



The influence of socioeconomic inequality on maternal and child health outcomes in Nigeria: A critical analysis

Dr. Ebele Victoria Ezeneme

Department of Political Science,
Nwafor Orizu College of Education, Nsugbe
ebeleezeneme762@gmail.com

Dr. Chidi E. Nwokike

Chukwuemeka Odumegwu Ojukwu University
Igbariam Campus- Anambra State-Nigeria
Department of Public Administration
nwokikechidi@gmail.com
ORCID ID: 0000-0003-3991-3379

Ukorah Chibuokem Portion

Department of Public Administration,
Chukwuemeka Odumegwu Ojukwu University
Igbariam Campus- Anambra State

Dr. Innocent Chidi Nwanekezi

Department of Social Studies
Nwafor Orizu College of Education, Nsugbe
nwanekeziinnocent@gmail.com

Abstract: This critical analysis explored the profound influence of socioeconomic inequality on maternal and child health outcomes in Nigeria, a nation grappling with significant healthcare disparities. The socioeconomic disparities, encompassing income inequality, limited access to education, employment challenges, and disparities in healthcare access, have far-reaching consequences on the well-being of mothers and children. Notably, wealthier individuals have easier access to quality healthcare services, while low-income families face formidable barriers. These disparities contribute to alarmingly high maternal and child mortality rates in Nigeria. Maternal mortality rates in Nigeria, among the highest globally, disproportionately affect low-income women. The scarcity of skilled birth attendants, inadequate antenatal care, and the lack of emergency obstetric care exacerbate the risks faced by these women. Furthermore, the absence of education and awareness perpetuates the maternal mortality crisis. Child mortality rates are also closely linked to socioeconomic status, with children from low-income families at greater risk of malnutrition, waterborne diseases, and limited access to healthcare. Education emerges as a powerful tool in addressing these disparities, empowering women with knowledge and awareness to make informed decisions about maternal and child health. Recommendations included investments in healthcare infrastructure, the deployment of skilled birth attendants, nutrition programs for low-income families, support for girls' education, and the expansion of

rural healthcare initiatives to bridge healthcare disparities. Addressing socioeconomic inequality in maternal and child health is crucial for Nigeria's progress and the well-being of its population.

Keywords: Socioeconomic inequality, maternal health, Child health, Healthcare disparities, Poverty Access to healthcare, infant mortality, maternal mortality

Introduction

Maternal and child health outcomes are critical indicators of a nation's overall well-being and development. The health of mothers and children is not only a matter of individual well-being but also a reflection of the socioeconomic conditions and healthcare systems within a country (Olonade, Olawande, Alabi and Imhonopi, 2019). In Nigeria, a country characterized by significant socioeconomic disparities, the impact of these disparities on maternal and child health outcomes is a topic of paramount importance. Nigeria, the most populous country in Africa, faces substantial challenges in achieving desirable maternal and child health outcomes. The country has made progress in reducing maternal and child mortality rates over the years, but these rates remain unacceptably high compared to global standards (World Health Organization, 2019). Maternal mortality is a particularly alarming concern, with Nigeria accounting for a significant proportion of global maternal deaths. According to the World Bank, in 2020, Nigeria had a maternal mortality ratio of 1047 per 100,000 live births, compared to the global average of 223 per 100,000 live births (World Health organization, 2023). Similarly, child mortality remains a significant issue in Nigeria, with the under-five mortality rate standing at 117 per 1,000 live births in 2019, higher than the global average of 38 per 1,000 live births in 2021 (Egbon, Bogoni, Babalola, Babalola, and Louzada, 2022; UNICEF, 2023). These high rates of maternal and child mortality are indicative of a healthcare system that is struggling to meet the needs of its population, especially the most vulnerable.

At the heart of these challenges are socioeconomic disparities that have persisted and, in some cases, worsened over the years. Socioeconomic disparities encompass a wide range of factors, including income, education, employment opportunities, and access to healthcare services. In Nigeria, these disparities are not evenly distributed across the population, and they have a profound impact on the health and well-being of mothers and children (WHO, 2018). One of the key factors contributing to these is income inequality. Nigeria is a country characterized by extreme income inequality, with a small percentage of the population holding a disproportionately large share of the country's wealth (Oxfam International, 2022). According to World Bank (2021), before COVID-19, nearly 4 in 10 Nigerians lived in poverty, with many at risk due to slow and non-inclusive economic growth. In 2018/19, 39.1% lived on less than \$1.90 per day, and 31.9% had consumption levels between \$1.90 and \$3.20, making them vulnerable to extreme poverty during crises. Nigeria's heavy reliance on oil, a growing population, and limited job opportunities have hindered poverty reduction efforts. Low-income families in Nigeria face significant barriers to accessing quality healthcare services. They often lack the financial resources to pay for medical expenses, including antenatal care, skilled birth attendance, and essential medications. As a result, Sumankuuro, Mahama, Crockett, Wang, and Young (2019) asserted that pregnant women from low-income backgrounds are more likely to delay seeking healthcare, leading to complications during pregnancy and childbirth.

Moreover, inadequate access to education among low-income families exacerbates the problem. Education plays a crucial role in maternal and child health outcomes, as it empowers women with knowledge about reproductive health and childcare practices. Women with lower levels of education are less likely to make informed decisions about family planning, nutrition, and healthcare utilization during pregnancy and infancy. Unemployment and underemployment are additional challenges faced by low-income families in Nigeria. Lack of stable employment

opportunities limits families' ability to secure basic necessities, including nutritious food and adequate housing. Inadequate nutrition during pregnancy can lead to adverse maternal and child health outcomes, such as low birth weight and stunted growth. Furthermore, geographic disparities in healthcare access are prominent in Nigeria. Rural areas, which are often characterized by lower socioeconomic status, face significant challenges in accessing healthcare facilities and skilled healthcare providers. This lack of access to healthcare services contributes to higher maternal and child mortality rates in rural areas compared to urban areas. The consequences of these socioeconomic disparities on maternal and child health outcomes in Nigeria are profound and multifaceted. Maternal mortality disproportionately affects women from low-income backgrounds, with a lack of access to skilled healthcare providers and delays in seeking care contributing to higher mortality rates. Child mortality is similarly affected, with low-income families struggling to provide their children with adequate nutrition and healthcare, leading to a higher risk of preventable diseases and death.

Concept clarifications

Socioeconomic inequality

Inequalities manifest themselves in various forms, often glaringly apparent on the surface, where stark disparities serve as stark reminders of the stark divides in our world. These disparities, like a vivid tapestry of social injustice, encompass a multitude of aspects of human existence. First and foremost, the realm of sustenance unveils this stark contrast (Cattani, 2007). On one end of the spectrum, there are those who grapple with the grim reality of food scarcity, struggling to secure their daily bread. They confront the daunting specter of hunger, with each meal becoming a formidable challenge. Yet, paradoxically, just a stone's throw away, we witness a world of extravagance, where excess abounds, and food is discarded with reckless abandon. Lavish feasts and opulent banquets become emblematic of conspicuous consumption, while others barely scrape by. Similarly, the spatial landscape mirrors these inequalities with astonishing clarity. Grandiose mansions adorned with opulence and luxury stand tall, casting their long shadows over the impoverished shanty towns that dot the landscape nearby. It's a juxtaposition of extreme privilege against abject poverty, a living testament to the chasm that divides society. The contrast between these two worlds, mere steps apart, is a glaring indictment of the disparity in wealth and opportunity. Healthcare, too, reveals the stark divide that runs through our societies. Affluent individuals and their cherished pets enjoy access to cutting-edge medical care, where no expense is spared in preserving their well-being. It's a world where ailments are swiftly diagnosed, and remedies are readily available. Meanwhile, on the other side of the coin, millions struggle in the shadows, their access to even the most basic healthcare and medication tragically limited. This inequality in healthcare access becomes a matter of life and death for many, underscoring the injustice inherent in our systems.

According to Richmond-Bishop (2023), socio-economic inequality is a multifaceted concept that encompasses a wide range of disparities among individuals, all of which are intricately connected to their social class and economic standing within a society. These disparities extend beyond mere economic factors and encompass a broader spectrum of resources and opportunities available to individuals. Socio-economic inequality exerts a profound and far-reaching influence on a nation's economic trajectory, primarily by fostering a corrosive environment of political instability. This interconnected relationship between inequality and instability manifests in several critical ways, ultimately impeding sustainable economic growth (Giskemo, 2012). First and foremost, when a society grapples with stark disparities in wealth and income, it sows the seeds of discontent among its citizens. These disparities can lead to profound grievances, resentment, and a pervasive sense of injustice. As the chasm between the affluent and the marginalized widens, it undermines social cohesion and erodes trust in government

institutions, further exacerbating political tension. Such an environment of social unrest often spurs political movements and protests, as disenfranchised individuals and groups demand equitable opportunities and a fair share of the economic pie. The resultant political activism and agitation can disrupt the normal functioning of a country's institutions, deter foreign investment, and increase the risk of social conflicts or even revolutions. These disruptions pose a considerable threat to political stability and deter long-term economic planning and growth. Furthermore, when inequality persists, it can distort the policymaking process. Those with substantial wealth and resources may exert disproportionate influence over political decision-making, leading to policies that primarily serve the interests of the elite. This distortion in the allocation of resources and opportunities not only perpetuates inequality but also undermines the legitimacy of government institutions. When citizens perceive that their government prioritizes the few over the many, their trust in the political system erodes further, heightening the potential for instability. In the realm of economic growth, (Giskemo, 2012), concluded that these consequences of political instability are particularly detrimental. Foreign investors and businesses are often hesitant to commit resources to a politically volatile environment, fearing the risks associated with uncertainty. As a result, the flow of foreign direct investment, which is crucial for economic development, may dwindle. Domestic entrepreneurs and businesses may also be deterred from expanding or investing, as political instability introduces an unpredictable element into their operations.

Maternal and child health

World Health Organization, 2019), maternal health encompasses the overall well-being of women throughout the crucial phases of pregnancy, childbirth, and the postnatal period. It involves not only physical health but also encompasses emotional and social aspects. Ensuring maternal health is vital for the safety and well-being of both the mother and her newborn, as well as for promoting healthy family dynamics and communities. Adequate prenatal care, access to skilled healthcare professionals during labor and delivery, and postnatal support are essential components of maintaining and improving maternal health worldwide. Addressing maternal health is not only a matter of healthcare but also a fundamental human right and a cornerstone of public health efforts to reduce maternal mortality and improve the quality of life for women and their families.

According to Addisse (2003), maternal and child health (MCH) care is a critical component of healthcare systems worldwide, with a primary focus on ensuring the well-being of both mothers and children. This multifaceted healthcare service is dedicated to addressing the unique needs and challenges faced by women of childbearing age, typically spanning from 15 to 49 years, as well as infants, children, school-age individuals, and adolescents. It embodies a holistic approach that encompasses various aspects of physical, mental, and social health, aiming to foster a thriving and healthy future for these vulnerable populations. For mothers, MCH care begins before conception and extends through pregnancy, childbirth, and the postpartum period. It encompasses preconception counseling, family planning services, and antenatal care to ensure a healthy pregnancy. Additionally, it provides support during labor and delivery to minimize complications and promote safe childbirth practices. Postpartum care focuses on the physical and emotional well-being of mothers as they recover from childbirth and adapt to their new roles.

Children, from infancy through adolescence, are another vital component of MCH care. This comprehensive healthcare service aims to safeguard their health and development through vaccination programs, regular health check-ups, and nutritional support. It also addresses the unique needs of school-age children and adolescents by promoting physical fitness, mental health awareness, and sexual education, ensuring they transition into adulthood with the necessary knowledge and tools to lead healthy lives (Addisse, 2003). One of the overarching goals of MCH care is to reduce maternal and child mortality rates, which remain significant

challenges in many parts of the world. Achieving this goal involves improving access to essential healthcare services, such as prenatal care, skilled attendance during childbirth, and postnatal care for both mothers and newborns. Furthermore, MCH care extends beyond the clinic or hospital setting and emphasizes community-based interventions, health education, and awareness campaigns to empower mothers, families, and communities to make informed decisions about their health. In essence, maternal and child health care embodies a comprehensive, life-course approach to healthcare that recognizes the interconnectedness of the health and well-being of mothers and their children. By addressing the unique needs of women of reproductive age, infants, children, and adolescents, MCH care plays a pivotal role in promoting healthier communities and ensuring a brighter future for generations to come.

American Public Health Association (n.d.) asserted that maternal and child health is a critical public health concern for several compelling reasons. Firstly, it offers us the chance to eliminate preventable fatalities among women, children, and adolescents, significantly enhancing their overall health and quality of life (). By ensuring access to quality healthcare services, we can reduce maternal and child mortality rates and promote healthier futures. Secondly, it is alarming that a substantial number of women, infants, and children across the globe still lack access to fundamental resources such as essential healthcare services, education, clean air, safe water, sanitation, and proper nutrition. Addressing these disparities is crucial for bridging the gap in health outcomes and promoting social equity. Lastly, investments in maternal and child health not only save lives but also yield lifelong benefits. Quality healthcare, education, and preventive measures during pregnancy and childhood can have a lasting positive impact on an individual's physical and cognitive development, setting the stage for a healthier and more prosperous life. Therefore, prioritizing maternal and child health is not only a moral imperative but also a wise investment in the future well-being of communities and societies as a whole.

The impact of Socioeconomic Inequality on Maternal and Child Health in Nigeria

Socioeconomic inequality plays a significant role in maternal and child health outcomes in Nigeria, as in many other developing countries. Nigeria is the most populous country in Africa and faces numerous challenges related to healthcare access and delivery. When socioeconomic disparities are present, they can exacerbate existing health disparities and contribute to poor maternal and child health outcomes. Here are some key points to consider when discussing socioeconomic inequality in maternal and child health outcomes in Nigeria:

1. Access to healthcare services plays a pivotal role in exacerbating health disparities within Nigeria. This glaring inequality stems from various factors, perpetuating a stark divide in healthcare accessibility and quality across different socio-economic strata of the population. At the core of this issue lies economic disparity. Wealthier individuals enjoy a distinct advantage when it comes to accessing healthcare, primarily due to their financial capacity to afford quality medical services (Adedini, Odimegwu, Bamiwuye, Fadeyibi and De Wet, (2014). This financial cushion not only facilitates their ability to seek medical attention but also ensures they can access a wide range of healthcare options, including specialized treatments and medications that may be financially out of reach for others. Conversely, the less privileged segments of society encounter multifaceted obstacles on their path to receiving essential healthcare services. These challenges are intertwined and often create a formidable barrier to adequate medical care. Firstly, geographical disparities are a significant impediment. Many healthcare facilities are concentrated in urban areas, rendering them less accessible to individuals residing in rural or remote regions (Chukwudozie, 2016).). The vast distances that must be traversed to reach these healthcare centers impose an arduous burden, particularly on those without reliable transportation options. Secondly, the financial burden of healthcare services compounds the difficulties faced by marginalized populations. The cost of medical consultations, diagnostic tests, and medications

can be prohibitively high for individuals with limited financial resources. This financial strain can lead to delayed or incomplete treatments, exacerbating health issues and contributing to the perpetuation of health disparities. Moreover, the lack of comprehensive health insurance coverage in Nigeria further exacerbates the problem. While some individuals may have access to insurance, a significant portion of the population remains uninsured, leaving them particularly vulnerable to financial shocks resulting from unexpected medical expenses.

2. Nigeria grapples with a stark and distressing reality; it boasts one of the highest maternal mortality rates in the world. This harrowing statistic sheds light on a deeply concerning issue that affects countless women across the nation. Particularly, women hailing from low-income backgrounds face a disproportionately higher risk of succumbing to maternal mortality, casting a shadow of despair over their reproductive health journey (WHO, 2023; Olonade, Olawande, Alabi and Imhonopi, 2019)). The root causes of this grave problem are multifaceted and intertwined. A critical factor is the stark scarcity of accessible and proficient skilled birth attendants, who play a pivotal role in ensuring safe and successful childbirths (Adedini et al., 2014). For impoverished women, this scarcity is more than just a statistic; it is a harsh reality that jeopardizes their lives and the lives of their unborn children. The absence of these skilled attendants exacerbates the already precarious nature of childbirth for these women, making it a perilous gamble rather than a moment of hope and anticipation. Furthermore, the inadequate provision of antenatal care services is a critical issue that exacerbates the maternal mortality crisis. Low-income women often lack the financial means to access regular check-ups during their pregnancies, which not only helps monitor the health of both mother and child but also provides an opportunity for early detection and intervention in case of complications. The absence of antenatal care leaves these vulnerable women navigating their pregnancy journey in the dark, oblivious to the potential risks lurking in the shadows. Emergency obstetric care, another indispensable component of maternal health services, remains frustratingly elusive for many low-income women. This lack of access to timely and life-saving medical interventions during childbirth can transform what should be a joyous occasion into a heart-wrenching tragedy. The consequences of such neglect ripple through families and communities, leaving behind scars that endure for generations. However, the maternal mortality crisis in Nigeria is not solely confined to a lack of healthcare infrastructure. It is further exacerbated by the pervasive lack of education and awareness within impoverished communities. Many women in these areas are denied the essential knowledge required to make informed decisions about their reproductive health. This information gap perpetuates a cycle of vulnerability, where women are often unaware of the warning signs and potential complications associated with pregnancy and childbirth.

3. High child mortality rates are intricately intertwined with the socioeconomic status of a given population. The stark reality is that children hailing from low-income families find themselves trapped in a cycle of adversity, besieged by a multitude of challenges that imperil their very existence. This harrowing situation is exacerbated by several interconnected factors that conspire against them, casting a grim shadow on their prospects for a healthy and thriving life. One of the foremost adversaries faced by these children is the specter of malnutrition. (Seetha et al., 2018). Limited financial resources often leave their families unable to afford a balanced and nourishing diet (Daniel, 2020; Ritchie, 2021). Consequently, these young souls endure the cruel pangs of hunger and suffer the long-lasting consequences of stunted growth, weakened immune systems, and cognitive impairments, making them more susceptible to the ravages of disease. Moreover, the scarcity of resources in low-income households extends to the realm of clean water and sanitation. A dearth of access to safe drinking water and proper sanitation facilities places these children at risk of waterborne diseases, like diarrhea and cholera, which can swiftly claim their

innocent lives. The absence of basic hygiene infrastructure further exacerbates their vulnerability to illness. Inadequate healthcare is yet another formidable barrier these children face. Insufficient financial means limit their access to critical medical services and preventive care. Routine vaccinations, which are fundamental in safeguarding against deadly diseases, often remain beyond their reach. The lack of timely medical interventions leaves them defenseless against illnesses that should be preventable and treatable, condemning them to needlessly suffer and perish.

4. Education emerges as another crucial determinant of health outcomes, serving as a beacon of knowledge and empowerment for women in their journey through maternal and child health. The positive ripple effect of education extends across various dimensions. Women who have had the privilege of acquiring higher levels of education tend to possess a better understanding of maternal and child health practices (Weitzman, 2017; Herval, Oliveira, Gomes & Vargas, 2019). They are equipped with the knowledge and awareness needed to make informed decisions regarding their own well-being and that of their children. This knowledge encompasses proper nutrition, hygiene, immunization, and the importance of regular medical check-ups. Furthermore, educated women are more likely to actively seek antenatal care and family planning services. These services are invaluable in ensuring a safe and healthy pregnancy, as well as in making informed choices about family size and spacing. By accessing antenatal care, women can detect and address potential health issues early, thus reducing the risk of complications during pregnancy and childbirth.

5. In Nigeria, healthcare disparities are multifaceted and rooted in geographic, cultural, and social factors. These disparities manifest as significant challenges in accessing and receiving adequate healthcare services, particularly for economically disadvantaged populations in rural areas. Geographic disparities play a pivotal role in shaping healthcare outcomes across the country. Rural regions often grapple with a lack of healthcare infrastructure, exacerbating the difficulties faced by economically marginalized individuals residing there (Rural Health Information Hub, 2022). Access to essential maternal and child health services becomes a daunting task in these areas, compounding the existing healthcare divide. Moreover, the interplay between socioeconomic inequality and cultural and social factors further deepens these disparities. Cultural norms wield substantial influence over healthcare decisions, especially in matters like family planning. These norms may either facilitate or hinder access to reproductive health services. Additionally, the pervasive social stigma surrounding healthcare-seeking behaviors, particularly for women, presents a formidable barrier (Adedini, Babalola, Ibeawuchi, Omotoso, Akiode, Odeku, 2018). Women may be deterred from seeking necessary medical attention due to societal judgment and discrimination. Taken together, these factors intertwine to create a complex web of healthcare disparities in Nigeria. Addressing these issues requires a comprehensive approach that not only focuses on improving healthcare infrastructure in underserved areas but also seeks to promote cultural sensitivity and combat social stigma, ensuring that all individuals, regardless of their geographic location or social circumstances, can access and benefit from essential healthcare services.

Conclusion

The critical analysis of the influence of socioeconomic inequality on maternal and child health outcomes in Nigeria reveals a deeply entrenched and multifaceted challenge. The disparities in income, education, employment opportunities, and access to healthcare services have far-reaching consequences on the well-being of mothers and children in the country. These disparities exacerbate existing health disparities and contribute to alarmingly high maternal and child mortality rates, highlighting the urgent need for comprehensive interventions. The impact

of socioeconomic inequality on healthcare access is undeniable. Wealthier individuals have a distinct advantage in terms of accessing quality healthcare, while the less privileged face formidable barriers, including geographic disparities and financial burdens. This unequal access to healthcare services perpetuates a cycle of vulnerability, where low-income families struggle to obtain essential medical care, leading to preventable health issues and fatalities.

Maternal mortality rates in Nigeria are among the highest in the world, and low-income women are disproportionately affected. The scarcity of skilled birth attendants, inadequate antenatal care, and the absence of emergency obstetric care further compound the risks faced by these women. Additionally, the lack of education and awareness perpetuates the maternal mortality crisis, as many women are unaware of potential complications during pregnancy and childbirth. Child mortality rates are also closely linked to socioeconomic status. Children from low-income families are at greater risk of malnutrition, waterborne diseases, and limited access to healthcare. The absence of resources for balanced nutrition, clean water, sanitation, and vaccinations leaves them vulnerable to preventable illnesses and premature death. Education emerges as a powerful tool in addressing these disparities. Educated women are better equipped to make informed decisions about maternal and child health, access antenatal care, and utilize family planning services. Education empowers women with knowledge and awareness, breaking the cycle of ignorance and vulnerability. Furthermore, geographic, cultural, and social factors play a significant role in healthcare disparities. Rural areas face a dearth of healthcare infrastructure, exacerbating the difficulties faced by economically disadvantaged populations. Cultural norms and social stigma can deter individuals, particularly women, from seeking necessary medical attention.

Recommendations

1. To improve access to healthcare services, it is essential to invest in healthcare infrastructure. This includes expanding healthcare facilities in underserved areas, which can help reduce geographical disparities in healthcare access. By building more clinics, hospitals, and healthcare centers in remote regions, we can ensure that people have easier access to medical care when needed.
2. Addressing maternal mortality rates requires a targeted approach. One crucial step is to train and deploy skilled birth attendants, especially in rural areas. These skilled professionals can provide essential care during childbirth, ensuring that mothers and infants are safe. By focusing on enhancing childbirth safety through skilled attendants, we can make significant strides in reducing maternal mortality.
3. To combat child mortality, it is vital to promote nutrition programs, particularly for low-income families. These programs can ensure that children have access to proper nutrition, which is essential for their growth and development. By providing support and resources to families in need, we can help improve children's overall health and reduce child mortality rates.
4. Education plays a crucial role in improving maternal and child health practices. To empower women with knowledge about these practices, it is essential to support girls' education, especially in low-income communities. By encouraging and facilitating girls' access to quality education, we can equip them with the information and skills they need to make informed decisions regarding their health and the health of their children.
5. Healthcare disparities are often more pronounced in rural areas. To address these disparities, we should expand rural healthcare initiatives. This could involve the introduction of mobile clinics and telemedicine services, which can help bridge the gap in healthcare access. Mobile clinics can reach remote communities, while telemedicine can

provide medical consultations and advice remotely, ensuring that even those in distant areas can receive the care they need.

References

- Olonade, O., Olawande, T. I., Alabi, O. J. & Imhonopi, D. (2019). Maternal Mortality and Maternal Health Care in Nigeria: Implications for Socio-Economic Development. *Open Access Macedonian Journal of Medical Sciences*, 7(5):849-855. doi: 10.3889/oamjms.2019.041.
- World Health Organization (WHO) (2019 June 25). Maternal health in Nigeria: Generating information for action. <https://www.who.int/news/item/25-06-2019-maternal-health-in-nigeria-generating-information-for-action>
- WHO (2023 March). Maternal mortality: The urgency of a systemic and multisectoral approach in mitigating maternal deaths in Africa. https://files.aho.afro.who.int/afahobckpcontainer/production/files/iAHO_Maternal_Mortality_Regional_Factsheet.pdf
- Egbon, O.A., Bogoni, M.A., Babalola, B.T., Babalola, B. T. & Louzada, F. (2022). Under age five children survival times in Nigeria: a Bayesian spatial modeling approach. *BMC Public Health*, 22, 2207. <https://doi.org/10.1186/s12889-022-14660-1>
- UNICEF (2023, June 1). Child Mortality .UNICEF DATA. <https://data.unicef.org/topic/child-survival/under-five-mortality/#:~:text=The%20global%20under%2Dfive%20mortality%20rate%20declined%20by%2059%20per,a%20matter%20of%20urgent%20concern.>
- WHO (2018 February 22). Health inequities and their causes. [www.who.int. https://www.who.int/news-room/facts-in-pictures/detail/health-inequities-and-their-causes](https://www.who.int/news-room/facts-in-pictures/detail/health-inequities-and-their-causes)
- Oxfam International. (2022, May 25). Nigeria: extreme inequality in numbers . Oxfam International. <https://www.oxfam.org/en/nigeria-extreme-inequality-numbers>
- World Bank (2021 April). Poverty & Equity Brief Nigeria. https://databankfiles.worldbank.org/public/ddpext/download/poverty/987B9C90-CB9F-4D93-AE8C-750588BF00QA/AM2020/Global_POVEQ_NGA.pdf
- Sumankuuro, J., Mahama, M. Y., Crockett, J., Wang, S. & Young, J. (2019). Narratives on why pregnant women delay seeking maternal health care during delivery and obstetric complications in rural Ghana. *BMC Pregnancy and Childbirth* 19(1). DOI: 10.1186/s12884-019-2414-4
- Cattani, A. D. (2007). Socioeconomic inequalities: concepts and research problems. *Sociologias*, 3. http://socialsciences.scielo.org/pdf/s_soc/v3nse/scs_a01.pdf
- Richmond-Bishop, I. (2023, February 27). Tackling Socio-Economic Inequality In The UK Is An Urgent Human Rights Issue. EachOther. <https://eachother.org.uk/tackling-socio-economic-inequality-in-the-uk-is-an-urgent-human-rights-issue/#:~:text=Socio%2Deconomic%20inequality%20relates%20to,education%2C%20and%20For%20income.>
- Giskemo, G. G. (2012). Exploring the relationship between socioeconomic inequality, political instability and economic growth: Why do we know so little? *Chr. Michelsen Institute (CMI)*. <https://www.cmi.no/publications/file/4379-exploring-the-relationship-between-socio-economic.pdf>
- Addisse, M. (2003). Maternal and Child Health Care. University of Gondar lecture notes. https://www.cartercenter.org/resources/pdfs/health/ephti/library/lecture_notes/health_science_students/ln_maternal_care_final.pdf
- WHO (2019, September 23). [www.who.int. https://www.who.int/health-topics/maternal-health](https://www.who.int/health-topics/maternal-health)

- American Public Health Association (n.d.). Maternal and Child Health. <https://www.apha.org/topics-and-issues/maternal-and-child-health>
- Adedini, S.A., Odimegwu, C., Bamiwuye, O., Fadeyibi, O. & De Wet, N. (2014). Barriers to accessing health care in Nigeria: implications for child survival. *Global Health Action*, 14;7:23499. doi: 10.3402/gha.v7.23499. PMID: 24647128; PMCID: PMC3957799.
- Chukwudozie, A. (2016). Inequalities in Health: The Role of Health Insurance in Nigeria . *Journal of Public Health in Africa*. DOI: 10.4081/jphia.2015.512
- WHO (2023). Maternal and reproductive health. <https://www.who.int/data/gho/data/themes/maternal-and-reproductive-health>
- Olonade, O., Olawande, T.I., Alabi, O.J. & Imhonopi, D. (2019). Maternal Mortality and Maternal Health Care in Nigeria: Implications for Socio-Economic Development. *Open Access Macedonian Journal of Medical Science*, 7(5):849-855. doi: 10.3889/oamjms.2019.041.
- Seetha, A., Tsusaka, T.W., Munthali, T.W., Musukwa, M., Mwangwela, A., Kalumikiza, Z., Manani, T., Kachulu, L., Kumwenda, N., Musoke, M. & Okor, P. (2018). How immediate and significant is the outcome of training on diversified diets, hygiene and food safety? An effort to mitigate child undernutrition in rural Malawi. *Public Health Nutrition*, 21(6):1156-1166. doi: 10.1017/S1368980017003652. Epub 2018 Jan 17
- Daniel, C. (2020). Is healthy eating too expensive?: How low-income parents evaluate the cost of food. *Social Science & Medicine*, 248:112823. doi: 10.1016/j.socscimed.2020.112823.
- Ritchie, H. (2021). Three billion people cannot afford a healthy diet. Published online at [OurWorldInData.org](https://ourworldindata.org/diet-affordability). <https://ourworldindata.org/diet-affordability>.
- Weitzman, A. (2017). The effects of women's education on maternal health: Evidence from Peru. *Social Science & Medicine*, 180:1-9. doi: 10.1016/j.socscimed.2017.03.004.
- Herval, Á.M., Oliveira, D.P.D., Gomes, V.E., Vargas, A.M.D. (2019). Health education strategies targeting maternal and child health: A scoping review of educational methodologies. *Medicine (Baltimore)*, 98(26):e16174. doi: 10.1097/MD.00000000000016174.
- Rural Health Information Hub (2022). Healthcare Access in Rural Communities Overview. <https://www.ruralhealthinfo.org/topics/healthcare-access>
- Adedini, S.A., Babalola, S., Ibeawuchi, C., Omotoso, O., Akiode, A., Odeku, M. (2018). Role of Religious Leaders in Promoting Contraceptive Use in Nigeria: Evidence From the Nigerian Urban Reproductive Health Initiative. *Global Health Science Practice*, 6(3):500-514. doi: 10.9745/GHSP-D-18-00135.