

Review of Policy Initiatives on Maternal Mortality in Nigeria

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ABSTRACT

One of the key measures of a nation's overall health and well-being is the incidence of maternal mortality (Osunu, Ofili, and Nwose, 2021). The Maternal Mortality Ratio (MMR), which is estimated as a ratio per 100,000 live births in the survey population, is frequently used to quantify maternal mortality (WHO, 2019). According to statistics, 287,000 maternal fatalities were recorded worldwide in 2020, with sub-Saharan Africa having the greatest casualty count and Eastern Asia holding the least (Mhyre, 2020). According to the aforementioned statistic, there are 223 maternal deaths for every 100,000 live births, which translates to a 1 in 210-lifetime probability risk for any girl of reproductive age to die from pregnancy-related causes (Mhyre, 2020).

This article addresses maternal mortality as a global health issue. It provides an in-depth overview of its epidemiology, stating prevalence rates based on global, regional, and local estimates. Postpartum bleeding, hypertensive problems in women, obstructed labor, unsafe abortions, and obstetric sepsis are some of the leading direct causes of maternal mortality (Von-Dadelszen and Magee, 2017). It also highlights risk factors such as HIV/AIDS, age, and social determinants like education, as well as their impacts on the general population.

This article also examines the global and national policy initiatives that are in place to tackle the prevalence of maternal mortality around the world, the majority of which are a continuation of the promises to improve global health from the 2015 Millennium Development Goals (MDGs) into the current Sustainable Development Goals (SDGs) that will remain in effect until 2030. The overall goal is to reduce the global MMR to fewer than 70 per 100,000 live births by 2030 (WHO, 2015). Evidence suggests that these policies are effective in some areas and lead to a slight decrease, but the effectiveness of some global policies has been constrained by their lack of coordination and their inherent contradictions. The assignment examines different health interventions and describes the concept of the health promotion model that adopts these concepts as regards trying to reduce maternal mortality, especially in sub-Saharan Africa.

In conclusion, the article highlights some of the challenges faced in the execution of these responses and makes recommendations for activities that will assist in addressing the national and international regulations that have prevented significant advancements in the decrease in maternal mortality.

Keywords: Maternal, Health, Nigeria

INTRODUCTION

An unprecedented number of women die during pregnancy and childbirth every year (WHO, 2019). It is thus appropriate to state that, among all pressing public health issues, maternal mortality is one for which continual responses are essential (WHO, 2019). The level of maternal mortality is crucial since it is one of the best

measures of a community's wellness (Osunu, Ofili, and Nwose, 2021). Maternal mortality, according to the WHO, is the term used to describe a woman's death while still expectant or within six weeks after due to gestational complications (WHO, 2019).

This assignment will accentuate the statistics of maternal mortality across the globe, at regional and national levels, and relate them to some likely factors affecting or predisposing to maternal mortality. It will also bring forward the existing health policy initiatives and interventions globally, regionally, and nationally, as well as the different health improvement initiatives available. It describes the health promotion model and highlights factors that influence help-seeking behavior.

Maternal mortality was chosen as the subject of public health discourse because, although newborn and infant mortality have decreased significantly in developing countries, this has not been the case for maternal mortality. While most developing nations already have a number of the required measures in place to minimize maternal mortality, 1 in 50 women still pass away from pregnancy-related problems, and that number increases to 1 in 10 in certain parts of Africa (Mhyre, 2020). However, the vast majority of these fatalities, particularly those that take place in low-resource environments, might have been avoided (WHO, 2019).

Public health practice, my area of practice is crucial for populations worldwide. The protection and enhancement of both public and individual health are its core priorities. I have worked with a number of TBAs and community health experts as a public health professional, more especially as a community social worker, and I have personally witnessed the psychological and social effects that maternal death has on families and communities; hence, this was the first topic to come to mind as the discussion's focal point. By extensively examining this problem, I believe a deeper understanding of the specific areas that require concentration while addressing women's concerns will be gained. Understanding the laws and policies that are in existence can also help me think of ideas and contributions that will benefit families and the community as a whole.

RESEARCH STRATEGY

To be sure that there are enough publications, especially those explaining the existing policies concerning maternal mortality in the past few years, a preliminary search was initially carried out. Using prominent databases like PubMed, PyscInfo, Science Direct, and Medline, a systematic method was used to find substantial reviews on maternal mortality. Recognized global organizations' websites, such as the WHO, UNICEF, Centres for Disease Control and Prevention (CDC) as well as obstetric manuals, and the District Health Information System (DHIS), were also cited when determining the accurate prevalence and epidemiology estimates, in addition to articles from those various databases.

Relevant articles, journals, and papers published between 2017 and date on maternal mortality were located using key phrases and their respective alternatives such as "maternal deaths," "maternal mortality," "pregnancy-related death", "epidemiology of maternal mortality," "causes of maternal mortality," "policy initiatives," "local laws, and "global policy". Boolean operators (specifically "AND" and "OR") were used to combine these keywords to get more focused and appropriate articles that satisfy the eligibility requirements. Similarly, the databases used Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) as the basis for their searches, bearing the inclusion and exclusion criteria such that the entire text was utilized after possible duplicates had been deleted. In the end, these techniques yielded more than 12,000 results. Also, the reliability of articles and the decision to include them were determined based on the clarity of the title and its abstract. It's important to note that there is limited data on up-to-date prevalence rates, policies, and health initiatives for some parts of the globe, especially in many African countries, including Nigeria.

Inclusion Criteria

The key relevant articles, journals, and papers included in this assignment were those published from 2017 until date, and once any potential overlaps were ruled out, their whole contents were utilized. Relevant literature on maternal mortality from recognized organizations such as the World Health Organization and the Center for Disease Control and Prevention was all included. In order to gather even more robust information, the references of key papers as well as publications where the initial publications were mentioned were also scrutinized and included as necessary.

Exclusion Criteria

Duplicate articles and publications, or those without all of the content, as well as those with low-quality evidence that was not properly vetted, were excluded from this study. Articles published in other languages aside from English were not taken into consideration.

EPIDEMIOLOGY OF MATERNAL MORTALITY

Globally, there were roughly 295,000 maternal deaths in 2017, giving an MMR of 225 deaths per 100,000 live births across 185 countries and territories. While one in 190 people worldwide was predicted to experience maternal death in their lifetime in 2019 (WHO, 2019), a global decline was shown, according to the UN inter-agency estimates, to about 223 deaths per 100,000 live births in 2020. It is noteworthy that while these figures could translate into an average rate of 2.1% reduction, it is still just about one-third of the needed 6.4% annual rate to achieve the Sustainable Development Goals (SDG) by 2030 (UNICEF, 2022). Also, as significant reduction has been reported between 2000 and 2015 globally, the rates have been somewhat stagnant when averaging rates of reduction between 2016 and 2022 in most regions, but on the increase in Western Europe and the United States of America (UNICEF, 2022).

Sub-Saharan Africa and Southern Asia together accounted for around 86% of the estimated maternal deaths worldwide in 2017, with Sub-Saharan Africa alone responsible for about 66% (196,000) (WHO, 2017). In 2020, sub-Saharan Africa reported about 545 deaths per 100,000 live births, accounting for about 70% of global maternal deaths (UNICEF, 2021). As mentioned earlier, apart from the United States with very increasing rates of MMR, values in sub-Saharan Africa and other regions have shown very little decrease in rate. Nigeria (23% of the projected 67,000 total maternal deaths) and India (12% of the estimated 35,000 total maternal deaths) accounted for about one-third (35%) of all recorded maternal fatalities worldwide. Thus, the greatest number of maternal deaths in the world occurred in these two nations (WHO, 2022; UNICEF, 2023).

This high MMR for Nigeria has been corroborated and explained by different local studies carried out among government health facilities and communities in the country (Ntoimo' et al., 2018; Meh et al., 2019). Research further revealed that there are different MMR levels within the country. Several states and medical centres have rates that are greater than the average nationwide, and evidence suggests that MMR in the northern part of Nigeria is significantly greater than in the southern part, while major health facilities in areas like Katsina, Lagos, and the Federal Capital Territory also display similarly high MMR levels (Meh et al., 2019). The likely reasons for these are explained in the subsequent sections.

The leading causes of maternal mortality include postpartum bleeding, maternal hypertensive disorders, obstructed labor, complications of unsafe abortion, and obstetric infection (Von Dadelszen and Magee, 2017). In 2019, the Center for Disease Control (CDC) also added cardiovascular conditions (including cardiomyopathy, myocardial infarction, and cerebrovascular accidents) as the cause for more than 33% of pregnancy-related deaths (UNICEF, 2021). Meanwhile, the risk of maternal mortality is influenced by several variables. In the United States and some parts of Europe, maternal deaths among non-Hispanic black women are commonly caused by pre-eclampsia, eclampsia, and embolism, while mental health conditions are the leading cause of deaths among non-Hispanic white women (Collier and Molina, 2019). These are associated with risk factors such as maternal age, racial disparities, racism, and inequalities (MacDorman, Declercq, and Thoma, 2018; Collier and Molina, 2019; Noursi et al., 2020).

Specifically, lack of political will, low economic status, grand multiparity, insufficient skilled labour, and non-booking for antenatal care have been reported as risk factors contributing immensely to the incidence of maternal mortality in Nigeria (Ntoimo et al., 2018). Many Nigerian states do not give health a high priority when allocating resources, which has a negative impact on the quality of emergency obstetric treatment and maternal care in major health institutions (Ntoimo et al., 2018; Joseph et al., 2021). Subsequently, Meh et al. (2019) showed a significant association between the level of education, media exposure, and maternal mortality. It is believed that education would provide some form of exposure that could influence seeking modern healthcare, especially during pregnancy. Also, insurgency is a very cogent risk factor observed over time, especially in the northern part of Nigeria. Terrorist attacks and kidnappings cause unrest in most

communities, leading health workers to flee from conflict zones to safer states while medical supplies and buildings are destroyed (Meh et al., 2019). The very few health workers remaining are then left with little or nothing to work with, especially during obstetric emergencies.

In addition, after the outbreak of COVID-19 in 2019 and the number of deaths reported as a result of it, there were reasons to believe that the virus could be a major risk for pregnant women. However, it is not yet entirely clear that there is a significant relationship between COVID-19 and maternal mortality. Although the pregnant woman's immune system is compromised, COVID could worsen her condition, necessitating hospitalization (Di Toro et al., 2020). Also, it's not fully possible to link the observed rate of preterm labor to COVID since any viral infection during pregnancy could cause an aberrant reaction to an opportunistic infection resulting in preterm labor and delivery (Mendz, Kaakoush, and Quinlivan, 2020). Hence, two factors may have had an impact on the level of maternal mortality during the COVID-19 pandemic: deaths in which the woman died as a result of the interaction between her pregnancy and COVID-19 (known as an indirect obstetric death) or deaths in which pregnancy complications weren't managed because of a disruption in health services (WHO, 2022).

Furthermore, studies have shown that deaths during childbirth have adverse effects on children, families and the community as a whole (Nguyen et al., 2019). Evidence of a link between maternal and childhood mortality in LMIC has been reported, and the risk seems to be higher for infants under six months compared to older children (Scott et al., 2017; Nguyen et al., 2019). This increased risk is likely a result of reduced breastfeeding (which can result in infection and malnutrition) and obstetric complications (which can result in asphyxia). However, the risk may be decreased in situations where nursing is not the only source of nourishment and inexpensive substitute food sources are available, as is the case in high-income countries (Nguyen et al., 2019). In another vein, maternal mortality is a significant barrier to sustainable development as it remains a crucial indicator of a society's development (Osunu, Ofili, and Nwose, 2021). Transportation expenses, prenatal care, and delivery fees all have a significant impact on the economic burden of maternal mortality, in addition to the loss of the woman's economic activity, rising childcare costs, and the loss of potential wage labour (Mollar et al., 2015).

POLICY INITIATIVES

Several policy initiatives have been developed both internationally and locally to reduce the incidence of maternal mortality and its consequences. This is important, seeing as it's a major public health problem that requires both local and international cooperation. As regards this assignment, the policy initiatives examined include the Safe Motherhood Initiative, the United Nations Global Strategy for Women's, Children's and Adolescents' Health, Universal Basic Education, the Midwives Service Scheme, and the Nigeria Urban Reproductive Health Initiative (NURHI).

Safe Motherhood Initiative

Safe Motherhood Initiative (SMI) was announced by the WHO in 1987 at an international conference in Nairobi to improve the standard of maternal health globally. At a time when more than 500,000 women die each year during pregnancy and childbirth, it was one of the first suggestions to raise awareness of maternal health on a global scale (Santora, 2020). At its inception, the initial goal of SMI was to lower the incidence of maternal mortality, especially in developing countries. But, in the 1990s, treatment and prevention of HIV and the provision of safe abortion care were incorporated (McGowan, 2017). The topic of abortion was, needless to say, a contentious one that sparked debate across the world. Women's rights advocates concur that access to safe abortion care is essential for enhancing maternal health, but many SMI donors were cautious, and the government was hesitant to implement legislation surrounding safe abortion care (McGowan, 2017). This had a significant impact on SMI's mission to improve maternal health.

The SMI further broadened its scope to include the effects of poverty, gender, education, water, and sanitation on maternal health since MDG 2000 considered it imperative to include enhanced access to maternal health measures (Hodin, 2017). This was important because there is ample evidence that these factors have a significant impact on maternal health and contribute to maternal mortality in LMICs, particularly in Sub-

Saharan Africa. Beyond 2015, SMI appears to be stagnant for some reasons, including an uneven distribution of resources and a lack of coordination between macro- and micro-level community models (AbouZahr, 2003; Santora, 2020).

Global Strategy for Women's, Children's, and Adolescents' Health

The Global Strategy for Women's, Children's, and Adolescents' Health was introduced by the UN in 2010 with the goals of saving lives and enhancing the well-being of women and children in developing nations. The program promoted all sexual and reproductive health services and placed a strong emphasis on a patient-centered care model. Throughout the first five years of its implementation, it inspired political leadership, garnered additional funding, and made improved progress in areas such as battling HIV/AIDS and lowering maternal and child morbidity and mortality (Temmerman et al., 2015). It also sparked the powerful multi-stakeholder health movement "Every Mother Every Child". Despite this, many women, children, and adolescents around the world continue to experience significant unfairness and inequality and have limited or no access to basic services like healthy nutrition, good education, and necessary health care (UN, 2015). Such a high number of preventable deaths were reported at the end of 2015, and many more continue to have illnesses and disabilities that prevent them from living up to their full potential (WHO, 2015).

As a result, an updated global strategy that would cover 15 years of the SDGS was launched in 2016. This revised version emphasizes equity and is more inclusive. The inclusion of adolescents is especially crucial because it recognizes the health issues they encounter and the impartial role they play as vital change agents alongside women and children. According to UNICEF (2015), properly implementing this global strategy with increased funding will end preventable maternal, child, and adolescent mortality, provide a significant convergence in health (thereby ensuring that all women, children, and adolescents have an equal chance to survive and thrive), and bring about significant investment in health (Heckman, 2015).

Universal Basic Education

Universal Basic Education (UBE) includes early childhood care and education, nine years of formal schooling, adult literacy and non-formal education, acquisition programs, and education for people with special needs (UBE Commission, 2004). Increased rates of teen pregnancies, unsafe abortions, and child marriages are all associated with maternal mortality in sub-Saharan Africa. Due to the connection between a lack of education and adolescent pregnancies, UBE was established in Africa to ensure that girls receive a basic education (Kalipeni, Iwelunmor, and Grigsby-Toussaint, 2017). It is possible to make progress toward the goals set for lowering the rate of infant and maternal fatalities more quickly with improved access to education, particularly for girls (Kalipeni, Iwelunmor, and Grigsby-Toussaint, 2017). Also, as women are important contributors to wealth creation, education enables them to acquire the knowledge and abilities needed to innovate and increase production. In the meantime, despite efforts to adhere to the Universal Declaration of Education for all, inequity persists as more boys than girls attend school. Several African nations have successfully implemented this policy, but others (e.g., Nigeria) are still lagging (Taylor et al., 2020). According to the National Bureau of Statistics, 56.8% of women and 74.6% of boys are literate. For comprehensive, sustainable growth, this is unquestionably unhealthy.

The Midwives Service Scheme

Midwives Service Scheme (MSS) was established in 2009 as one of the initiatives to lower maternal mortality in Nigeria. It was a response policy created to address the need to expand access to skilled birth attendance and promote sustainable, safe maternal health, especially in rural areas known for lacking basic facilities and trained birth attendants (Oluwasusi et al., 2020). It was designed to be a collaborative effort between all three tiers of government overseeing the recruitment of newly graduated, retired, and unemployed midwives posted to selected primary health centers in remote areas.

The MSS demonstrated a reduction in maternal and infant deaths, an increase in prenatal visits, and an increase in the proportion of women using modern contraceptives in the chosen areas during the first year of implementation (Onugha, 2017). The benefits diminished over time, however. The idea didn't advance further

for several reasons, including difficulties maintaining midwives recruitment, inadequate housing, and irregular salary payments, among others (Onugha, 2017; Oluwasusi et al., 2020).

Nigerian Urban and Reproductive Health Initiative (NURHI)

The low use of modern contraceptives is one of the causes of Nigeria's high total fertility rate (TFR). Therefore, it was crucial to address the adoption of modern contraceptives to reduce maternal mortality (Speizer et al., 2019). The sole objective of the NURHI, a 5-year program initiated in 2009, is to increase the uptake of contemporary contraceptives. It concentrated on providing access to modern family planning for selected rural populations. It used a variety of tactics, such as community outreach, social mobilization, and mass media entertainment (e.g., radio dramas) (NURHI, 2013). In the evaluation study of the initiative done by Speizer et al. (2019), evidence showed that NURHI facilities have both better quality and higher services than non-NURHI facilities. The program's quality of services was maintained for a considerable amount of time, even after it ended. To ensure sustainability, government policy efforts must adhere to the WHO suggestion of "Begin with the End in Mind", particularly for short-term programs (Speizer et al., 2019).

HEALTH IMPROVEMENT INTERVENTIONS

The majority of the health improvement initiatives centre on periods during or shortly after birth because that's when many maternal deaths happen. Government initiatives and policies are built on the foundation of these multidimensional actions. These comprise clinical services, evidence-based interventions, and community-level interventions. They are based on the health promotion models of Pender and Tannahill. Community-level interventions involve the formation of facilitator-led groups, outreaches, and social mobilization to increase awareness among the population (Kidney et al., 2009; Speizer et al., 2019). Pender's model, even though it was primarily designed to focus on people, can be applied to focus on households, communities, or societies (Aqtam and Darawal, 2018). According to researchers, it is a more comprehensive approach to reducing maternal mortality. Pender's approach influences how clinical and evidence-based programs implement health interventions such as free ANC care, training of traditional birth attendants, provision of skilled birth attendants, safe delivery kits to prevent infection, and ensuring a steady supply of medications (Ogbuabor and Onwujekwe, 2018; Oladimeji and Fatusi, 2022).

A somewhat similar pattern can be seen while evaluating of the effectiveness of these improvement interventions. In the initial phases, they show effectiveness, which later fades off as the program is stopped. The main goal (decreasing maternal mortality) is clear, and there are readily available solutions, but numerous barriers exist that preclude effective and timely prevention. For instance, community-led initiatives have been shown to improve women's perceptions of health and raise their knowledge of it (WHO, 2019). It is more efficient, however, when free medicines/services are offered at the medical facilities along with the availability of skilled medical personnel when they eventually visit. In other words, the efficacy of stand-alone interventions is lower. Lack of political will, corruption, insufficient funds and resources, and harmful cultural practices (Oladimeji and Fatusi, 2022) are stalling the sustainability of most of these interventions and thereby stalling the overall goal, thus defining the major reason why little or no significant change is seen in the rate of maternal mortality.

CONCLUSION

Maternal mortality is a global public health issue which requires both local and international cooperation to tackle. Even though evidence have shown that there has been little decline in the prevalence indicating that progress is being made in addressing this vital problem at all levels, it has been demonstrated that the current level of responsiveness and effectiveness is still below expectations. Globally, nations have come together to support a new goal and the SDGs to lower maternal mortality. Regional policies and programs place a strong emphasis on family planning, infrastructural development, human resource investments, monitoring and evaluation through leadership, health system oversight, and employing several strategies to decrease maternal mortality. However, careful observation of most of these initiatives shows an initiation effectiveness which decline gradually due to lack of continuity and sustainability.

RECOMMENDATIONS

Many of the aforementioned strategies that worked and are still working have some factors of active leadership, oversight, monitoring, and evaluation in them. To address some of the challenges faced in the complete execution of the local strategies and other policies and ensure sustainable reductions in maternal mortality, below are some recommendations:

1. Local initiatives and interventions such as emergency obstetric care and other strategies that work in some parts of the country (including women's education and empowerment schemes) should be encouraged and emulated in other similar communities and countries.
2. Governments and their partners should strengthen monitoring and evaluation, and they should offer suitable tools to track the development of health programs (Ogunjimi, 2012).
3. To end socioeconomic disparities in maternal mortality, the government should increase funding for financially enhancing programs like the Earned Income Tax Credit, Baby Bonds, and Universal Basic Income (Allan, 2020).
4. Policies like the Supplemental Nutrition Assistance Program should be implemented to enhance maternal nutrition and to promote general health in all pregnant and nursing mothers (Allan 2020).
5. Stability and security should be re-established as a matter of urgency especially in the Northern part of Nigeria for communities to address maternal mortality in a way that benefits indigenous people and other stakeholders.
6. There should be synergy among the different stakeholders in the country so that maternal mortality can be addressed holistically.
7. Government policy efforts should adhere to the WHO suggestion of "Begin with the End in Mind", particularly for short-term programs in order to ensure sustainability (Speizer et al., 2019).

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