.2021.38.289.24437]
87. Fapohunda BM, Orobato NG (2013) When Women Deliver with No One Present in Nigeria: Who, What, Where and So What? *PLoS ONE* 8(7): e69569. <https://doi.org/10.1371/journal.pone.0069569>
88. Adewuyi EO, Khanal V, Zhao Y, David L, Bamidele OD, Auta A. Home childbirth among young mothers aged 15-24 years in Nigeria: a national population-based cross-sectional study. *BMJ Open*. 2019 Sep 18;9(9):e025494. doi: 10.1136/bmjopen-2018-025494. PMID: 31537553; PMCID: PMC6756611.
89. Tesema GA, Mekonnen TH, Teshale AB. Individual and community-level determinants, and spatial distribution of institutional delivery in Ethiopia, 2016: Spatial and multilevel analysis. *PLoS One*. 2020 Nov 12;15(11):e0242242. doi: 10.1371/journal.pone.0242242. PMID: 33180845; PMCID: PMC7660564.
90. Ahinkorah BO. Non-utilization of health facility delivery and its correlates among childbearing women: a cross-sectional analysis of the 2018 Guinea demographic and health survey data. *BMC Health Serv Res*. 2020 Nov 9;20(1):1016. doi: 10.1186/s12913-020-05893-0. PMID: 33167985; PMCID: PMC7650152
91. Somefun OD, Ibisomi L. Determinants of postnatal care non-utilization among women in Nigeria. *BMC Res Notes*. 2016 Jan 11;9:21. doi: 10.1186/s13104-015-1823-3. PMID: 26754966; PMCID: PMC4707769.
92. Tukur Dahiru et al. Determinants of antenatal care, institutional delivery and postnatal care services utilization in Nigeria. *Pan African Medical Journal*. 2015;21:321. [doi: 10.11604/pamj.2015.21.321.6527]
93. Olajubu AO, Olowokere AE, Ogundipe MJ, Olajubu TO. Predictors of Postnatal Care Services Utilization Among Women in Nigeria: A Facility-Based Study. *J Nurs Scholarsh*. 2019 Jul;51(4):408-416. doi: 10.1111/jnu.12473. Epub 2019 Mar 28. PMID: 30919580.
94. Lloyd, Cynthia. B; Hewett, Paul C. Primary Schooling in sub-Saharan Africa: Recent Trends and Current Challenges; Washington, DC. Working Paper no. 176, Population Council; 2003.
95. Fatusi AO. Young People's sexual and reproductive health interventions in developing countries: making the investments count. *J Adolesc Health*. 2016;59(3):S1-3. <https://doi.org/10.1016/j.jadohealth.2016.06.016>
96. Rachel Kidman, Child marriage and intimate partner violence: a comparative study of 34 countries, *International Journal of Epidemiology*, Volume 46, Issue 2, April 2017, Pages 662-675, <https://doi.org/10.1093/ije/dyw225>
97. Dorothy Ngozi Ononokpono & Ezinwanne Christiana Azfredrick (2014) Intimate Partner Violence and the Utilization of Maternal Health Care Services in Nigeria, *Health Care for Women International*, 35:7-9, 973-989, DOI: [10.1080/07399332.2014.924939](https://doi.org/10.1080/07399332.2014.924939)

98. Aboagye, R.G., Seidu, AA., Asare, B.YA. et al. Intimate partner violence and timely antenatal care visits in subSaharan Africa. *Arch Public Health* 80, 124 (2022).
<https://doi.org/10.1186/s13690-022-00853-y>
99. Caroline Signore, Maurice Davis, Candace M. Tinggen, and Alison N. Cernich. The Intersection of Disability and Pregnancy: Risks for Maternal Morbidity and Mortality. *Journal of Women's Health*. Feb 2021. 147-153. <http://doi.org/10.1089/jwh.2020.8864>
100. Ganle JK, Otupiri E, Obeng B, Edusie AK, Ankomah A, Adanu R (2016) Challenges Women with Disability Face in Accessing and Using Maternal Healthcare Services in Ghana: A Qualitative Study. *PLoS ONE* 11(6): e0158361. <https://doi.org/10.1371/journal.pone.0158361>
101. Kazeem A, June S, Elizabeth B, Ubong A, Olaposi O, Oluwayemisi F, Jude O, Barinaadaa A, Nasir U, "Predictors and Utilization of Health Institution Services for Childbirth among Mothers in a Southern Nigerian City", *Obstetrics and Gynecology International*, vol. 2021, ArticleID 6618676, 8 pages, 2021. <https://doi.org/10.1155/2021/6618676>
102. Olufunmilayo I Fawole, Ikeola A Adeoye Women's status within the household as a determinant of maternal health care use in Nigeria *African Health Sciences* Vol 15 Issue 1, March 2015
103. Agopian AJ, Lupo PJ, Herdt-Losavio ML, Langlois PH, Rocheleau CM, Mitchell LE; Differences in folic acid use, prenatal care in early pregnancy by occupation. *Prev Med.* 2012; 55(4): 341-5
104. Singh A, Kumar A, Pranjali P. Utilization of maternal healthcare among adolescent mothers in urban India: evidence from DLHS-3. *PeerJ.* 2014;2, e592.
105. Singh PK, Rai RK, Alagarajan M, Singh L. Determinants of maternity care services utilization among married adolescents in rural India. *PLoS One.* 2012;7, e31666.
106. Singh L, Rai RK, Singh PK. Assessing the utilization of maternal and child health care among married adolescent women: evidence from India. *J Biosoc Sci.* 2012;44:1-26.
107. Onah MN, Govender V. Out-of-pocket payments, health care access and utilisation in south-eastern Nigeria: a gender perspective. *PLoS One.* 2014;9(4):e93887. Published 2014 Apr 11. doi:10.1371/journal.pone.0093887
108. Rugoho T, Maphosa F. Challenges faced by women with disabilities in accessing sexual and reproductive health in Zimbabwe: The case of Chitungwiza town. *Afr J Disabil.* 2017 May 26;6:252. doi: 10.4102/ajod.v6i0.252. PMID: 28730062; PMCID: PMC5502473.
109. Towards Improved Inclusion of Women and Girls with Disabilities in the Development Agenda in Nigeria Edward Ugbada Adie PhD *International Journal of Integrative Humanism* Vol. 10 No. 1, November 2018. ISSN: 2026 - 6286
110. Olayiwola, S. O., Kazeem, B. L., & Kum, F. V. (2021). Female Education and Contraceptives Use in Nigeria. *European Scientific Journal, ESJ*, 17(32), 366.
<https://doi.org/10.19044/esj.2021.v17n32p366>
111. Adeniyi Francis Fagbamigbe & Erhabor Sunday Idemudia (2017) Wealth and antenatal care utilization in Nigeria: Policy implications, *Health Care for Women International*, 38:1, 17-37, DOI: [10.1080/07399332.2016.1225743](https://doi.org/10.1080/07399332.2016.1225743)

- 112 Bolarinwa OA, Fortune E, Aboagye RG, Seidu A-A, Olagunju OS, Nwagbara UI, et al. (2021) Health facility delivery among women of reproductive age in Nigeria: Does age at first birth matter? *PLoS ONE* 16(11): e0259250. <https://doi.org/10.1371/journal.pone.0259250>
- 113 Dankwah E, Zeng W, Feng C, Kirychuk S, Farag M. The social determinants of health facility delivery in Ghana. *Reproductive health*. 2019;16(1):1–10. pmid:30621726
- 114 Colomé-Hidalgo, M., Campos, J.D. & de Miguel, Á.G. Exploring wealth-related inequalities in maternal and child health coverage in Latin America and the Caribbean. *BMC Public Health* 21, 115 (2021).
- 115 Ochako R, et al. Utilization of maternal health services among young women in Kenya: Insights from the Kenya Demographic and Health Survey, 2003. *BMC Preg Childbirth*. 2011;11(1):1.
- 116 Nwogu, E., Utilization of maternity care in Nigeria. *Global J Pure Appl Sci*. 2009; 15(3–4).
- 117 Fagbamigbe, A.F., Bamgboye, E.A., Yusuf, B.O. *et al.* The Nigeria wealth distribution and health seeking behaviour: evidence from the 2012 national HIV/AIDS and reproductive health survey. *Health Econ Rev* 5, 5 (2015). <https://doi.org/10.1186/s13561-015-0043-9>
- 118 Blessing I Babalola Determinants of urban-rural differentials of antenatal care utilization in Nigeria; African population studies. Vol. 28 No. 3 (2014)
- 119 Arthur E. Wealth and antenatal care use: implications for maternal health care utilisation in Ghana. *Health Econ Rev*. 2012;2:14:1–18.
- 120 Obasohan PE. Religion, Ethnicity and Contraceptive Use among Reproductive age Women in Nigeria. *Int J MCH AIDS*. 2015;3(1):63-73.
- 121 Izugbara CO, Ezeh AC. Women and high fertility in Islamic northern Nigeria. *Stud Fam Plan*. 2010;41(3):193–204. <https://doi.org/10.1111/j.1728-4465.2010.00243.x>
- 122 Differentials in Contraceptive Use Among Selected Minority Ethnic Groups in Nigeria Aboluwaji Daniel Ayinmoru* and Olufunke A. Fayehun *Front. Glob. Womens Health*, 03 June 2022 Sec. Contraception and Family Planning <https://doi.org/10.3389/fgwh.2022.878779>
- 123 Solanke, Bola Lukman & Oladosu, Olusegun Adebolu & Akinlo, Ambrose & Olanisebe, Samson. (2015). Religion as a Social Determinant of Maternal Health Care Service Utilisation in Nigeria. *African Population Studies*. 29. 10.11564/29-2-761.
- 124 Adigun OA. And Adigun, K.A . An Analysis of Utilization of Postnatal Care Services Among Mothers in Nigeria. *Int J Cont Res Rev [Internet]*. 2019 Jan. 31 [cited 2022 Aug. 1];10(01):20691-9. Available from: <http://ijcrr.info/index.php/ijcrr/article/view/651>
- 125 Rai RK, Singh PK, Singh L. Utilization of maternal health care services among married adolescent women: insights from the Nigeria Demographic and Health Survey, 2008. *Womens Health Issues*. 2012 Jul-Aug;22(4):e407–14.
- 126 Tarekegn, S.M., Lieberman, L.S. & Giedraitis, V. Determinants of maternal health service utilization in Ethiopia: analysis of the 2011 Ethiopian Demographic and Health Survey. *BMC Pregnancy Childbirth* 14, 161 (2014). <https://doi.org/10.1186/1471-2393-14-161>
- 127 Nmadu, AG, Mohammed S, Usman NO. Barriers to adolescents' access and utilisation of reproductive health services in a community in north-western Nigeria: A qualitative exploratory

study in primary care. *Afr J Prm Health Care Fam Med.* 2020;12(1), a2307. <https://doi.org/10.4102/phcfm.v12i1.2307>

- 128 Jomeen J, Redshaw M (2013) Ethnic minority women's experience of maternity services in England. *Ethn Health* 18(3): 280-296.
- 129 Lyons SM, O'Keeffe FM, Clarke AT, Staines A (2008) Cultural diversity in the Dublin maternity services: the experiences of maternity service providers when caring for ethnic minority women. *Ethn Health* 13(3): 261-276.
- 130 Phillimore J (2015) Delivering maternity services in an era of super diversity: the challenges of novelty and newness. *Journal of Ethnic and Racial Studies* 38(4): 568-582.
- 131 Evans EC (2013) A review of cultural influence on maternal mortality in the developing world. *Midwifery* 29(5): 490-496.
- 132 Mselle LT, Moland KM, Mvungi A, Evjen OB, Kohi TW (2013) Why give birth in health facility? Users' and providers' accounts of poor quality of birth care in Tanzania. *BMC Health Serv Res* 13: 174.
- 133 Owais A, Faruque AG, Das SK, Ahmed S, Rahman S, et al. (2013) Maternal and Antenatal Risk Factors for Stillbirths and Neonatal Mortality in Rural Bangladesh: A Case-Control Study. *PLoS One* 2013 8(11): e8016
- 134 Umar AS. The use of maternal health services in Nigeria: does ethnicity and religious beliefs matter? *MOJ Public Health* . 2017;6(6):442-447.
- 135 Babalola, S., Fatusi, A. Determinants of use of maternal health services in Nigeria - looking beyond individual and household factors. *BMC Pregnancy Childbirth* 9, 43 (2009). <https://doi.org/10.1186/1471-2393-9-43>
- 136 Dorothy Ngozi Ononokpono, Clifford Obby Odimegwu, Sunday Adepoju Adedini Eunice N. S. Imasiku (2016) Ethnic Diversity and Maternal Health Care in Nigeria, *Women's Reproductive Health*, 3:1, 45-59, DOI: [10.1080/23293691.2016.1150701](https://doi.org/10.1080/23293691.2016.1150701)
- 137 Forty J, Rakgoasi SD, Keetile M. Patterns and determinants of modern contraceptive use and intention to use contraceptives among Malawian women of reproductive ages (15–49 years). *Contracept Reprod Med.* (2021) 6:1–12. doi: 10.1186/s40834-021-00163-8
- 138 Zegeye B, Ahinkorah BO, Idriss-Wheeler D, Olorunsaiye CZ, Adjei NK, Yaya S. Modern contraceptive utilization and its associated factors among married women in Senegal: a multilevel analysis. *BMC Public Health.* (2021) 21:1–13. doi: 10.1186/s12889-021-10252-7
- 139 Atiglo DY, Biney AA. Correlates of sexual inactivity and met need for contraceptives among young women in Ghana. *BMC Womens Health.* (2018) 18:1–10. doi: 10.1186/s12905-018-0630-0
- 140 Adewole Adebola Adefalu et al. Awareness and opinions regarding contraception by women of reproductive age in North-West Nigeria. *Pan African Medical Journal.* 2018;30:65. [doi: 10.11604/pamj.2018.30.65.12975]
- 141 Augustine Ankomah¹ Jennifer Anyanti Muiyiwa Oladosu Myths, misinformation, and communication about family planning and contraceptive use in Nigeria; *Open Access Journal of Contraception*, June 20, 2011 Ankomah^{1*}, J. Anyanti², S. Adebayo³ and A. Giwa⁴ Barriers to Contraceptive Use among Married Young Adults in Nigeria: A Qualitative Study

- 142 Orisaremi TC. (2013). Socio-cultural and economic determinants of poor utilization of health facilities for child delivery among the Tarok in North-central Nigeria. *Afr J Med Health Sci*, 12(2): 60–67.
- 143 Sekine K, Carter DJ (2019) The effect of child marriage on the utilization of maternal health care in Nepal: A cross-sectional analysis of Demographic and Health Survey 2016. *PLoS ONE* 14(9): e0222643. <https://doi.org/10.1371/journal.pone.0222643>
- 144 Sekine K, Carter DJ. The effect of child marriage on the utilization of maternal health care in Nepal: A cross-sectional analysis of Demographic and Health Survey 2016. *PLoS One*. 2019 Sep 19;14(9):e0222643. doi: 10.1371/journal.pone.0222643. PMID: 31536591; PMCID: PMC6752778.
- 145 Onyejose, K.; Ndep O.; Offiong, D.; Omang, J.; and Otu, F Sociocultural factors influencing maternal health outcomes in Nigeria *Scientific Research Journal (SCIRJ)*, Volume VII, Issue XI, November 2019 86 ISSN 2201-2796 www.scirj.org
<http://dx.doi.org/10.31364/SCIRJ/v7.i11.2019.P1119728>
- 146 Adatarara P, Strumpher J, Ricks E, Mwini-Nyaledzigbor PP. Cultural beliefs and practices of women influencing home births in rural Northern Ghana. *Int J Womens Health*. 2019 Jun 4;11:353-361. doi: 10.2147/IJWH.S190402. PMID: 31239788; PMCID: PMC6556529.
- 147 Xu, Y., Peng, M.Y.P., Ahuru, R.R. *et al.* Individual and community-level factors associated with non-institutional delivery of women of childbearing-age in Nigeria. *Humanit Soc Sci Commun* 9, 197 (2022). <https://doi.org/10.1057/s41599-022-01168-7>
- 148 Cofie LE, Barrington C, Sodzi-Tettey S, Ennett S, Maman S, Singh K: A qualitative study of women's network social support and facility delivery in rural Ghana. *PLoS one* 2018, 13(11):e0206429.
- 149 Mamo A, Morankar S, Asfaw S, Bergen N, Kulkarni MA, Abebe L, Labonté R, Birhanu Z, Abera M: How do community health actors explain their roles? Exploring the roles of community health actors in promoting maternal health services in rural Ethiopia. *BMC health services research* 2019, 19(1):724.
- 150 Mochache V, Wanje G, Nyagah L, Lakhani A, El-Busaidy H, Temmerman M, Gichangi P: Religious, socio-cultural norms and gender stereotypes influence uptake and utilization of maternal health services among the Digo community in Kwale, Kenya: a qualitative study *Reproductive health* 2020, 17(1):71
- 151 Haruna, M.A. (2017). The problems of living with disability in Nigeria. *Journal of Law, Policy and Globalization*, 6(5), 103-112
- 152 Aluko, Yetunde. Dimensions of Exclusion and Inclusion of Women in Nigeria(2018). 22. 34-59. 10.36108/ssan/191802.22.0130.
- 153 Sanni Yaya, Friday Okonofua, Lorretta Ntoimo, Ogochukwu Udenige, Ghose Bishwajit, Gender inequity as a barrier to women's access to skilled pregnancy care in rural Nigeria: a qualitative study, *International Health*, Volume 11, Issue 6, November 2019, Pages 551–560,
- 154 Fawole OI, Adeoye IA. Women's status within the household as a determinant of maternal health care use in Nigeria. *Afr Health Sci*. 2015;15:217–25.
- 155 Dalal K, Shabnam J, Andrews-Chavez J, et al. Economic empowerment of women and utilization of maternal delivery care in Bangladesh. *Int J Prev Med*. 2012;3:628–36.

- 156 Namasivayam A, Osuorah DC, Syed R, et al. The role of gender inequities in women's access to reproductive health care : a population-level Study of Namibia, Kenya, Nepal and India. *Int J Womens Health*. 2012;4:351–64
- 157 Lowe M, Chen D-R, Huang S-L. Social and Cultural Factors Affecting Maternal Health in Rural Gambia: An Exploratory Qualitative Study. *PLoS One*. 2016;11:e0163653.
- 158 Adeniran AS, Aboyeji AP, Fawole AA, et al. Male Partner's Role during Pregnancy, Labour and Delivery: Expectations of Pregnant women in Nigeria. *Int J Heal Sci (Qassim)*. 2015;9:306–12
- 159 Mkandawire E, Hendriks SL. A qualitative analysis of men's involvement in maternal and child health as a policy intervention in rural Central Malawi. *BMC Pregnancy Childbirth*. 2018;18:37.
- 160 Reis V, Deller B, Carr C, Smith J. *Respectful Maternity Care: Country Experiences. Survey Report*. Washington DC: United States Agency for International Development, 201
- 161 Fagbamigbe, A.F., Idemudia, E.S. Barriers to antenatal care use in Nigeria: evidences from non-users and implications for maternal health programming. *BMC Pregnancy Childbirth* **15**, 95 (2015). <https://doi.org/10.1186/s12884-015-0527-y>
- 162 Okafor II, Ugwu EO, Obi SN. Disrespect and abuse during facility-based childbirth in a low-income country. *International Journal of Gynecology & Obstetrics*. 2015;128(2):110–3. 10.1016/j.ijgo.2014.08.015
- 163 Lamina MA, Sule-Odu AO, Jagun EO. Factors militating against delivery among patients booked in Olabisi Onabanjo University Teaching Hospital, Sagamu. *Niger J Med*. 2004;13(1):52
- 164 Moronkola OA, Omonu JB, Iyayi DA, Tihamiyu MA. Perceived determinants of the utilization of maternal health-care services by rural women in Kogi State, Nigeria. *Tropical Doctor*. 2007;37(2):94–6.
- 165 Iyaniwura CA, Yussuf Q. Utilization of antenatal care and delivery services in Sagamu, south western Nigeria. *African journal of reproductive health*. 2009;13(3):111–22
- 166 Udoma EJ, Ekanem AD, Abasiattai AM, Bassey EA. Reasons for preference of delivery in spiritual church-based clinics by women of south-south Nigeria. *Nigerian Journal of Clinical Practice*. 2008;11(2):100–3
- 167 Moore BM, Alex-Hart BA, George IO. Utilization of health care services by pregnant mothers during delivery: a community based study in Nigeria. *East African Journal of Public Health*. 2011;8(1):49–51
- 168 Moyer CA, Adongo PB, Aborigo RA, Hodgson A, Engmann CM. 'They treat you like you are not a human being': Maltreatment during labour and delivery in rural northern Ghana. *Midwifery*. 2014;30(2):262–8.
- 169 Nnennaya N, Kalu U Mohammed S, Suleiman H. Abubakar M; Costs and Patterns of Financing Maternal Health Care Services in Rural Communities in Northern Nigeria: Evidence for Designing National Fee Exemption Policy *International Journal of MCH and AIDS* (2013), Volume 2, Issue 1, Pages 163-17
- 170 Kowalewski M, Mujinja P, Jahn A. Can mothers afford maternal health care costs? User costs of maternity services in rural Tanzania. *2002 African Journal of Reproductive Health* 2002; 6:66–73

- 171 Perkins M, Brazier E, Themman E, Bassane B, Diallo D, Mutunga A et al. Out of pocket costs for facility based maternity care in three African countries. *Health Policy and Planning* 2009; 24 (4): 289-300.
- 172 Uzochukwu BS, Onwujekwe OE, Akpala CO. Community satisfaction with the quality of maternal and child health services in southeast Nigeria. *East Afr Med J*. 2004;81(6):293-9. Epub 2005/09/20.
- 173 Igboanugo GM, Martin CH. What are Pregnant Women in a Rural Niger Delta Community's Perceptions of Conventional Maternity Service Provision? An Exploratory Qualitative Study. *African Journal of Reproductive Health*. 2011;15(3):59-72.
- 174 Ganle JK, Otupiri E, Obeng B, Edusie AK, Ankomah A, Adanu R (2016) Challenges Women with Disability Face in Accessing and Using Maternal Healthcare Services in Ghana: A Qualitative Study. *PLoS ONE* 11(6): e0158361. <https://doi.org/10.1371/journal.pone.0158361>
- 175 Ajayi, A.I., Akpan, W. Maternal health care services utilisation in the context of 'Abiye' (safe motherhood) programme in Ondo State, Nigeria. *BMC Public Health* **20**, 362 (2020). <https://doi.org/10.1186/s12889-020-08512-z>
- 176 Emmanuel Adeniran Alebiosu; 212 National Health System, Maternal Health and the Millennium Development Goals: A Review of Abiye Programme in Ondo State, Nigeria October 2014 *International Journal of Humanities and Social Science* Vol. 4, No. 12

ANNEX

Table 1: Health Allocation as a percentage of Federal budget⁴³

Year	Total federal budget (NGN Billion)	Total health allocation (NGN Billion)	Health allocation as % of the federal budget
2011	4971.9	266.7	5.4%
2012	4877.2	282.8	5.8%
2013	4920	279.2	5.7%
2014	4695.19	339.38	7.2%
2015	5067.9	347.26	6.9%
2016	6060.48	353.54	5.8%
2017	7441.18	380.16	5.1%
2018	9120.33	528.14	5.8%
2019	8830	372.7	4.2%
2020	10594.36	463.8	4.4%
2021	13082	546.98	4.2%

Table 2: Nigeria reproductive and maternal health indices by geopolitical zone⁶

Indicator	2018 NDHS Overall	2013 NDHS Overall	2018 Regional					
			North East	North Central	North West	South East	South South	South West
Skilled ANC (%)	67	61	58.5	66.2	53.9	89.2	77.1	88.2
Facility delivery (%)	39	36	25.4	49.2	15.6	81.8	50.2	76.3
mCPR (%)	12	10	7.8	13.8	6.2	12.9	15.8	24.3

Table 3: Combination of Search terms

MAIN KEYWORDS		"maternal health services"	"Factors"	" decision making"	"use"	"Women of reproductive age"	"Nigeria"	"Intervention"
AND								
OTHER RELATED KEYWORDS/SYNONYMS (derived from framework and objectives of the study"	OR	"antenatal care"	"socioeconomic"	"power"	"use"	"women"	" Africa"	"Best practice"
		"facility based delivery"	" sociocultural"	"autonomy"	" access"	"girls"	" Sub saharan Africa"	"project"
		"Institutional delivery"	" gender"	"power relation"	"utilization"	"teenage girls"	"West Africa"	"strrategy"
		"Post natal care"	"health system"	"male involvement"	"utilisation"	"women with disability"	"low and middle income countries"	
		"post partum care"	"intersectional"					
		"women' health"	"education"					
		"Reproductive health"	"religion"					
		"prenatal care"	"cultural"					
		"skilled care"	"tradition"					
		"skilled birth attendant"	"belief"					
		"pregancy care"	"gender inequality"					
			gender inequity"					
			"social identity"					
			"social category"					