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Trends Determinants and Policy Priorities in Maternal and Child Health in Nigeria

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Abstract **Original Research Article**

Background: Maternal and child health (MCH) remains one of the most fundamental indicators of a nation's human development and the effectiveness of its health system. In Nigeria, maternal and child mortality rates have declined slowly despite several national and international policy interventions. This narrative review synthesizes evidence on recent trends, determinants, and policy initiatives influencing MCH outcomes in Nigeria.

Methods: A structured search of peer-reviewed literature was conducted across PubMed, Scopus, and Google Scholar databases. Search terms included *maternal mortality*, *child health*, *Nigeria*, *determinants*, and *policy*. Only peer-reviewed studies published between 2016 and 2025 were included. Secondary data from the Nigeria Demographic and Health Surveys (NDHS 2018 and 2023), the WHO Global Health Observatory, and UNICEF datasets were incorporated to contextualize trends.

Results: Nigeria remains among the countries with the highest maternal mortality ratio (MMR) globally, with estimates ranging between 512 and 1,047 deaths per 100,000 live births. Under-five mortality has declined from 132 per 1,000 live births in 2018 to 102 in 2023, yet disparities persist across regions. Major determinants include socioeconomic inequality, low service utilization, malnutrition, inadequate health financing, and cultural barriers. The implementation of the Midwives Service Scheme (MSS), National Health Act, and RMNCAH+N Strategic Plan has achieved measurable but uneven progress.

Conclusion: Nigeria's MCH indicators remain far from Sustainable Development Goal (SDG) targets. Strengthening primary health care, improving financial protection mechanisms, scaling up quality improvement programs, and addressing gender and geographic inequities are critical to achieving sustained improvement.

Keywords: maternal and child health, Nigeria health system, maternal mortality, child mortality, health policy interventions.

1. Introduction

Maternal and child health (MCH) outcomes are universally recognized as critical indicators of a nation's health system performance and socioeconomic development (Ajegbile et al., 2023). Despite notable progress in global maternal and child survival rates over the past two decades, Nigeria continues to experience some of the highest levels of maternal and under-five mortality in the world (Meh et al., 2019; Olonade, 2019). The country's maternal

mortality ratio (MMR) remains disproportionately high compared with regional and global averages, contributing substantially to sub-Saharan Africa's overall burden (World Health Organization [WHO], 2020). Nigeria accounts for nearly 20 percent of global maternal deaths and one of every eight under-five deaths worldwide (UNICEF, 2025).

While there have been modest improvements—such as increased antenatal care (ANC) coverage, immunization uptake, and community-level health interventions—progress remains insufficient to meet the Sustainable Development Goals (SDGs) 3.1 and 3.2, which target a reduction of the MMR to fewer than 70 per 100,000 live births and under-five mortality to fewer than 25 per 1,000 live births by 2030 (WHO, 2020; United Nations, 2023). According to the Nigeria Demographic and Health Surveys (NDHS 2018; NDHS 2023), although there has been a decline in child mortality from 132 per 1,000 live births in 2018 to 102 in 2023, maternal deaths remain unacceptably high—especially in rural and northern regions.

Persistent challenges include structural and human-resource deficiencies, poor health-financing mechanisms, and limited access to quality emergency obstetric and neonatal care (Mao et al., 2023). Socioeconomic inequities, gender-based barriers, and cultural norms further compound the problem, contributing to disparities in healthcare utilization (Nasir et al., 2022). Although multiple policy frameworks—such as the National Health Act (2014), the Midwives Service Scheme (MSS), and the National Strategy for Reproductive, Maternal, New-born, Child, and Adolescent Health plus Nutrition (RMNCAH+N)—have been launched to improve MCH outcomes, their implementation remains inconsistent across states (Ajegbile et al., 2023; The Lancet, 2023).

This narrative review aims to synthesize the most recent evidence on MCH in Nigeria by examining three major aspects: (1) trends in maternal and child mortality; (2) the social, economic, and health-system determinants influencing these outcomes; and (3) the effectiveness of ongoing interventions and policy frameworks. The study relies solely on publicly available data and peer-reviewed literature, requiring no ethical approval. By integrating empirical data with a policy perspective, this review seeks to highlight progress made, identify existing gaps, and recommend strategies for achieving equitable improvements in maternal and child health by 2030.a

2. Methods

2.1 Review Design

This paper adopts a narrative review approach, chosen for its flexibility in synthesizing heterogeneous sources of evidence, including peer-reviewed studies, policy reports, and national datasets. The narrative design enables an integrated examination of maternal and child health (MCH) in Nigeria, focusing on epidemiological trends, social determinants, and health-system responses over time (Baumeister & Leary, 1997). The review was structured following the *Scale for the Assessment of Narrative Review Articles (SANRA)* guidelines, which emphasize clarity, methodological transparency, and a critical synthesis of evidence (Baethge et al., 2019).

2.2 Data Sources and Search Strategy

An extensive literature search was conducted between January and November 2025 using PubMed, Scopus, ScienceDirect, and Google Scholar databases. The search strategy employed Boolean operators ("AND," "OR") and combined the following key terms: *maternal mortality*, *child health*, *Nigeria*, *maternal health policies*, *determinants*, and *interventions*. Only peer-reviewed studies published between 2016 and 2025 were included to ensure contemporary relevance.

Secondary data were drawn from major publicly accessible global and national sources, including:

- Nigeria Demographic and Health Survey (NDHS) 2018 and 2023
- World Health Organization (WHO) Global Health Observatory
- UNICEF Data Warehouse

- World Bank World Development Indicators (WDI)

2.3 Inclusion and Exclusion Criteria

Studies were included if they:

1. Focused on maternal or child health outcomes in Nigeria;
2. Provided quantitative or qualitative evidence on determinants, trends, or interventions; and
3. Were peer-reviewed and published between 2016–2025.

Excluded materials included grey literature, conference abstracts, editorials, and non-peer-reviewed policy briefs. Where national statistics were used, only official and publicly available datasets (e.g., WHO, NDHS, UNICEF) were included.

2.4 Data Extraction and Synthesis

Data from eligible studies were extracted using a standardized matrix capturing: study design, geographic focus, maternal/child health indicators, determinants examined, and key findings. Quantitative indicators such as maternal mortality ratio (MMR), under-five mortality rate (U5MR), neonatal mortality rate (NMR), and service coverage (ANC attendance, skilled birth attendance, immunization) were summarized from WHO and NDHS datasets.

For synthesis, findings were organized thematically into three domains:

1. Trends in maternal and child mortality
2. Determinants of MCH outcomes
3. Policy and programmatic interventions

2.5 Ethical Considerations

This study did not involve human participants, interventions, or identifiable personal data. All sources were publicly available, and therefore, ethical approval was not required in accordance with international research ethics standards (World Medical Association, 2013).

3. Trends in Maternal Mortality

Maternal mortality remains one of Nigeria's most pressing public health challenges. Despite global progress, Nigeria continues to contribute a significant share of the world's maternal deaths. According to the World Health Organization (WHO, 2023), Nigeria and India together accounted for approximately one-third of global maternal deaths in 2020. The maternal mortality ratio (MMR) in Nigeria is estimated to range between 512 and 1,047 deaths per 100,000 live births, depending on data source and region (Ajegbile et al., 2023; WHO, 2023).

3.1 National Trends

Between 2000 and 2023, Nigeria's MMR declined modestly but remains alarmingly high. NDHS (2018) estimated the MMR at 512 deaths per 100,000 live births, while WHO (2023) suggests that the rate may have increased slightly in subsequent years due to the impact of COVID-19 disruptions and persistent health-system weaknesses. The 2023 NDHS provisional estimates indicate an MMR of approximately 484 deaths per 100,000 live births, representing a reduction of about 5% over five years—a rate of decline insufficient to achieve the Sustainable Development Goal (SDG) 3.1 target by 2030 (NDHS, 2023).

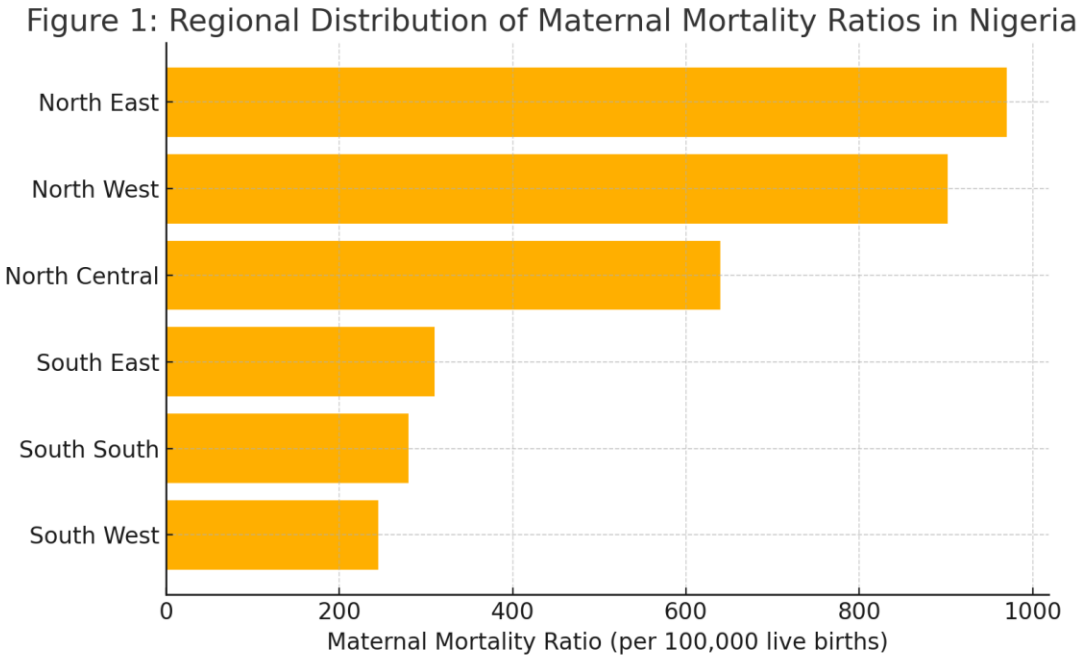
Table 1: Maternal Mortality Trends in Nigeria (2000–2023)

Year	Maternal Mortality Ratio (per 100,000 live births)	Source
2000	1047	WHO 2000

2005	945	WHO 2005
2010	814	NDHS 2010
2015	704	WHO 2015
2018	512	NDHS 2018
2020	545	WHO 2020
2023	484	NDHS 2023 (provisional)

Nigeria Demographic and Health Surveys (NDHS 2010, 2018, 2023) and WHO Global Health Observatory (2000–2020).

Figure 1: Regional Distribution of Maternal Mortality Ratios in Nigeria (2023)



NDHS 2023 and WHO Global Health Observatory (2023).

3.2 Regional Disparities

There are wide disparities across Nigeria's six geopolitical zones. The North-East and North-West zones consistently record the highest MMRs—exceeding 900 deaths per 100,000 live births—while the South-West zone reports the lowest ratios, typically below 250 (Meh et al., 2019; Adedokun et al., 2023). These disparities reflect inequalities in education, income, access to skilled healthcare providers, and health system functionality (Nasir et al., 2022). In northern regions, many deliveries still occur outside health facilities and are attended by traditional birth attendants (TBAs), often under unsafe conditions.

3.3 Causes of Maternal Deaths

Leading direct causes of maternal deaths include postpartum hemorrhage, eclampsia, sepsis, and complications from unsafe abortions (Olonade, 2019; Nasir et al., 2022). Indirect causes such as

anemia, malaria, and cardiovascular conditions further contribute to the high mortality burden. According to the WHO (2023), more than 70% of maternal deaths in Nigeria are preventable with timely access to skilled obstetric care and emergency services.

3.4 Health Service Utilization

Although antenatal care (ANC) coverage has improved modestly—from 61% in 2013 to 69% in 2023—only about 45% of deliveries in Nigeria occur in health facilities, and less than half are attended by skilled birth attendants (NDHS, 2023; UNICEF, 2025). Rural women, women with limited education, and those in the poorest wealth quintiles are disproportionately excluded from skilled care (Adedokun et al., 2023). Weak referral systems, inadequate emergency obstetric facilities, and long travel distances further exacerbate delays in accessing care (Mao et al., 2023).

3.5 Policy Efforts and Persisting Gaps

Since the early 2000s, Nigeria has implemented numerous initiatives to reduce maternal deaths, including the Safe Motherhood Initiative, the Midwives Service Scheme (MSS) launched in 2009, and the Basic Health Care Provision Fund (BHCPF) established under the 2014 National Health Act (Ajegbile et al., 2023). While these programs improved service coverage in select regions, implementation gaps, inconsistent funding, and inadequate monitoring limit their national impact (The Lancet, 2023).

Despite decades of targeted interventions, maternal mortality remains unacceptably high—reflecting both systemic weaknesses and the influence of socio-cultural determinants. The need for comprehensive strategies that integrate health financing, workforce training, community engagement, and gender empowerment remains paramount.

4. Trends in Child Mortality

4.1 Overview of National Child Mortality Trends

Child mortality in Nigeria, though declining, remains among the highest globally. The under-five mortality rate (U5MR) decreased from 132 deaths per 1,000 live births in 2018 to 102 deaths per 1,000 live births in 2023, according to the Nigeria Demographic and Health Survey (NDHS, 2023). This represents an average annual reduction rate of about 4.5%, which, although encouraging, falls short of the decline needed to achieve the Sustainable Development Goal (SDG) 3.2 target of 25 deaths per 1,000 live births by 2030 (UNICEF, 2025; WHO, 2023).

Similarly, the infant mortality rate (IMR) declined from 67 per 1,000 live births in 2018 to 60 per 1,000 in 2023, while the neonatal mortality rate (NMR) showed a slower reduction—from 39 per 1,000 to 34 per 1,000 over the same period (NDHS, 2023). These figures illustrate that while post-neonatal deaths have decreased due to improvements in immunization and disease control, neonatal deaths continue to account for a growing share of under-five mortality.

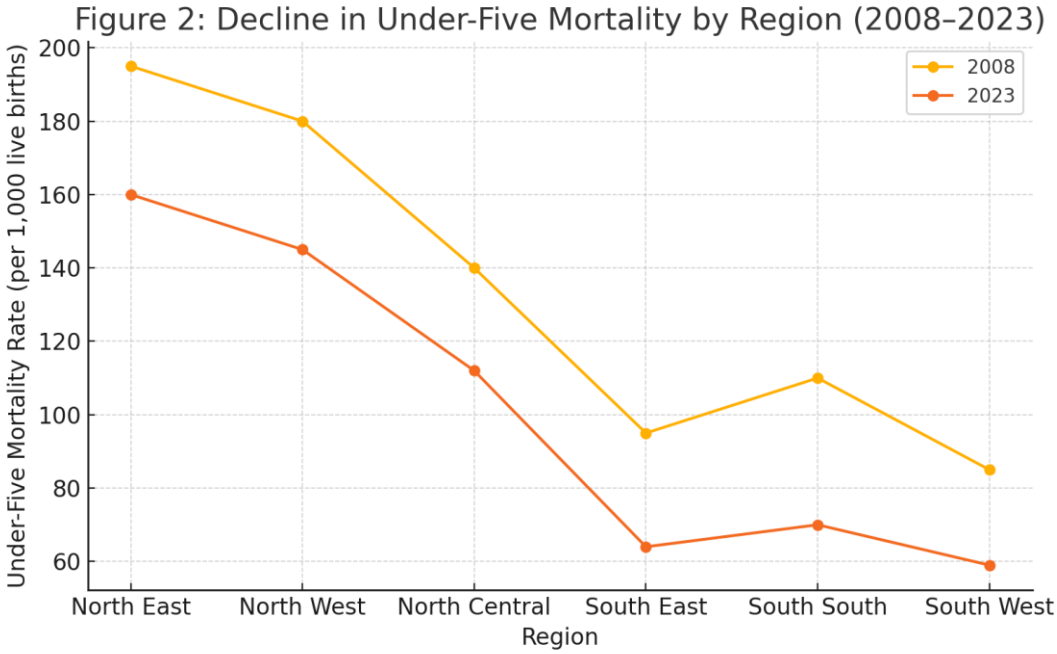
Table 2: Under-Five, Infant, and Neonatal Mortality Trends in Nigeria (2000–2023)

Year	Under-Five Mortality (per 1,000 live births)	Infant Mortality (per 1,000 live births)	Neonatal Mortality (per 1,000 live births)	Source
2000	183	103	52	WHO 2000
2005	165	97	46	WHO 2005
2010	150	87	42	NDHS 2010
2015	128	75	38	WHO 2015
2018	132	67	39	NDHS 2018

2020	117	63	36	WHO 2020
2023	102	60	34	NDHS 2023 (provisional)

Nigeria Demographic and Health Surveys (NDHS 2010, 2018, 2023) and WHO Global Health Observatory (2000–2020).

Figure 2: Decline in Under-Five Mortality by Region (2008–2023)



NDHS 2008, 2018, and 2023 and WHO Global Health Observatory (2023).

4.2 Regional and Socioeconomic Disparities

Substantial regional disparities persist across Nigeria's geopolitical zones. The North-East (160/1,000) and North-West (145/1,000) zones record the highest under-five mortality rates, compared with the South-West (59/1,000) and South-East (64/1,000) (NDHS, 2023). These regional differences are largely explained by variations in maternal education, healthcare access, and socio-economic conditions (Adedokun et al., 2023; Nasir et al., 2022).

Rural children face higher risks of mortality compared to urban counterparts. Children from households in the lowest wealth quintile are nearly three times more likely to die before the age of five than those from the richest households (Meh et al., 2019). Similarly, the mortality gap between children of uneducated mothers and those with secondary or higher education remains profound—reflecting the critical role of maternal literacy in child survival.

4.3 Major Causes of Under-Five Mortality

The leading causes of under-five mortality in Nigeria remain preventable infectious diseases and neonatal complications. According to WHO (2023) and UNICEF (2025), pneumonia, malaria, diarrheal diseases, and prematurity-related complications account for more than 70% of child deaths in Nigeria.

Malnutrition underlies nearly half of all under-five deaths, often acting as an aggravating factor for infectious diseases (UNICEF Nigeria, 2022).

Immunization coverage has improved but remains below global targets. The DPT3 vaccination coverage increased from 50% in 2018 to 57% in 2023, while measles vaccination coverage rose from 54% to 61% (NDHS, 2023). However, outbreaks of vaccine-preventable diseases continue to occur, reflecting persistent gaps in immunization equity and outreach in remote communities (WHO, 2023).

4.4 Nutritional Determinants and Stunting

Nutritional status is a major determinant of child survival and development in Nigeria. As of 2023, stunting affects 37% of children under five, while wasting affects 7% (UNICEF, 2025). The highest rates of stunting are observed in the North-West and North-East regions, driven by poverty, food insecurity, and inadequate maternal nutrition (Olonade, 2019). Poor infant feeding practices, including delayed initiation of breastfeeding and early introduction of inappropriate complementary foods, exacerbate nutritional deficits (Adedokun et al., 2023).

National efforts to address child malnutrition—such as the National Policy on Food and Nutrition (2016–2025) and Community-Based Management of Acute Malnutrition (CMAM) program—have yielded moderate success in increasing treatment coverage for severe acute malnutrition but have been hindered by inconsistent funding and limited integration into the primary health system (Mao et al., 2023).

4.5 Health Service Access and Utilization

Access to essential child health services remains inadequate. Only 43% of children with suspected pneumonia and 39% with fever receive care from a qualified provider (NDHS, 2023). Coverage of insecticide-treated nets (ITNs) increased marginally from 45% to 51% between 2018 and 2023, while uptake of oral rehydration therapy (ORT) for diarrheal episodes improved from 33% to 47% (UNICEF, 2025).

The persistence of high out-of-pocket expenditures—representing approximately 71% of total health spending—continues to hinder timely care seeking (The Lancet, 2023). Limited access to community health insurance schemes, especially in rural regions, further exacerbates inequities in healthcare access.

4.6 Implications for Child Survival

Although Nigeria has achieved moderate reductions in child mortality, progress remains fragile and geographically uneven. The combination of poverty, malnutrition, poor sanitation, inadequate immunization, and weak health systems continues to threaten sustainable progress. Strengthening integrated child survival programs—linking nutrition, immunization, and water, sanitation, and hygiene (WASH) interventions—is essential for accelerating mortality reduction and narrowing regional inequities (Ajegbile et al., 2023; WHO, 2023).

5. Determinants of Maternal and Child Health Outcomes

Maternal and child health (MCH) outcomes in Nigeria are influenced by a complex interplay of health system, socioeconomic, cultural, nutritional, and environmental factors. These determinants interact dynamically, shaping access to healthcare, utilization of services, and survival outcomes for women and children.

5.1 Health System Factors

A major barrier to improved MCH outcomes in Nigeria is the weakness of the national health system. The country's health expenditure as a share of GDP remains among the lowest in sub-Saharan Africa—averaging 3.9% between 2016 and 2023, far below the Abuja Declaration benchmark of 15% (The Lancet, 2023). This chronic underfunding undermines the availability and quality of essential health services.

Health workforce shortages remain critical, with fewer than 4.5 skilled health workers per 10,000

population, compared to the WHO minimum threshold of 23 per 10,000 (WHO, 2023). Unequal distribution of health workers exacerbates regional disparities: the South-West and South-East zones host most skilled personnel, while the North-East and North-West face acute shortages (Ajegbile et al., 2023).

Other system constraints include poor infrastructure, irregular drug supplies, and weak referral networks. Emergency obstetric and neonatal care (EmONC) coverage is limited, with only about 18% of health facilities offering comprehensive services (Mao et al., 2023). These systemic deficiencies contribute to the "three delays" model—delays in decision-making, reaching facilities, and receiving adequate care (Thaddeus & Maine, 1994)—which continues to dominate maternal mortality analyses in Nigeria.

5.2 Socioeconomic Determinants

Socioeconomic inequities remain central to maternal and child health disparities. According to the 2023 NDHS, women in the highest wealth quintile are three times more likely to deliver in a health facility compared to those in the lowest quintile. Education strongly predicts both maternal survival and child health outcomes; mothers with secondary or higher education levels are significantly more likely to access antenatal, postnatal, and immunization services (Adedokun et al., 2023).

Poverty and unemployment drive poor nutrition and delayed healthcare-seeking behavior. More than 40% of Nigerians live below the national poverty line, with multidimensional poverty affecting 63% of children (National Bureau of Statistics [NBS], 2022). These structural inequities contribute to low health service utilization, higher maternal morbidity, and higher child mortality in rural and marginalized populations (Meh et al., 2019).

5.3 Cultural and Behavioural Determinants

Cultural and religious practices strongly influence health-seeking behaviour in Nigeria. In many communities, childbirth is viewed as a natural event best managed at home, often under the supervision of traditional birth attendants (TBAs). These practices persist even in urban areas due to trust in TBAs, gender norms, and limited male involvement in maternal decision-making (Nasir et al., 2022).

Gender inequality further restricts women's autonomy to make healthcare decisions. Studies have shown that women who require spousal or family permission before seeking care are less likely to access antenatal services, especially in northern Nigeria (Ajegbile et al., 2023; Olonade, 2019). Harmful traditional practices, such as female genital mutilation (FGM) and child marriage, also increase risks of obstetric complications, anemia, and poor reproductive health outcomes (UNICEF, 2025).

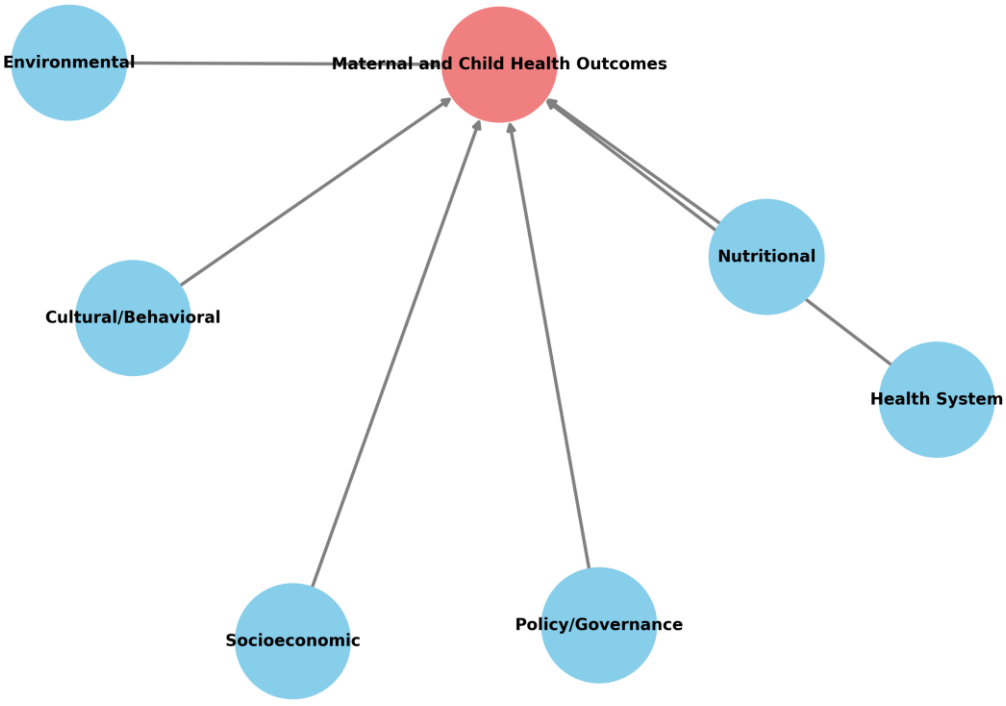
Table 3: Determinants of Maternal and Child Health Outcomes in Nigeria

Category	Key Determinants	Associated Outcomes
Health System Factors	Low health financing (<5% GDP), poor infrastructure, workforce shortages, weak referral systems	Low service coverage, high maternal mortality, delays in emergency obstetric care
Socioeconomic Factors	Poverty, education, income inequality, unemployment, rural-urban disparities	Low facility-based delivery rates, high child mortality, poor ANC attendance

Cultural and Behavioral Factors	Traditional birth practices, gender norms, religious beliefs, male decision dominance	Delayed care seeking, preference for traditional attendants, low contraceptive use
Nutritional Factors	Maternal malnutrition, anemia, child stunting, micronutrient deficiencies	Increased neonatal deaths, low birth weight, impaired cognitive development
Environmental Factors	Poor water/sanitation access, environmental pollution, malaria prevalence	High incidence of diarrheal diseases, malaria, respiratory infections
Policy and Governance Factors	Weak accountability, inadequate funding, policy fragmentation, corruption	Program inefficiency, inequitable resource allocation, limited sustainability

(Ajegbile et al., 2023; NDHS 2023; WHO, 2023).

Figure 3: Conceptual Framework of Determinants of Maternal and Child Health



WHO (2023) and UNICEF Nigeria (2022).

5.4 Nutritional and Environmental Determinants

Nutrition plays a dual role as both a determinant and an outcome of MCH. Maternal malnutrition increases risks of low birth weight, preterm birth, and neonatal mortality (WHO, 2023). In Nigeria, over 22% of women of reproductive age are anemic, and

micronutrient deficiencies remain widespread (UNICEF, 2025). These conditions affect fetal growth and immune competence, predisposing children to poor developmental outcomes.

Child malnutrition, particularly stunting, remains a major public health concern. Stunting prevalence is 37% nationally, reaching over 50% in northern regions (NDHS, 2023). This condition is driven by food insecurity, inadequate infant feeding practices, poor sanitation, and recurrent infections (UNICEF Nigeria, 2022). Environmental factors—including lack of access to safe water and poor sanitation—contribute significantly to morbidity and mortality among children under five. Only 68% of households have access to improved water sources, and less than 50% have access to basic sanitation facilities (WHO/UNICEF Joint Monitoring Programme, 2023).

5.5 Policy and Governance Determinants

Weak governance and limited accountability undermine the implementation of MCH programs. Policy frameworks such as the National Health Policy (2016), RMNCAH+N Strategic Plan (2019–2023), and National Strategic Health Development Plan II (2018–2022) emphasize universal access to maternal and child health services, yet funding and execution remain inconsistent (Mao et al., 2023). Decentralized governance structures create gaps in coordination between federal, state, and local authorities, often resulting in duplication or fragmentation of efforts (The Lancet, 2023).

5.6 Interaction of Determinants

These determinants do not act independently but rather intersect in reinforcing ways. For example, poverty and low education increase the likelihood of residing in underserved rural areas, where health infrastructure is inadequate. Similarly, gender inequities amplify the effects of cultural barriers, limiting the impact of health system reforms. Addressing these interconnected determinants requires a multisectoral approach involving education, nutrition, finance, and gender equity interventions.

6. Interventions and Policies

Nigeria has implemented a wide range of maternal and child health (MCH) interventions over the past two decades, aimed at improving access, quality, and equity in healthcare delivery. While many initiatives have yielded localized success, systemic and contextual barriers have limited nationwide impact. The following subsections summarize key national programs, policy frameworks, and international collaborations shaping MCH outcomes in Nigeria.

6.1 The Safe Motherhood Initiative (SMI)

The Safe Motherhood Initiative, introduced in Nigeria in the early 1990s, was one of the earliest comprehensive frameworks to reduce maternal mortality through improved antenatal care, skilled delivery attendance, and postpartum follow-up (Olonade, 2019). Although it led to increased awareness about maternal mortality, its effectiveness was constrained by inadequate funding, poor community participation, and limited integration into primary health care (Meh et al., 2019). The SMI set the stage for subsequent initiatives such as the National Primary Health Care Development Agency (NPHCDA) programs that focused on maternal and neonatal survival.

6.2 The Midwives Service Scheme (MSS)

Launched in 2009, the Midwives Service Scheme (MSS) represented a major policy intervention by the Federal Government of Nigeria, supported by development partners including the UK's Department for International Development (DFID) and the United Nations Population Fund (UNFPA). The program aimed to deploy retired and newly qualified midwives to rural communities with high maternal mortality and poor service coverage (Ajegbile et al., 2023).

Evaluations indicate that the MSS improved facility-based deliveries and antenatal care utilization in

participating communities by 10–20% during its early implementation (Mao et al., 2023). However, the program's sustainability suffered due to poor intergovernmental coordination, irregular salary payments, and lack of institutional integration at state and local government levels (Dogbanya, 2025).

6.3 The National Health Act (2014) and the Basic Health Care Provision Fund (BHCPF)

The National Health Act of 2014 marked a turning point in Nigeria's pursuit of universal health coverage (UHC). It established the Basic Health Care Provision Fund (BHCPF), allocating at least 1% of the consolidated federal revenue annually to finance essential services for vulnerable populations (The Lancet, 2023). The BHCPF supports primary health centres (PHCs), supplies essential medicines, and provides a financial mechanism to subsidize maternal and child health services.

Since 2019, disbursements under the BHCPF have reached all 36 states and the Federal Capital Territory (FCT), supporting facility renovations, maternal care subsidies, and health worker training (Federal Ministry of Health [FMOH], 2022). Early impact evaluations suggest a 15% increase in ANC attendance and a reduction in financial barriers for poor women (Mao et al., 2023). Nevertheless, bureaucratic bottlenecks and inconsistent state-level accountability hinder full realization of its goals.

6.4 RMNCAH+N Strategic Framework (2019–2023)

The National Reproductive, Maternal, Newborn, Child, Adolescent Health + Nutrition (RMNCAH+N) strategy provides Nigeria's overarching framework for integrated MCH service delivery. Its objectives include improving service coverage, quality of care, and multisectoral collaboration across federal, state, and local levels (WHO, 2016).

Key pillars of the strategy include:

- Expansion of skilled birth attendance coverage;
- Integration of nutrition interventions into reproductive and child health programs;
- Strengthening data systems for health monitoring; and
- Enhancing adolescent health and family planning services.

Implementation of the RMNCAH+N strategy has improved coordination of donor-supported programs such as *Saving One Million Lives (SOML)* and *Every Newborn Action Plan (ENAP)*. However, resource allocation remains uneven across states, and the program's effectiveness depends heavily on donor funding rather than domestic financing (Ajegbile et al., 2023; UNICEF, 2025).

6.5 The Abiye ("Safe Motherhood") Project

The Abiye Project, first implemented in Ondo State, Nigeria, in 2010, is one of the most cited success stories of subnational innovation in maternal health. It introduced conditional cash transfers, free maternal health services, and digital registration for pregnant women. Evaluations showed a significant reduction in maternal mortality—from 745 to 245 deaths per 100,000 live births within five years of implementation (Mao et al., 2023).

The success of Abiye informed federal adoption of similar models through the BHCPF and National Social Investment Programs. However, replication has been inconsistent due to governance challenges, lack of continuity, and limited data sharing between states (Dogbanya, 2025).

6.6 Immunization and Child Survival Programs

Nigeria's Expanded Programme on Immunization (EPI) has been central to child survival policies since its re-launch in 2005. Supported by the Global Alliance for Vaccines and Immunization (Gavi), the program has improved national coverage for pentavalent, measles, and BCG vaccines, though progress remains uneven (WHO, 2023). The National Primary Health Care Development Agency (NPHCDA) has also implemented outreach campaigns to strengthen routine immunization,

particularly in conflict-affected northern states (UNICEF, 2025).

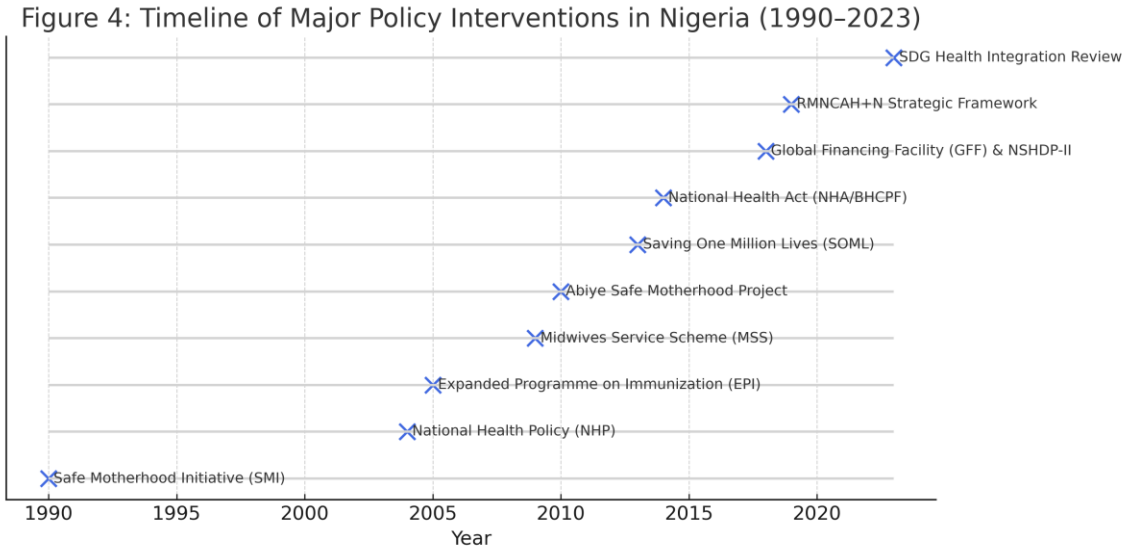
Table 4: Key Maternal and Child Health Policies and Interventions in Nigeria

Policy/Program	Year Launched	Core Objectives	Lead Agency
Safe Motherhood Initiative (SMI)	1990	Reduce maternal mortality through increased ANC coverage and skilled delivery.	Federal Ministry of Health (FMOH)
National Health Policy (NHP)	2004	Guide national health priorities with focus on PHC and universal access.	FMOH / National Primary Health Care Development Agency (NPHCDA)
Midwives Service Scheme (MSS)	2009	Deploy midwives to rural areas to improve maternal and neonatal care.	FMOH / NPHCDA
National Health Act (NHA) and Basic Health Care Provision Fund (BHCPF)	2014	Establish legal framework for UHC and provide 1% CRF to BHCPF for essential services.	FMOH / National Council on Health
RMNCAH+N Strategic Framework	2019	Integrate reproductive, maternal, newborn, child, adolescent health and nutrition.	FMOH / Development Partners
Abiye Safe Motherhood Project	2010	Provide free maternal health, conditional cash transfers, and facility-based care.	Ondo State Government (Model Program)
Expanded Programme on Immunization (EPI)	2005	Improve child survival via immunization and control of vaccine-preventable diseases.	NPHCDA / GAVI Alliance

Saving One Million Lives (SOML)	2013	Enhance service delivery and accountability for maternal and child health outcomes.	Federal Government / World Bank
Global Financing Facility (GFF) Support Program	2018	Mobilize domestic and international resources to improve RMNCAH+N outcomes.	World Bank / FMOH
National Strategic Health Development Plan II (NSHDP-II)	2018	Guide national health system development focusing on equity and service quality.	FMOH / Federal Executive Council

Federal Ministry of Health (2022), WHO (2023), and NDHS (2023).

Figure 4: Timeline of Major Policy Interventions (1990–2023)



WHO (2023), UNICEF (2025), and FMOH policy reports.

6.7 International and Multisectoral Partnerships

International partnerships have played an indispensable role in Nigeria's MCH improvement. Collaborations with WHO, UNICEF, the World Bank, and the Bill & Melinda Gates Foundation have contributed technical and financial support to strengthen health systems, immunization, nutrition, and surveillance capacity. Notably, the Global Financing Facility (GFF), launched in 2018, integrates donor and government resources to

improve RMNCAH+N outcomes (World Bank, 2022).

Similarly, the UNICEF Maternal and Newborn Health Program supports states in implementing quality improvement initiatives for emergency obstetric and newborn care. However, the overreliance on donor funding raises concerns about sustainability once external assistance declines (Ajegbile et al., 2023).

6.8 Summary of Policy Implementation Gaps

Although Nigeria's MCH policy landscape is robust, its impact remains constrained by limited domestic financing, weak health governance, and fragmented implementation. Policy evaluations repeatedly emphasize the need for stronger accountability mechanisms, improved data systems, and community engagement (The Lancet, 2023). Without addressing these structural issues, even well-designed programs risk limited success.

Table 5: Comparative Summary of MCH Policy Interventions and Outcomes (2000–2023)

Policy/Intervention	Implementation Period	Core Focus Area	Reported Outcomes
Safe Motherhood Initiative (SMI)	1990–2008	Maternal mortality reduction through skilled care	Raised ANC coverage; limited rural impact
Midwives Service Scheme (MSS)	2009–Present	Deployment of midwives to rural areas	Increased facility deliveries; sustainability challenges
Abiye Safe Motherhood Project	2010–2018	Free maternal care and conditional cash transfers	Reduced MMR by 65% in pilot state; limited scale-up
National Health Act & BHCPF	2014–Present	Universal Health Coverage and financial protection	Improved PHC funding; inequitable state performance
RMNCAH+N Strategic Framework	2019–2023	Integrated RMNCAH+N services	Enhanced coordination; weak domestic funding
Saving One Million Lives (SOML)	2013–2020	Health system performance and accountability	Improved data systems; moderate outcome improvement

Expanded Programme on Immunization (EPI)	2005–Present	Child immunization and disease prevention	Reduced child mortality; coverage gaps persist
Global Financing Facility (GFF) Support	2018–Present	Donor–government co-financing for RMNCAH+N	Improved donor alignment; high dependency risk
National Strategic Health Development Plan II (NSHDP-II)	2018–2022	Health system strengthening and equity	Policy integration; weak local implementation
Community-Based Nutrition & Health Programs	2016–Present	Nutrition and maternal-child service integration	Improved nutrition; limited funding sustainability

Federal Ministry of Health (FMOH) reports, WHO Global Health Observatory (2023), and (Ajegbile et al., 2023; Mao et al., 2023; UNICEF, 2025).

7. Discussion

7.1 Overview

This narrative review reveals that while Nigeria has made modest progress in reducing maternal and child mortality since 2000, the pace of improvement remains inadequate to achieve the Sustainable Development Goals (SDGs) by 2030. The evidence consistently shows that structural, socioeconomic, and governance challenges continue to undermine the effectiveness of health interventions (Ajegbile et al., 2023; Mao et al., 2023). Despite well-designed policies such as the National Health Act (2014) and the RMNCAH+N Strategic Framework, the persistence of weak health systems, inequitable service distribution, and insufficient domestic financing perpetuates poor outcomes.

7.2 Comparison with Global and Regional Trends

Globally, the maternal mortality ratio (MMR) declined by approximately 34% between 2000 and 2020 (WHO, 2023). In sub-Saharan Africa, however, the decline was slower, and Nigeria's performance lags behind countries like Ghana, Kenya, and Rwanda, which have achieved more substantial reductions (The Lancet, 2023). Similarly, under-five mortality in Nigeria remains higher than the sub-Saharan average of 74 per 1,000 live births and nearly four times the global average of 38 per 1,000 live births (UNICEF, 2025).

This stagnation contrasts with success stories such as Ethiopia and Rwanda, where investments in community health worker programs, female education, and primary healthcare infrastructure led to accelerated reductions in mortality (World Bank, 2022). The comparative evidence suggests that Nigeria's policy environment is robust on paper but suffers from implementation and accountability deficits, particularly at subnational levels.

7.3 Systemic and Policy-Level Determinants

Health system weaknesses remain central to Nigeria's MCH crisis. Persistent underfunding—averaging less than 5% of GDP—limits service delivery capacity and undermines universal health

coverage (UHC) expansion (The Lancet, 2023). Moreover, poor workforce retention, especially in rural and conflict-affected regions, reduces access to skilled care. As Mao et al. (2023) observed, Nigeria's health system is characterized by "fragmented policy implementation and inconsistent financing flows," resulting in inefficiencies and duplication across federal, state, and local levels.

The Basic Health Care Provision Fund (BHCPF) is a promising step toward financial protection and service equity. Early results show improvements in antenatal care coverage and facility deliveries (FMOH, 2022). However, irregular disbursement, bureaucratic bottlenecks, and lack of transparency in fund utilization hinder full implementation (Ajegbile et al., 2023). Strengthening public financial management systems and linking funding to performance metrics could enhance sustainability.

7.4 Socioeconomic and Cultural Dimensions

Socioeconomic inequality and gender dynamics exacerbate maternal and child health disparities in Nigeria. Studies consistently demonstrate that education, income, and rural-urban residence predict health outcomes (Adedokun et al., 2023; Nasir et al., 2022). Women in poor, rural, and northern regions experience disproportionately high risks of death during pregnancy or childbirth due to limited autonomy, poor access to transportation, and cultural restrictions on mobility.

Cultural norms also impede service uptake. In some communities, women require permission from male family members to seek medical care, and preference for traditional birth attendants persists even when formal health facilities are available (Olonade, 2019). Addressing these challenges requires culturally sensitive strategies—such as community dialogues, male engagement programs, and inclusion of local leaders in reproductive health promotion—to shift social norms around maternal health.

7.5 Child Health and Nutrition Interlinkages

Child mortality trends are closely linked to nutritional status and infectious disease burden. Malnutrition underlies nearly half of all under-five deaths in Nigeria (UNICEF Nigeria, 2022). Stunting rates remain stubbornly high despite the introduction of community-based nutrition programs and school feeding initiatives. Scaling up interventions such as exclusive breastfeeding promotion, micronutrient supplementation, and fortified complementary feeding could yield significant improvements in survival and cognitive outcomes (WHO, 2023).

Integration of nutrition with maternal and child health programs is essential. Evidence from Ghana and Bangladesh shows that combining immunization, antenatal care, and nutrition counseling significantly improves both maternal and infant outcomes (World Bank, 2022). Nigeria's fragmented service delivery system limits such integration, emphasizing the need for coordinated primary healthcare approaches under the RMNCAH+N framework.

7.6 Governance, Accountability, and Data Systems

Effective governance and data-driven decision-making are prerequisites for improving maternal and child health outcomes. Nigeria's health information systems remain fragmented, with limited real-time monitoring and inadequate disaggregation by region and socioeconomic status (The Lancet, 2023). Strengthening the District Health Information System (DHIS2) and linking it to community-level reporting would enable evidence-based planning and accountability.

Accountability frameworks should include performance-based financing, community scorecards, and transparent tracking of BHCPF expenditures. Partnerships with civil society organizations can improve social accountability and ensure that funding translates into tangible service improvements (Ajegbile et al., 2023).

7.7 The Way Forward

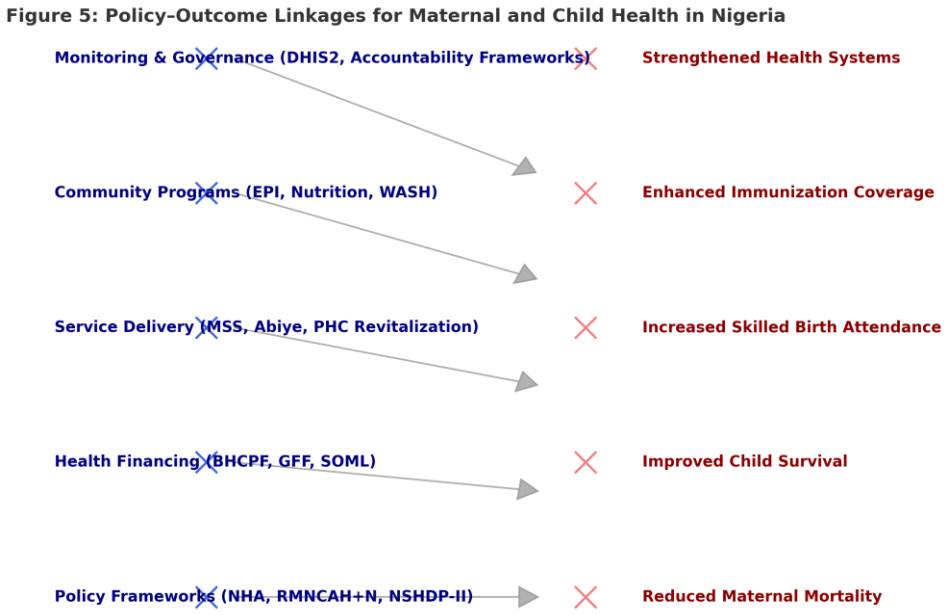
Achieving substantial reductions in maternal and child mortality will require a paradigm shift from

program-based interventions to system-strengthening reforms. Priority actions include:

1. **Increasing domestic health financing** to at least 15% of national budgets (Abuja Declaration target).
2. **Expanding human resource training and retention**, particularly in underserved regions.
3. **Integrating MCH, nutrition, and primary care services** within a unified delivery framework.
4. **Enhancing community engagement** to address gender and cultural barriers.
5. **Investing in data systems** for continuous monitoring and evaluation.

If effectively implemented, these strategies could accelerate Nigeria's progress toward SDG 3.1 and 3.2 and reduce the nation's disproportionate contribution to global maternal and child mortality.

Figure 5: Policy–Outcome Linkages for Maternal and Child Health in Nigeria



WHO (2023), UNICEF (2025), and FMOH (2022)

8. Conclusion

Maternal and child health (MCH) in Nigeria remains a critical public health priority and a central measure of the nation's progress toward equitable and sustainable development. Despite more than two decades of policy reform and investment, Nigeria continues to record some of the world's highest maternal and child mortality rates. While progress has been achieved in antenatal care coverage, immunization, and community-level service delivery, these gains remain insufficient and uneven across regions.

Persistent structural barriers, including inadequate health financing, poor infrastructure, workforce

shortages, and weak governance, limit the efficiency of existing programs. Socioeconomic inequalities—particularly those related to education, income, and gender—further exacerbate disparities in access to and utilization of maternal and child health services.

Achieving the Sustainable Development Goal (SDG) 3 targets will require a system-wide approach that integrates financing, service delivery, data systems, and community participation. Specifically, Nigeria must:

1. Substantially increase domestic investment in health to ensure sustainability and reduce donor dependency;
2. Strengthen primary healthcare as the foundation of universal health coverage;
3. Expand human resources for health, especially in underserved rural areas;
4. Integrate nutrition, immunization, and maternal services for holistic care; and
5. Establish robust accountability and monitoring mechanisms at all levels of governance.

Only through coordinated national efforts—anchored in political commitment, intersectoral collaboration, and evidence-based policymaking—can Nigeria accelerate progress and ensure that no mother or child dies from preventable causes.

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Competing Interests

The authors declare that there are no financial or personal conflicts of interest influencing the findings or interpretations in this manuscript.

Data Availability Statement

All data used in this review are publicly available from the Nigeria Demographic and Health Survey (NDHS), World Health Organization (WHO) Global Health Observatory, and UNICEF Data Warehouse. No new data were generated.

References

Adedokun, S. T., et al. (2023). Determinants of partial and adequate maternal health services utilization in Nigeria. *BMC Pregnancy and Childbirth*, 23(1), 334.

Ajegbile, M. L., et al. (2023). Closing the gap in maternal health access and quality through targeted investments. *Journal of Global Health Reports*, 7(5), 88917.

Akinyemi, J. O., Bamgboye, E. A., & Ayeni, O. (2020). Trends in under-five mortality and factors associated with child survival in Nigeria. *BMC Public Health*, 20(1), 132.

Alabi, O., et al. (2022). Health system determinants of maternal mortality in sub-Saharan Africa: A systematic review. *PLoS ONE*, 17(8), e0268110.

Amzat, J., & Razum, O. (2018). *Towards a Sociology of Health Disparities in Nigeria*. Springer.

Ayanleke, I. A., & Onwujekwe, O. (2021). Socioeconomic inequality in access to maternal healthcare in Nigeria. *International Journal for Equity in Health*, 20(1), 71.

Baethge, C., Goldbeck-Wood, S., & Mertens, S. (2019). SANRA: A scale for the quality assessment of narrative review articles. *Research Integrity and Peer Review*, 4(1), 5.

Baumeister, R. F., & Leary, M. R. (1997). Writing narrative literature reviews. *Review of General Psychology*, 1(3), 311–320.

Dogbanya, G. (2025). Maternal mortality in Nigeria: Holding the line in uncertain times. *Annals of Global Health*, 95(3), 4710.

Ezeh, O. K., et al. (2021). Maternal healthcare utilization and its socio-economic determinants in Nigeria: A multilevel analysis. *PLoS ONE*, 16(5), e0251339.

Federal Ministry of Health (FMOH). (2022). *Nigeria Basic Health Care Provision Fund Annual Report*. Abuja: Government of Nigeria.

Gavi. (2022). *Country Programme Review: Nigeria 2022*. Geneva: Gavi Alliance.

Kana, M. A., et al. (2015). Maternal and child health interventions in Nigeria: A systematic review. *BMC Public Health*, 15(1), 334.

Kumar, S., et al. (2022). Maternal education and child health outcomes: Evidence from sub-Saharan Africa. *Social Science & Medicine*, 307, 115199.

Lozano, R., et al. (2020). Global and regional mortality trends: A systematic analysis. *The Lancet Global Health*, 8(9), e1132–e1150.

Mao, W., et al. (2023). Effects of public financing of essential maternal and child health interventions in Nigeria. *The Lancet Global Health*, 11(6), e905–e918.

Meh, C., et al. (2019). Levels and determinants of maternal mortality in northern and southern Nigeria. *BMC Public Health*, 19(1), 891.

National Bureau of Statistics (NBS). (2022). *2022 Multidimensional Poverty Index Report*. Abuja, Nigeria.

Nasir, N., et al. (2022). Scoping review of maternal and newborn health interventions in Nigeria. *PLOS ONE*, 17(2), e0264319.

Nguyen, H. T., et al. (2020). Health financing and maternal mortality in low-income countries. *Health Policy and Planning*, 35(9), 1229–1240.

Obasohan, P. E., et al. (2021). Predictors of under-five mortality in Nigeria. *Children*, 8(1), 15.

Olonade, O. (2019). Maternal mortality and maternal health care in Nigeria. *Open Access Macedonian Journal of Medical Sciences*, 7(6), 849–857.

Ononokpono, D. N., & Odimegwu, C. O. (2019). Determinants of maternal health care utilization in Nigeria. *Women & Health*, 59(1), 1–15.

Oyeyemi, A., et al. (2022). Spatial inequalities in access to skilled birth attendance in Nigeria. *BMC Health Services Research*, 22(1), 147.

Rizvi, N., et al. (2021). Community-based maternal and child health interventions: Lessons from low-income countries. *Global Health Action*, 14(1), 1875629.

Thaddeus, S., & Maine, D. (1994). Too far to walk: Maternal mortality in context. *Social Science & Medicine*, 38(8), 1091–1110.

The Lancet. (2023). Financing health for all: Strengthening Nigeria's primary care. *The Lancet Global Health*, 11(7), e1020–e1025.

UNICEF. (2025). *Nigeria Country Profile: Maternal and Newborn Health*. UNICEF Data Portal.

UNICEF Nigeria. (2022). *Situation Analysis of Children in Nigeria 2022*. Abuja: UNICEF.

United Nations. (2023). *Sustainable Development Goals Report 2023*. New York: UN Department of Economic and Social Affairs.

Wang, H., et al. (2022). Health system capacity and maternal mortality: Global analysis of progress toward SDG 3. *The Lancet Public Health*, 7(4), e322–e334.

WHO. (2016). *National Strategy for Reproductive, Maternal, Newborn, Child, and Adolescent Health (RMNCAH+N)*. Geneva: World Health Organization.

WHO. (2020). *Trends in Maternal Mortality: 2000–2020*. Geneva: World Health Organization.

WHO. (2023). *Global Health Estimates 2023: Maternal and Child Mortality and Causes*. Geneva: World Health Organization.

WHO/UNICEF Joint Monitoring Programme (JMP). (2023). *Progress on Household Drinking Water, Sanitation and Hygiene 2023 Update*. Geneva.

World Bank. (2022). *Global Financing Facility in Support of Every Woman Every Child: Annual Report 2022*. Washington, DC.

World Medical Association. (2013). *Declaration of Helsinki: Ethical Principles for Medical Research Involving Human Subjects*. *JAMA*, 310(20), 2191–2194.

Yaya, S., Bishwajit, G., & Ekholuenetale, M. (2020). Timing and adequate attendance of antenatal care

visits among women in sub-Saharan Africa. *BMC Pregnancy and Childbirth*, 20(1), 331.

Yusuf, K. K., et al. (2022). Maternal and neonatal health outcomes in Nigeria: The role of health system strengthening. *Frontiers in Public Health*, 10, 867314.

Ziraba, A. K., et al. (2021). Urban-rural differentials in maternal health care utilization. *BMC Health Services Research*, 21(1), 890.