The state of maternal health in Nigeria over the years leaves much to be desired. This is not unconnected with poor access to quality healthcare, inadequate infrastructure, poorly equipped hospitals and health centres, a wide doctor-patient ratio, and socio-cultural practices, among others. This study explores the stylised facts on maternal mortality in Nigeria and suggests a multi-faceted approach to combating the high maternal mortality rate. The study concluded that improving maternal health in Nigeria requires a collaborative effort between the government, healthcare workers, the international community, and individuals.
The Nigerian health sector faces various challenges, including inadequate funding, poor healthcare infrastructure, shortage of healthcare workers, low access to healthcare services, and inadequate healthcare policies. These challenges have contributed to poor health outcomes, including high maternal and child mortality rates, high prevalence of infectious diseases, and low life expectancy, among others. As a result of these issues, the government, Non-Governmental Organisations (NGOs), and international organisations have made several efforts to improve the Nigerian health sector. The government launched the National Strategic Health Development Plan II (2018-2022) to improve the country's health sector by providing a comprehensive framework for health system development.

The plan addresses various health challenges, including maternal and child health, infectious diseases, and non-communicable diseases. Universal Health Coverage (UHC), the National Health Insurance Scheme (NHIS), and strengthening the Primary Health Care centres (PHCs) are plans that have also been implemented to improve the sector. Also, the Bill and Melinda Gates Foundation has invested in programs to increase access to contraceptives and enhance the quality of maternal healthcare services.

There is a growing concern among development scholars and policymakers about the imperatives of maternal health in the discourse on women's integration into the mainstream of socio-economic and political life. It has been underscored that no nation can attain sustainable economic growth and development with a population impaired by ill health and high maternal mortality.

When the maternal mortality rate increases, it translates to a reduction in the country's labour force, which can negatively impact the national economy. It leads to a reduction in the percentage of women in the nation's population. Conventional economic thoughts posit that women have a significant role to play in the growth and development of an economy.

The death of pregnant women or women at the point of delivery can also negatively impact the nation's future labour force. This has the potential to reduce the growth rate of Nigeria's GDP, inhibiting the nation's ability to achieve economic growth and development on a sustainable basis. An attempt will be made to examine the trend of maternal mortality in Nigeria to proffer policy recommendations to improve maternal health.
STYLISED FACTS ON MATERNAL MORTALITY IN NIGERIA

At the expiration of the Millennium Development Goals (MDGs) in 2015, the world came together on the 25th of December of the same year and launched the Sustainable Development Goals (SDGs). The SDGs had 17 goals and 169 targets, expected to be attained by the end of 2030. Important to health outcomes is SDG – 3 (i.e., "Ensure healthy lives and promote well-being for all at all ages"). To set a target for the attainment of this goal, the World Health Organization (WHO) adopted the end preventable maternal mortality (EPMM) and set SDG target 3.1, which aims to reduce the global maternal mortality ratio (MMR) at less than 70 maternal deaths per 100,000 live births by 2030.


Recent statistics from World Bank (2022) on Nigeria's MMR profiles indicate that Nigeria is still far from attaining the set target. This is evidenced in Figure 1. Figure 1 presents Nigeria's MMR for the period 2000 – 2017.

Although progress has been made within the last seventeen (17) years, as shown by Nigeria's MMR falling from 1200 per 100,000 live births in 2000 to 917 per 100,000 live births in 2017, the attainment of MMR below 70 MMR per 100,000 by 2030 might not be realised as annual MMR reduction has not been substantial enough to guarantee a faster decline in this ratio. For instance, MMR has not been falling significantly, especially from 2008 – 2017. Also, recent statistics show that this further increased to 82,000 in 2020 as maternal deaths (WHO et al., 2023).
Nigeria’s MMR is also not encouraging compared to the MMR performance of some selected African countries. Figure 2 shows MMR for some African countries. It indicates that Nigeria has the highest MMR of 917 deaths per 100,000 live births in 2017 among the comparator countries. However, except for Cabo Verde, Tunisia, and Egypt, all other selected countries are yet to achieve the WHO set target of MMR (World Bank, 2022).

Source: Author’s computation

Source: Author’s computation
Figure 3 presents the most recent global estimates of maternal deaths. It reveals that Nigeria accounted for 28.5 percent, representing approximately 82,000 of estimated global maternal deaths in 2020, the highest globally. This was followed by India (24,000), the Democratic Republic of the Congo (22,000), and Ethiopia (10,000), accounting for 8.3 percent, 7.5 percent, and 3.6 percent of global maternal deaths. However, Kenya, Afghanistan, Indonesia, Chad, and Tanzania had fewer maternal deaths than 10,000 in 2020 (WHO et al., 2023).

Source: Author’s computation
Also, Table 1 indicates the three African countries, namely South Sudan, Chad, and Nigeria, that top the list of global MMR, of 1223, 1083, and 1047 respectively. Table 1 also reveals that, on average, the lifetime risk of a 15-year Sudanese, Nigerian, and Chadian woman dying from a maternal cause is 1-in-20, 1-in-19, and 1-in-15, respectively (WHO et al., 2023).

**TABLE 1: TOP THREE COUNTRIES WITH HIGHEST MMR, AND LIFETIME RISK OF MATERNAL DEATHS WORLDWIDE IN 2020.**

<table>
<thead>
<tr>
<th>Country</th>
<th>Lower Uncertainty Interval (80%)</th>
<th>MMR Point Estimates</th>
<th>Upper Uncertainty Interval</th>
<th>% of HIV related indirect maternal deaths</th>
<th>Lifetime risk of maternal deaths (1 in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Sudan</td>
<td>746</td>
<td>1223</td>
<td>2009</td>
<td>0.8</td>
<td>20</td>
</tr>
<tr>
<td>Nigeria</td>
<td>793</td>
<td>1047</td>
<td>1565</td>
<td>0.3</td>
<td>19</td>
</tr>
<tr>
<td>Chad</td>
<td>772</td>
<td>1083</td>
<td>1586</td>
<td>0.2</td>
<td>15</td>
</tr>
</tbody>
</table>

Source: Author’s computation
Figure 4 shows that in 2020, the National Maternal Mortality ratio was 196.6, with Katsina, Zamfara, Kano, Sokoto, Jigawa, and Kebbi exceeding the national target of 288, with Ekiti State had zero MMR in the same period (Health Think, 2020).

Figure 5 indicates that compared to pregnant women seeking skilled birth attendance during delivery, the worst-performing states in MMR identified in Figure 4 do not meet the national target of skilled birth attendance of 57 percent in 2021. Therefore, the high MMR reported in these states may not be unconnected with the low percentage of skilled birth attendance. Ayele et al. (2019) submitted that the presence of a skilled birth attendant (SBA) during delivery is essential in preventing maternal mortality and morbidity.
FIGURE 5: SKILLED BIRTH ATTENDANCE IN NIGERIA

Source: Federal Ministry of Health, 2020
Figure 6 indicates that from 1990 to 2018, all indicators and surveys reveal that antenatal care performance has fallen consistently below the national target (NT) of 57 percent.

**FIGURE 6: NATIONAL ANTENATAL CARE ATTENDANCE**

Source: Federal Ministry of Health, 2019

Figure 7 reveals that post-natal care coverage only includes 16 States out of 36 States in Nigeria. This suggests the need to improve post-natal care coverage for mothers to avoid maternal deaths arising from post-delivery complications.

**Note:** NHMIS, DHIS2, NDHS, NARHS, NNHS, MICS & IHME, denote National Health Management Information System, District Health Information System 2, National Demographic and Health Survey, National HIV/AIDS and Reproductive Health Survey, National Nutrition and Health Survey, Multiple Indicators Cluster Survey, and Institute for Health Metrics and Evaluation respectively.
Causes of Maternal Mortality

Say et al. (2014), cited in Health Think (2022), reported direct global maternal mortality as abortive causes (8 percent), embolism (3 percent), haemorrhage (27 percent), sepsis (11 percent), hypertensive disorder (14 percent), indirect causes (27 percent), and other direct (10 percent). However, in Nigeria, 75 percent of all maternal deaths result from unsafe abortions, severe post-partum bleeding, pre-eclampsia, eclampsia and complications from delivery.

This high maternal mortality rate is not unconnected with poor access to quality healthcare, inadequate infrastructure, poorly equipped hospitals and health centres, wide doctor-patient ratio, and socio-cultural practices. Nigeria is one of the countries with the highest maternal mortality rates globally, accounting for approximately 14 percent of global maternal deaths. Specifically, Northern Nigeria has an alarming maternal mortality rate in the country.
There is limited access to healthcare in the region, many of the women never received antenatal care, and they are more likely to give birth at home without the assistance of skilled attendants (Gulumbe, Alabi, Omisakin and Omoleke, 2018). Conflict and insecurity also affect a large part of the Northern region. Conflict-affected areas in Nigeria have high maternal mortality rates due to the disruption of healthcare services, displacement of populations, and the general insecurity that affects healthcare service delivery.

For instance, in the study carried out by Omonona, Obisesan and Aromolaran (2015) in a rural part of Ogun State, over 40% of the respondents travel close to 10km before being able to access health-related services. Also, the Nigerian Health Watch revealed that the health and private insurance plans currently used by most Nigerians are unaffordable, and many rural dwellers do not have any active plans. This is not surprising as major macroeconomic challenges faced in rural areas are severe poverty and high illiteracy.

Furthermore, rural areas in Nigeria have higher maternal mortality rates than urban areas. This is due to inadequate healthcare infrastructure, a shortage of skilled healthcare workers, and limited access to essential drugs and equipment.
Lack of knowledge among women, their families and communities on the importance of antenatal care (ANC), institutional delivery and family planning, resulting in low attendance at health services; cost, distance and transport difficulties are also contributory;

- Poor patronage of healthcare services because the health staff are thought to be rude and uncaring to women;
- Lack of skills, equipment, tools and drugs among health staff;
- Poor state of facilities - dilapidated, closed at night, lack of electricity and water;
- Referral services are slow and unreliable so life-saving care is not timely.

In the Road Map for Accelerated Reduction of Maternal and Neonatal Mortality, the following are listed to be among the causes of maternal deaths in Nigeria.
**WHAT NEEDS TO BE DONE**

Considering the high maternal mortality rate in Nigeria coupled with the effect on the upkeep and health of the newborn, it is imperative to adopt a multi-faceted approach in combating the high maternal mortality rate. The following are policies that various stakeholders should implement.

- The budget for the Nigerian health sector should be increased. It should be increased to at least the amount agreed upon (at least 15 percent) by the country members of the African Union in 2001. The private and public sectors should explore options to get more support from donor organizations. The budget and donations should be efficiently expended by establishing sustainable institutional and structural frameworks.

- Nigerian hospitals should also be adequately stocked with the latest drugs and equipment. The blood bank system of hospitals should also be augmented with sufficient blood. Healthcare workers should be sufficiently remunerated. More health workers should also be employed. A conducive environment should also be created and maintained to reduce the massive brain drain in the health sector.

- Healthcare workers should also be trained and retrained in maternal care. This will help healthcare workers to recognize the danger signs that can lead to maternal death. It will also aid them in providing quality antenatal care, post-natal care, and care during childbirth, thereby preventing maternal deaths.

- Private firms in the Nigerian health sector should be given tax incentives and credit facilities at affordable interest rates. These will improve their productive capacity to provide quality health care at a more affordable rate to the general public. An increase in the budgetary allocation and donations to public hospitals will also make quality maternal health care accessible and affordable to all.

- Women and expectant mothers should be sensitized on the importance of receiving maternal care from hospitals. Such sensitization can be done in partnership with organizations like World Health Organization. This will increase the willingness of pregnant women to seek pre-natal and post-natal care from hospitals.
Also, more laws that promote gender equality should be established and enforced in Nigeria. This will increase women's access to opportunities to be gainfully employed and educated. This will increase the ability and willingness of pregnant women to access medical care from hospitals.

Good road infrastructure and ambulances should also be provided to enhance the accessibility to hospitals. The insecurity issue currently prevalent in the nation should also be resolved. These will increase the speed with which pregnant women and those on the verge of delivering access to maternal care from hospitals.

A program should be established to monitor the maternal mortality rate. This should be done to examine the effectiveness of policies implemented to reduce such mortality rates. The program should also be conducted to improve the policies geared toward avoiding and reducing maternal mortality.

The matter of maternal health should be brought forward to be among the critical political discourse in the country and used as a critical index to measure good governance and economic performance in all tiers of government.

Age at first marriage for young girls should be increased, and primary and secondary education should be made compulsory for young girls of school age to reduce the high fertility rate currently experienced in the country.

Data collection and monitoring systems should be used to identify areas of need and track progress towards reducing maternal mortality rates. The government should prioritize improving data collection and monitoring systems to inform policymaking and track progress. The role of information technology cannot be overemphasized in this regard. ICT-based interventions and systems to improve maternal health should be deployed across rural and urban areas.
The government should also strengthen primary healthcare services. Primary healthcare services are critical for preventing and managing maternal health complications. The government should prioritise strengthening primary healthcare services by training and deploying more skilled healthcare workers, improving healthcare infrastructure, and ensuring essential drugs and equipment are available. Family planning services and emergency obstetric care are also essential services to implement on a large scale. It is also important to provide incentives for skilled birth attendants in rural areas where the maternal mortality is higher.

In sum, improving maternal health in Nigeria requires a collaborative effort between the government, healthcare workers, the international community, and individuals. By implementing these recommendations, Nigeria can reduce maternal mortality and improve maternal health outcomes.
References


World Bank (2022). World Development Indicators. Washington D.C.
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About the NESG

The NESG is an independent, non-partisan, non-sectarian organisation, committed to fostering open and continuous dialogue on Nigeria’s economic development. The NESG strives to forge a mutual understanding between leaders of thought to explore, discover and support initiatives to improve Nigeria’s economic policies, institutions and management.

Our views and positions on issues are disseminated through electronic and print media, seminars, public lectures, policy dialogues, workshops, specific high-level interactive public-private sessions and special presentations to the executive and legislative arms of government.

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The NESG Non-Residential Fellowship Programme (NRFP) is a knowledge hub that bridges the gap between socioeconomic research and public policy and promotes evidence-based policymaking in Nigeria. The programme brings together outstanding high-level intellectuals in academia, research-based institutions, the public sector and the private sector to collaborate, share ideas and ensure that findings from its research are applied in practice.

The views expressed in this publication are those of the author and do not necessarily reflect the views of the Nigerian Economic Summit Group.