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ECONOMIC FACTORS AND MATERNAL MORBIDITY IN TARABA STATE: A REVIEW

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Abstract

Despite progress in reducing maternal mortality rates, the burden of maternal morbidity remains high, particularly in developing regions such as Nigeria. Understanding the economic factors that contribute to maternal morbidity in this region is crucial for effective policy formulation and targeted interventions to improve maternal health outcomes. Taraba State, faces numerous challenges in its healthcare system, particularly regarding maternal health. The study seeks to examine economic factors influencing maternal mortality in Taraba State. The Socio-economic determinant of health model was used to explain the phenomenon. The study relied on secondary data obtained from reputable sources, such as government reports, national surveys, academic publications, and relevant databases. The data collection process involved accessing and extracting relevant information from the identified sources. The thoroughly reviewed and selected data sets, reports, and publications provided insights into economic factors influencing maternal morbidity in Taraba State. The study discovered that socio-economic factors influencing maternal mortality includes; poverty and socio-economic disparities, limited access to healthcare services, financial barriers, educational attainment, unemployment and economic instability and economic instability, transportation and distance as well as lack health insurance coverage among others. The study recommended that government and healthcare stakeholders should prioritize initiatives aimed at improving access to affordable maternal healthcare services, especially for women from low-income households. This could include subsidies, waivers, or community-based health insurance schemes to reduce out-of-pocket expenses and investments should be made to improve healthcare infrastructure, particularly in rural and remote areas. This includes increasing the number of skilled healthcare professionals, equipping healthcare facilities, and expanding the reach of healthcare services to enhance accessibility.

Keywords: Economic Factors, Mortality, Poverty, Maternal Morbidity, Taraba State.

I. Introduction

Maternal morbidity, defined as the incidence of maternal health complications during pregnancy, childbirth, or the postpartum period, remains a significant public health concern globally (World Health Organization (WHO), 2020). According to Maternal Mortality Estimation Inter-Agency Group (MMEIG) report, about 295,000 women died annually during

and following pregnancy and childbirth in 2017 (WHO, 2018). Only a minimal fraction of 1% occurs in developed countries while over half takes place in Africa, 42% in Asia and 4% in Latin America and the Caribbean. This suffices to say, that over 94% of maternal deaths take place in the developing countries of the world. It has been reported that the sub-Saharan Africa region alone accounts for about 62% of the global maternal deaths of 289000 with MM Ratio of 510 per 100,000 live births, the second highest in the remaining Sustainable Development Goal (SDG) developing regions and Nigeria has a burden of 14% (40,000 maternal deaths) with India as the highest with 17% (50,000 maternal deaths) (WHO, 2018).

It was also reported that the lifetime risk of maternal death in Nigeria is 1 in 31 and a MM Ratio of 560 per 100,000 live births compared to 1 in 45,200 and a MM Ratio of 1 in 100,000 live births in Belarus (World Health Organization, United Nations Children's funds, United Nations Population Fund and the World Bank, 2012; World Health Organization, 2013; World Health Organization 2014; World Health Organization, United Nations Children's funds, United Nations Population Fund, 2015).

The rate of maternal morbidity in Nigeria and Taraba State is a critical public health concern that requires comprehensive understanding and targeted interventions. Nigeria, as a whole, suffers from a high maternal mortality rate, with 800 maternal deaths per 100,000 births (Akpabio et al., 2020). However, there is a dearth of evidence on the estimates and determinants of maternal mortality specifically in the northern regions of Nigeria (Meh et al., 2019). Despite progress in reducing maternal mortality rates, the burden of maternal morbidity remains high, particularly in developing regions such as Taraba State. Understanding the economic factors that contribute to maternal morbidity in this region is crucial for effective policy formulation and targeted interventions to improve maternal health outcomes.

ii. Conceptual Issues

Maternal morbidity refers to any health condition that complicates pregnancy and childbirth and negatively impacts a woman's well-being and functioning (Hababa&Assarag, 2022). It includes a range of conditions such as infections, hypertensive disorders, and sepsis (Bonet et al., 2020; Adu-Bonsaffoh et al., 2022; Ornaghi et al., 2022). Maternal morbidity is a significant concern, particularly in low- and middle-income countries (LMICs), where the burden is higher (Aftab et al., 2021; Bonet et al., 2020; Adu-Bonsaffoh et al., 2022). Infections, including obstetric infections, are a leading cause of maternal mortality and severe maternal morbidity (Bonet et al., 2020). Hypertensive disorders of pregnancy (HDP) are also a major contributor to maternal morbidity and mortality globally, with substandard clinical care being a significant factor (Adu-Bonsaffoh et al., 2022). Challenges in managing HDP include patient-related factors, health system-related challenges, and health provider-associated factors (Adu-Bonsaffoh et al., 2022). To address the measurement and response to maternal morbidity, frameworks and measurement tools have been developed

Types of Maternal Morbidity

Hemorrhage: Hemorrhage refers to excessive bleeding during pregnancy, childbirth, or the postpartum period. It can occur due to various reasons, including placental abruption, uterine agony, or trauma during childbirth. Hemorrhage is a leading cause of maternal morbidity worldwide (WHO, 2019).

Infections: Maternal infections can lead to significant morbidity. Examples include urinary tract infections, puerperal sepsis, post-cesarean section infections, and sexually transmitted infections. These infections can cause complications such as pelvic inflammatory disease, septic shock, or maternal sepsis (Say et al., 2014).

Hypertensive disorders: Hypertensive disorders, such as preeclampsia and eclampsia, are characterized by high blood pressure during pregnancy. These conditions can lead to complications such as organ damage, placental abruption, and increased risk of maternal morbidity (WHO, 2018).

Obstructed labour: Obstructed labor occurs when the baby cannot pass through the birth canal due to factors such as fetal malposition, cephalopelvic disproportion, or inadequate uterine contractions. It can lead to complications such as uterine rupture, postpartum hemorrhage, or maternal infection (WHO, 2018).

Unsafe abortion: In areas where safe and legal abortion services are limited, unsafe abortion can lead to severe maternal morbidity. Unsafe abortion is associated with complications such as hemorrhage, sepsis, or organ damage (Ganatra et al., 2017).

Mental health disorders: Maternal mental health disorders, such as postpartum depression or anxiety, can significantly impact a woman's well-being and functioning. These disorders can affect maternal-infant bonding, child development, and overall maternal health (Fisher et al., 2012).

iii. Literature Review

Maternal morbidity in Nigeria is influenced by a myriad of socio-economic factors. Several studies have delved into this issue, shedding light on the complexities and disparities that exist within the country's healthcare system. Obiyan and Kumar's research highlighted significant socioeconomic differences in the utilization of antenatal care (ANC) and medical care assistance at delivery in Nigeria (Novignon et al., 2019). This underscores the impact of socio-economic status on maternal health-seeking behavior and access to essential healthcare services.

Vincent (2021), emphasized the influence of various socio-economic determinants on maternal and child health in Nigeria, including economic inequity, geographical challenges, insecurity, education, gender equality, and cultural disparities. These factors contribute to the multifaceted nature of maternal morbidity, reflecting the intricate interplay between socio-economic conditions and healthcare outcomes.

Aregbeshola&Olaniya (2022) in their study, "investigation into horizontal inequity in the utilization of maternal and reproductive health services in Nigeria" revealed disparities in access to postnatal care, cesarean section deliveries, and modern contraceptive use. This underscores the unequal distribution of essential maternal healthcare services across different socio-economic strata, further exacerbating maternal morbidity rates.

Uzobo&Ayinmoro (2021) in their study, focused on regional socio-economic factors associated with postnatal care services utilization and its relationship with child morbidity in

Nigeria, highlighting the regional disparities that contribute to variations in maternal health outcomes. This regional dimension adds another layer of complexity to the socio-economic influences on maternal morbidity, emphasizing the need for targeted interventions tailored to specific geographic areas.

Fenny et al., (2019) & Ogundele et al (2020) in a broader context examined the causes and trends of socioeconomic inequalities in maternal healthcare utilization in Ghana and five West-African countries, including Nigeria, through decomposition analyses. These studies provided insights into the underlying factors contributing to disparities in maternal healthcare access, shedding light on the intricate web of socio-economic determinants that impact maternal morbidity.

Duodu et al (2021) in their study highlighted the rural-urban dimensions of malaria perception and preventive practices in Nigeria, emphasizing the influence of socio-demographic factors on women's healthcare behaviors, including maternal health practices. This underscores the need to consider the rural-urban dichotomy in addressing maternal morbidity and healthcare utilization patterns.

In conclusion, the empirical evidence from these studies underscores the intricate web of socio-economic factors influencing maternal morbidity in Nigeria. These factors encompass economic disparities, regional variations, cultural beliefs, access to healthcare services, and rural-urban differentials.

iv. Methodology

The study was a content analysis which involves the systematic examination of data from multiple studies, electronic databases, such as PubMed, Scopus, and Google Scholar, were searched using a combination of keywords and Medical Subject Headings (MeSH) research articles, other forms of content that have already been conducted on the same research questions to gain insights into the phenomena under study. This approach allows for the synthesis of findings across multiple studies to draw more robust conclusions.

v. Findings

Economic Factors Affecting Maternal Morbidity in Taraba State

Poverty and Socioeconomic Disparities: Poverty is a critical economic factor that significantly affects maternal morbidity. Women from low-income households may face challenges in accessing quality maternal healthcare services due to financial constraints, leading to delays in seeking care and inadequate utilization of services (Ganle, 2015; Say et al., 2014). Poverty is prevalent in Northern Nigeria, with a high poverty rate reported among rural households (NBS, 2019).

Limited Access to Healthcare Services: Economic factors can influence access to healthcare facilities and services, which can impact maternal morbidity rates. In Northern Nigeria, limited healthcare infrastructure, including a shortage of skilled healthcare professionals and inadequately equipped facilities, can hinder access to quality maternal healthcare (Uzochukwu et al., 2019). The scarcity of healthcare resources can contribute to delays in receiving necessary interventions and suboptimal management of complications.

Financial Barriers: Economic factors can create financial barriers that impede women's access to maternal healthcare services. Out-of-pocket expenses, lack of insurance coverage, and the costs associated with antenatal visits, delivery, and postpartum care may prevent women from seeking timely and appropriate care, increasing the risk of maternal morbidity (Ganle, 2015; Say et al., 2014).

Educational Attainment: Educational attainment is an important economic factor that influences maternal morbidity. Lower levels of education are associated with reduced knowledge about maternal health, limited awareness of available healthcare services, and poorer health-seeking behaviors (Uzochukwu et al., 2019). Limited education can hinder women's ability to make informed decisions regarding their own health and that of their newborn, potentially leading to adverse maternal health outcomes.

Unemployment and Economic Instability: Economic factors such as unemployment and economic instability can contribute to maternal morbidity. Unemployment can restrict women's financial resources, making it challenging to access healthcare services and afford necessary medications or treatments. Economic instability may also increase stress levels, affecting maternal mental health and overall well-being, potentially influencing maternal morbidity rates (Fisher et al., 2012; Ganle, 2015)

Transportation and Distance: Economic factors can impact transportation options and distance to healthcare facilities, which in turn affect maternal morbidity. Women living in remote or rural areas may face challenges in accessing timely and appropriate maternal healthcare services due to long travel distances, lack of transportation infrastructure, and associated costs (Ochako et al., 2014). These barriers can contribute to delays in receiving essential care and increase the risk of maternal morbidity.

Health Insurance Coverage: The lack of health insurance coverage is a significant economic factor that can influence maternal morbidity. In Northern Nigeria, a substantial proportion of the population lacks health insurance, limiting their ability to access and afford necessary maternal healthcare services (Ganle, 2015). Women without insurance may face higher out-of-pocket expenses, leading to delayed or inadequate utilization of healthcare services, potentially resulting in increased maternal morbidity rates.

Income Inequality: Income inequality is an economic factor that can contribute to disparities in maternal morbidity rates. In Northern Nigeria, income disparities exist, with a significant portion of the population experiencing low income (NBS, 2019). Women from low-income households may face additional challenges in accessing quality maternal healthcare, resulting in higher maternal morbidity rates compared to women from higher-income households.

Socioeconomic Inequalities in Education: Socioeconomic inequalities in education can have implications for maternal morbidity. Limited educational opportunities and lower educational attainment among women can contribute to reduced knowledge about maternal health, limited understanding of pregnancy-related risks, and suboptimal health-seeking behaviors (Uzochukwu et al., 2019). This lack of knowledge and empowerment can lead to delayed or inadequate utilization of maternal healthcare services, potentially increasing maternal morbidity rates.

vi. Theoretical Framework

The Socioeconomic Determinants of Health Model

The Socioeconomic Determinants of Health Model is a theoretical framework that highlights the influence of socioeconomic factors on individual and population health outcomes. It recognizes that social and economic conditions significantly shape health disparities and outcomes, going beyond individual behaviors and genetic factors (Adler & Stewart, 2010; Marmot & Wilkinson, 2005).

The model proposes that socioeconomic factors, such as income, education, occupation, and social status, interact with the broader social and economic environment to influence health outcomes. It emphasizes the unequal distribution of resources, opportunities, and power within society as key drivers of health disparities (Adler & Stewart, 2010; Marmot & Wilkinson, 2005).

The Socioeconomic Determinants of Health Model suggests that socioeconomic factors affect health through multiple pathways:

Material Resources: Socioeconomic status determines access to material resources, including housing, nutrition, and healthcare services. Individuals with lower socioeconomic status may face challenges in accessing quality healthcare, nutritious food, and adequate housing, which can contribute to poorer health outcomes (Adler & Stewart, 2010; Marmot & Wilkinson, 2005). Psychosocial Factors: Socioeconomic factors influence psychosocial factors such as stress, social support, and social cohesion. People with lower socioeconomic status often experience higher levels of chronic stress due to financial strain, job insecurity, and social inequalities. Chronic stress can negatively impact physical and mental health (Adler & Stewart, 2010; Marmot & Wilkinson, 2005).

Behavioral Factors: Socioeconomic status can influence health behaviors. For instance, individuals with higher socioeconomic status may have better access to health education and resources, enabling them to adopt healthier behaviors. In contrast, those with lower socioeconomic status may face barriers to adopting healthy behaviors due to limited resources or knowledge (Adler & Stewart, 2010; Marmot & Wilkinson, 2005).

Environmental Factors: Socioeconomic status shapes exposure to environmental hazards, such as air pollution, unsafe living conditions, and neighborhood crime rates. People with lower socioeconomic status often reside in neighborhoods with limited access to green spaces, healthy food options, and safe recreational facilities, which can negatively impact health outcomes (Adler & Stewart, 2010; Marmot & Wilkinson, 2005).

Applying the Socioeconomic Determinants of Health Model to maternal morbidity in Taraba State reveals the significant influence of socioeconomic factors on maternal health outcomes. The model helps explain how economic factors contribute to maternal morbidity through various pathways:

Material Resources: Economic factors, such as poverty and limited access to resources, contribute to maternal morbidity in Taraba State. Poverty restricts women's access to quality healthcare, leading to delays in seeking care, inadequate utilization of services, and increased

risk of complications during pregnancy, childbirth, and the postpartum period (Ganle, 2015; Say et al., 2014).

Psychosocial Factors: Economic disparities and financial stressors negatively impact maternal mental health and overall well-being, which can indirectly affect maternal morbidity. Financial strain, limited social support, and job insecurity can contribute to higher levels of stress, anxiety, and depression among pregnant and postpartum women, potentially increasing the risk of maternal morbidity (Fisher et al., 2012; Ganle, 2015).

Behavioral Factors: Economic factors influence health-related behaviors that can impact maternal morbidity rates. Women from lower socioeconomic backgrounds may face barriers to adopting healthy behaviors during pregnancy, such as inadequate nutrition, reduced antenatal care visits, or limited access to prenatal vitamins and supplements. These behavioral factors can contribute to increased maternal morbidity risks (Ganle, 2015; Say et al., 2014).

Environmental Factors: Economic factors shape the physical and social environment in which pregnant women live, which can impact their health outcomes. Women from disadvantaged socioeconomic backgrounds often reside in areas with limited access to clean water, sanitation facilities, and healthcare infrastructure. These environmental factors can contribute to maternal morbidity by increasing the risk of infections, complications during labor, and delays in receiving emergency obstetric care (Uzochukwu et al., 2019).

To address maternal morbidity in Taraba State, interventions and policies must focus on addressing socioeconomic determinants of health. Strategies should aim to reduce poverty, improve access to quality healthcare services, promote mental health support, and enhance health education and behavior change initiatives. By addressing these economic factors, it is possible to mitigate the impact of socioeconomic disparities on maternal morbidity and improve maternal health outcomes in Northern Nigeria.

vii. Conclusion

The analysis of economic factors influencing maternal morbidity in Taraba State reveals the significant impact of poverty, limited access to healthcare services, financial barriers, educational attainment, transportation challenges, health insurance coverage, income inequality, and employment conditions. These economic factors contribute to delays in seeking care, inadequate utilization of maternal healthcare services, and increased maternal morbidity rates in the region. Addressing these economic barriers is crucial to improving maternal health outcomes and reducing maternal morbidity in Taraba State.

viii. Recommendations

Based on the findings, the following recommendations are proposed to address the economic factors affecting maternal morbidity in Taraba State.

1. Government and healthcare stakeholders should prioritize initiatives aimed at improving access to affordable maternal healthcare services, especially for women from low-income households. This could include subsidies, waivers, or community-based health insurance schemes to reduce out-of-pocket expenses.
2. Investments should be made to improve healthcare infrastructure, particularly in rural and remote areas. This includes increasing the number of skilled healthcare

professionals, equipping healthcare facilities, and expanding the reach of healthcare services to reduce travel distances and enhance accessibility.

3. Efforts should be made to increase health insurance coverage among the population, with a specific focus on pregnant women and maternal healthcare.
4. Policies should aim to reduce income inequality in Taraba State by promoting equitable economic growth, job creation, and income generation opportunities. This can help alleviate financial constraints faced by women and improve their ability to afford and access quality maternal healthcare services.
5. Investing in education and health literacy programs for women in Northern Nigeria is crucial. Improving educational opportunities, especially for girls and women, can empower them with knowledge about maternal health, family planning, and health-seeking behaviors, leading to improved maternal health outcomes.
6. Integrating mental health services into maternal healthcare programs is essential. This includes providing psychosocial support, screening for perinatal mental health disorders, and ensuring access to mental healthcare services for pregnant and postpartum women.
7. Effective partnerships between the government, healthcare providers, non-governmental organizations, and community-based organizations are crucial. Collaboration can help develop and implement comprehensive maternal healthcare programs, address economic barriers, and promote sustainable solutions to reduce maternal morbidity in Northern Nigeria.

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