

AMELIORATING CHILD AND MATERNAL FATALITIES THROUGH ECONOMIC EMPOWERMENT IN DEVELOPING NATIONS

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Abstract

This study explored the role of economic empowerment in reducing child and maternal mortality among childbearing mothers in developing countries, specifically in South East, Nigeria. The research employed a correlation survey research design, with a sample of 1,200 childbearing mothers selected through a multi-stage sampling technique. Data were collected using a structured questionnaire, which was validated by experts and tested for reliability using Cronbach's Alpha. The study found a significant positive correlation ($r = 0.72$) between economic empowerment and maternal mortality, indicating that improved economic empowerment among childbearing mothers is associated with a reduction in maternal mortality. The study also revealed that a lack of economic independence, particularly among non-working mothers, increases the risk of both maternal and child deaths during emergencies. Based on these findings, the study recommends the implementation of intervention strategies that focus on providing economic empowerment opportunities for childbearing mothers. This study contributes to the body of knowledge by emphasizing the critical link between economic empowerment and maternal-child health outcomes, advocating for policy interventions to enhance the economic independence of mothers to reduce health risks.

Keywords: Economic, women, empowerment, child and maternal mortality

Introduction

Child and maternal fatalities represent significant public health and socio-economic challenges in developing countries, hindering both individual well-being and broader societal development. Globally, maternal mortality, defined as deaths resulting from complications during pregnancy, childbirth, or the postpartum period, remains unacceptably high, with developing nations accounting for approximately 94% of all maternal deaths (World Health Organization, 2021). Similarly, child mortality, particularly deaths occurring within the first five years of life, continues to be a critical issue. Addressing these intertwined challenges has become a priority for international health and development efforts, with economic empowerment emerging as a pivotal strategy for mitigation. Economic empowerment refers to the process of equipping

individuals particularly women with the skills, resources, and opportunities necessary to participate meaningfully in economic activities and decision-making. In the context of maternal and child health, economically empowered women are better positioned to access healthcare services, maintain adequate nutrition, and make informed decisions about their health and that of their children (Doepke, Tertilt & Voena, 2012). This connection between economic empowerment and health outcomes underscores its potential as a transformative approach to reducing child and maternal mortality rates in developing countries.

In sub-Saharan Africa, and Nigeria in particular, historical, cultural, and socio-economic factors have contributed to the marginalization of women in economic and political spheres. Traditionally, Nigerian women played central roles in agriculture, trade, and governance, significantly contributing to community development. However, colonial policies and patriarchal systems relegated women to domestic roles, limiting their economic participation and access to education and healthcare (Okpalaoka, 2015). These structural inequalities have persisted, exacerbating vulnerabilities among women and children, particularly in rural and economically disadvantaged regions. The relationship between economic empowerment and health outcomes is evident in several studies. Empowered women tend to invest in their families' health, education, and nutrition, leading to improved child survival rates and maternal health outcomes (Zaky, Armanious & Hussein, 2014). For instance, women with financial autonomy are more likely to seek antenatal care, ensure skilled attendance during childbirth, and access postnatal care services, reducing the risks of complications and fatalities. Furthermore, economic empowerment fosters resilience, enabling women to navigate socio-economic challenges and contribute meaningfully to their communities.

In Nigeria's Southeast region, which comprises Abia, Anambra, Ebonyi, Enugu, and Imo states, maternal and child mortality rates, while lower than the national average, remain significant concerns. The region's estimated population of over 21.9 million places immense pressure on healthcare systems and resources, exacerbating challenges for women and children in low-income households (Mberu, 2007). Many women in the region face barriers such as limited access to healthcare facilities, inadequate transportation, and financial constraints, which impede timely medical intervention during pregnancy and childbirth (Meh et al., 2019). Maternal mortality in Nigeria is driven by preventable causes, including severe bleeding, infections, hypertensive disorders,

and unsafe abortions. Similarly, child mortality often results from preventable or treatable conditions such as pneumonia, diarrhea, and malnutrition. The lack of timely access to quality healthcare exacerbates these issues, especially for economically disadvantaged populations. However, evidence suggests that economic empowerment initiatives targeting women can mitigate these challenges. For example, programs that provide microfinance opportunities, vocational training, and community support have demonstrated significant impacts on women's health-seeking behaviors and overall family well-being (Olonade et al., 2019).

The potential of economic empowerment to address maternal and child health challenges is supported by global and regional policies. Initiatives such as the United Nations Sustainable Development Goals (SDGs), particularly Goal 3 (Good Health and Well-Being) and Goal 5 (Gender Equality), emphasize the importance of empowering women to achieve health and development outcomes. Additionally, national programs in Nigeria, such as the Maternal, Newborn, and Child Health (MNCH) strategy, highlight the role of community engagement and economic empowerment in reducing mortality rates. Empowering women economically enables them to break free from cycles of poverty, access essential healthcare services, and advocate for their rights within their families and communities. By addressing the socio-economic determinants of health, economic empowerment serves as a critical tool for improving maternal and child health outcomes in the Southeast region of Nigeria and other developing nations. It is imperative to recognize the interconnectedness of health, education, and economic opportunities in crafting sustainable solutions to these challenges. This study underscores the need for targeted economic empowerment strategies to mitigate child and maternal mortality. By focusing on resource allocation, policy implementation, and community engagement, stakeholders can harness the transformative power of economic empowerment to foster sustainable development and improve the quality of life for women and children.

In the Southeastern region of Nigeria, childbearing mothers face significant challenges in accessing healthcare facilities, a reality rooted in socio-economic barriers that exacerbate maternal and child mortality. The inability to access healthcare services is attributed to various factors, including financial constraints, economic instability, and systemic poverty. These challenges often lead to devastating consequences such as death, prolonged suffering, and profound economic losses for families and communities. Maternal and child mortality in the region is further compounded by poor maternal and child health

indicators. These include limited capacity to initiate or seek medical care, insufficient financial resources to pay for prescribed medications, and an inability to demand referral services when necessary. Additionally, critical decisions such as the choice of healthcare facility, place of delivery, or access to emergency care services are often hindered by the financial and social vulnerabilities of childbearing mothers. However, efforts to address these challenges have emphasized the importance of maternal economic empowerment as a catalyst for improving health outcomes. Economic empowerment equips mothers with the financial autonomy and decision-making capacity needed to navigate healthcare systems effectively. Empowered mothers are more likely to ensure adequate nutrition, attend antenatal care, access emergency services during complications, and pay for necessary medical treatments. These capabilities are crucial in mitigating maternal and child mortality, particularly in a region where traditional economic pressures often place a disproportionate burden on fathers to meet family needs.

Current global economic challenges and uncertainties have intensified the pressures faced by families, particularly in developing regions like Southeastern Nigeria. Economic empowerment of childbearing mothers emerges as a critical strategy for alleviating these pressures and addressing the socio-economic determinants of health. Empowered mothers can play an active role in improving feeding habits, initiating healthcare visits during emergencies, and contributing to family financial stability. Such empowerment not only enhances self-reliance but also strengthens maternal and child health systems. Despite the recognition of economic empowerment as a transformative approach, gaps remain in its integration into maternal and child health strategies. Many existing interventions in the Southeastern region focus on short-term relief efforts, overlooking the systemic barriers that prevent women from achieving sustained economic independence. Additionally, cultural and institutional constraints, such as limited access to vocational training and microfinance opportunities, continue to impede progress. The gap in addressing the socio-economic factors driving maternal and child mortality is further highlighted by the limited focus on targeted, scalable economic empowerment programs for mothers. While studies have acknowledged the potential of such programs, there is insufficient evidence on their implementation and long-term impact in the specific context of Southeastern Nigeria. For instance, existing maternal health interventions rarely incorporate strategies for enhancing financial literacy, promoting entrepreneurial activities, or improving access to community-based savings programs tailored to the needs of childbearing mothers. Therefore, to reduce maternal and child mortality rates to their barest minimum and enhance survival outcomes in Southeastern Nigeria, economic empowerment must become a central focus of health and development policies. Integrating economic empowerment initiatives into healthcare strategies

will position childbearing mothers to overcome financial barriers, ensure timely access to healthcare services, and improve overall family well-being. This study aims to address these gaps by exploring sustainable models of maternal economic empowerment that align with the unique socio-economic realities of the Southeastern region.

Statement of the Problem

Maternal and child health is a cornerstone of sustainable development and a key indicator of a nation's overall well-being. Ideally, every childbearing mother should have unhindered access to quality healthcare services, including antenatal care, safe delivery options, and postnatal care. Economic stability should empower mothers to make informed decisions about healthcare, ensuring proper nutrition, timely medical attention, and the ability to cover necessary medical expenses. In such an ideal situation, maternal and child mortality rates would be significantly reduced, and families would thrive in a healthier and more productive society. However, the reality in Southeastern Nigeria falls far short of this ideal. Childbearing mothers in the region face numerous socio-economic and systemic challenges that hinder their ability to access essential healthcare services. Many mothers lack the financial resources to initiate medical care, purchase prescribed medications, or seek emergency health services. Cultural and systemic barriers often exacerbate these issues, leading to poor maternal and child health outcomes. The region continues to report high rates of child and maternal mortality, largely driven by limited access to healthcare facilities, poverty, and a lack of financial autonomy among women. This gap between the ideal and the real highlights the urgent need to address the economic empowerment of childbearing mothers. Economic empowerment has the potential to improve maternal decision-making and access to healthcare services, enabling mothers to attend antenatal clinics, respond effectively to emergencies, and contribute to family income in ways that reduce dependency and enhance overall well-being. This study aims to explore the critical role of economic empowerment in improving maternal and child health outcomes in Southeastern Nigeria. It seeks to investigate the socio-economic factors that limit access to healthcare services and to propose sustainable strategies that integrate economic empowerment into maternal health policies and programs. Hence, by addressing these challenges, the study intends to provide actionable insights into reducing maternal and child mortality rates in the region.

Purpose of this Study

The aim of the study was to examine the role of economic empowerment in improving maternal and child health outcomes in Southeastern Nigeria. The study specifically aimed to:

1. examine the Relationship between Economic Empowerment and Child Mortality of Child Bearing Mothers?
2. examine the Relationship between Economic Empowerment and Maternal Mortality of Child Bearing Mothers?

Research Questions

The following research questions were answered in the study.

1. What is the Relationship between Economic Empowerment and Child Mortality of Child Bearing Mothers?
2. What is the Relationship between Economic Empowerment and Maternal Mortality of Child Bearing Mothers?

Hypotheses

The following hypotheses are tested at a 0.05 level of significance

Ho₁: There is no significant difference between the mean rating score of Regression Analysis of economic empowerment and child mortality among child bearing mothers.

Ho₂: is no significant difference between the mean rating score of Regression Analysis of economic empowerment and maternal mortality among child bearing mothers

Methodology

This study adopted correlation survey research design. Nworgu (2015) noted that correlational research design is a type of research design in which the researcher seeks to establish the relationship that exists between two or more variables. This design enables the researcher to find out the existing relationship between dependent and independent variables using regression analysis. This design was considered appropriate for the study because the researcher's interest was to determine the relationship existing with sustainable economic empowerment, and child and maternal mortality of child bearing mothers. The population of this study consisted of 640,447 childbearing mothers in South East, Nigeria. The sample for the study was 1,200 child bearing mothers in South East, Nigeria. Multi-stage sampling technique was used. In the first stage, simple random sampling technique was used to select three (3) states (Abia, Ebonyi and Enugu

states) out of the five (5) states in the study area. In the second stage, purposive sampling technique was used to select 400 child bearing mothers from each state. This gave a total number of 1,200 respondents for the study. The instrument for data collection was a researcher developed questionnaire titled “Women Empowerment, Child and Maternal Mortality of Child Bearing Mothers Questionnaire” (WECMQ). The instrument was divided into two parts: Section A and B. Section A elicited information on the demographic data of the respondents. While section B has 10 items, and elicited information on the extent of relationship between economic empowerment and child and maternal mortality among child bearing mothers. The respondents were requested to indicate their degree of agreement or disagreement on a four-point rating scale as follows: VHE = Very High Extent = (4 points), HE = High Extent (3 points), LE = Low Extent = (2 points), Very Low Extent = (1 point). The instrument was face validated by three experts, two from Sociology of Education Unit, Department of Educational Foundations, and one from Measurement and Evaluation Unit, Department of Science Education, all from the Faculty of Education, University of Nigeria, Nsukka. 30 copies of the validated instrument (WECMQ) were administered on thirty child bearing mothers in Akwa Ibom State, South-South Nigeria that do not form part of the area of the present study, but possess similar characteristics with the area of this study. Their responses were analyzed using Cronbach Alpha. Cronbach alpha was used because the items in the instrument were not dichotomously scored. The result estimate was 0.87 for WECMQ. Research questions were answered using linear regression analysis while the hypotheses were tested using t-test associated with linear regression analysis at 0.05 level of significance. The ethical approval of the study was obtained from the Health Research and Ethics Committee University of Nigeria Teaching Hospital, Enugu Nigeria. All participants in the study consented.

Results

Table 1: The relationship between economic empowerment and child mortality among child bearing mothers in South East, Nigeria

Variable	\bar{X}	SD	N	r	R ²
Economic Empowerment	77.05	14.06	47	0.79	0.63
Child Mortality	84.00	38.52			

R² = coefficient of determination

The result of the analysis presented in Table 1 above shows the correlation coefficient of the relationship between economic empowerment of women and child mortality among child bearing mothers in South East, Nigeria. The result shows that the correlation coefficient between economic empowerment of women and child mortality among child bearing mothers was 0.79. This means there was a positive relationship between economic empowerment of women and child mortality among child bearing mothers in South East, Nigeria. The coefficient of determination associated with the correlation coefficient of 0.79 is 0.63. The coefficient of determination (0.63) shows that 63% of child mortality among child bearing mothers is predicted by economic empowerment of women. This is an indication that 37% of child mortality is attributed to other factors order than economic empowerment of women.

Table 2: Regression Analysis of economic empowerment and child mortality among child bearing mothers

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	303698.550	1	303698.550	75.995	0.00
Residual	179834.003	45	3996.311		
Total	483532.553	46			

$\alpha = 0.05$, S = Significant

In order to test hypothesis 1 (H_{01}), regression analysis was used. The result in Table 2 shows the regression analysis of the significant relationship between economic empowerment and child mortality among child bearing mothers. Result shows that an F-ratio of 75.99 with associated exact probability value of 0.00 was obtained. This exact probability value of 0.00 is less than 0.05 level of significance set as bench mark for testing the hypothesis and the result was found to be significant. The null hypothesis which stated that there is no significant relationship between economic empowerment and child mortality among child bearing mothers in South East, Nigeria is therefore rejected and inference drawn is that, there is a significant relationship between economic empowerment and child mortality among child bearing mothers in South East, Nigeria.

Table 3: Correlation Analysis of Economic Empowerment and Maternal Mortality among Child Bearing Mothers in South East, Nigeria

Variable	\bar{X}	SD	N	r	R ²
Economic Empowerment	77.05	14.06	47	0.72	0.55
Maternal Mortality	29	9.59			

R² = coefficient of determination

The result of the analysis presented in Table 3 above shows the correlation coefficient of the relationship between economic empowerment of women and maternal mortality among child bearing mothers in South East, Nigeria. Results show that the correlation coefficient between economic empowerment of women and maternal mortality among child bearing mothers was 0.72. This means there was a positive relationship between economic empowerment of women and maternal mortality among child bearing mothers in South East, Nigeria. The coefficient of determination associated with the correlation coefficient of 0.72 is 0.55. The coefficient of determination (0.55) shows that 55% of maternal mortality among child bearing mothers is predicted by economic empowerment of women. This is an indication that 45% of maternal mortality is attributed to other factors order than economic empowerment of women.

Table 4: Regression Analysis of economic empowerment and maternal mortality among child bearing mothers

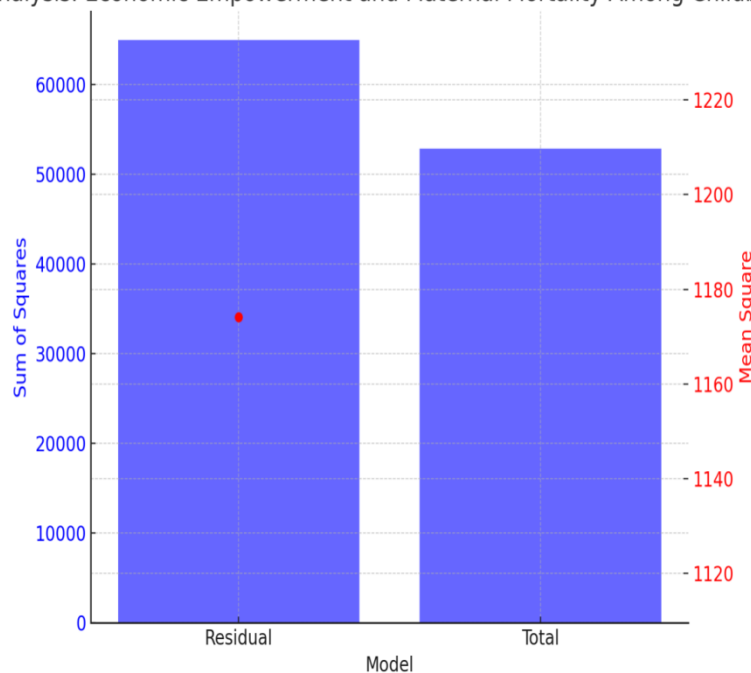
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	64906.880	1	64906.880	55.280	0.00
Residual	52837.078	45	1174.157		
Total	117743.957	46			

$\alpha = 0.05$, S = Significant

In order to test hypothesis 4 (H_{02}), regression analysis was used. The result in Table 4 shows the regression analysis of the significant relationship between economic empowerment and maternal mortality among child bearing mothers. Result shows that an F-ratio of 55.28 with associated exact probability value of 0.00 was obtained. This exact probability value of 0.00 is less than 0.05 level of significance set as bench mark for testing the hypothesis and the result was found to be significant. The null hypothesis which stated that there is no significant relationship between economic empowerment and maternal mortality among child bearing mothers in South East, Nigeria is therefore rejected and

inference drawn is that, there is a significant relationship between economic empowerment of women and maternal mortality among child bearing mothers in South East, Nigeria

Regression Analysis: Economic Empowerment and Maternal Mortality Among Childbearing Mothers



The above combo chart presents the results of a regression analysis exploring the relationship between economic empowerment and maternal mortality among childbearing mothers. The bar plot shows the Sum of Squares for both the regression and residual models, with the dashed line indicating the Mean Square for the residuals, starting from the second model (Residual). The Sum of Squares for the regression model is considerably larger than that for the residuals, highlighting a strong relationship between the variables. The F-value of 55.280, calculated from the ratio of the Mean Squares, suggests a significant model. Furthermore, the p-value of 0.00, which is less than the alpha level of 0.05, confirms the statistical significance of the regression model.

Discussion

The findings of the study revealed that there is a positive relationship between the economic empowerment of childbearing mothers and child mortality in South East, Nigeria. This result aligns with the studies of Tacke and Waldmann (2013) and Hossain and Hoque (2015), which explored the effects of relative income and

women's autonomy on infant mortality. Their findings highlighted that increasing the income of women, especially childbearing mothers, and enhancing their participation in household decision-making can significantly reduce child mortality rates. Additionally, the findings of Deaton (2010), Gettler (2010), and Trevathan (2010) support the idea that women's income has a more substantial positive impact on children's well-being compared to men's income.

Furthermore, the findings of Birech (2013) revealed that approximately 800 children die daily from preventable causes related to childbirth and rearing practices, with 99% of these deaths occurring in developing countries. This mortality rate is especially high in communities where cultural norms place men in higher economic positions, leading to women's economic dependence on their male counterparts. This lack of economic independence exposes women, particularly childbearing mothers, to greater risks in managing child mortality. The NDHS (2018) also noted a decline in child mortality as family wealth increased, reinforcing the study's findings. Ajuzie (2012) emphasized the need for greater efforts by the government, non-governmental organizations, and society at large to empower childbearing mothers, enabling them to meet their basic needs, including healthcare, nutrition, and self-reliance, thereby reducing the impact of child mortality on families and society.

The findings of the study further revealed a significant relationship ($p < 0.05$) between economic empowerment and child mortality. This emphasizes the need to empower women in South East Nigeria with the resources and skills necessary to seek healthcare services for their children, ultimately saving lives. Additionally, the findings of the study revealed a positive relationship between economic empowerment and maternal mortality among childbearing mothers in South East, Nigeria. This finding is consistent with the research by Aregawi and Haileslasie (2013), which highlighted that women must be economically empowered to overcome the challenges of maternal mortality. Empowering women to make informed decisions about healthcare, particularly regarding antenatal visits, is essential for improving maternal health outcomes. The findings of this study also align with the research of WHO (2013) in Bangladesh and NDHS (2018), which demonstrated that economic empowerment, such as access to micro-credit facilities, can significantly improve women's health and survival chances.

The study's hypothesis testing the relationship between economic empowerment and maternal mortality revealed a significant relationship

($p < 0.05$). This reinforces the importance of economic empowerment in reducing maternal mortality. To save the lives of childbearing mothers, concerted efforts from the government, donor agencies, non-governmental organizations, and private individuals are crucial. Providing women with access to land for large-scale agriculture, micro-credit, and other resources will enable them to access healthcare services during pregnancy and childbirth, thereby improving maternal survival rates.

Educational Implications of the Study

The study's findings suggest important implications for policymakers, healthcare providers, educators, and community leaders in addressing child and maternal mortality in South East Nigeria. For policymakers, the study highlights the need for economic empowerment initiatives as part of public health policies. This includes creating access to financial resources, employment opportunities, and land for farming, enabling childbearing mothers to afford healthcare services and make informed health decisions. Healthcare providers are encouraged to offer affordable services and financial support mechanisms to ensure that economic barriers do not prevent women from seeking necessary care. Educational programs focusing on health literacy and financial management can empower mothers to make better health decisions for themselves and their children. Community leaders can play a role by implementing programs that teach entrepreneurial skills, financial literacy, and sustainable farming practices, helping women achieve financial independence. The study also suggests integrating maternal and child health education into school and adult education curricula to raise awareness and pass on critical knowledge to future generations. Overall, sustainable economic empowerment strategies are needed to ensure long-term improvements in maternal and child health.

Contribution to Knowledge

The study contributes to knowledge by highlighting the critical role that economic empowerment plays in reducing child and maternal mortality among childbearing mothers in South East, Nigeria. Through its findings, the research emphasizes that improving the financial independence of women can significantly impact their ability to access essential healthcare services, thereby enhancing their overall health and survival during pregnancy and childbirth. The study also underscores the importance of creating policies that prioritize economic empowerment, such as access to micro-credit, land for agriculture, and

employment opportunities, to help women become self-reliant. Additionally, it contributes to the understanding that childbearing mothers' economic empowerment has broader societal benefits, including reducing the economic burden of child and maternal deaths on families and communities. The research aligns with existing literature but further clarifies the direct connection between economic stability and health outcomes, offering new insights into policy and intervention strategies to improve maternal and child health in Nigeria.

Conclusion

Child and maternal mortality among childbearing mothers has persisted over the years in Southeastern Nigeria, despite efforts by the government and private individuals. This persistent challenge is largely attributed to the inadequate focus on empowering financially vulnerable childbearing mothers. Efforts to address the issue have predominantly centered on building more hospitals and improving the physical infrastructure of healthcare facilities, neglecting the economic empowerment of these mothers. The findings of this study revealed a significant relationship between economic empowerment and the reduction of child and maternal mortality rates. It was therefore concluded that economic empowerment plays a crucial role in enhancing the survival of both children and their mothers. Specifically, empowering childbearing mothers economically equips them to access quality healthcare services during pregnancy and delivery, seek referrals when necessary, ensure proper immunization for their children, and provide good nutrition and timely medical care. Based on the findings, it is essential for policymakers to design and implement targeted intervention strategies that prioritize the economic empowerment of childbearing mothers. These interventions should include providing access to economic resources, opportunities for paid employment, land for large-scale farming, entrepreneurial skill development, and the right to own property and other productive assets. Financial independence and self-reliance will enable these mothers to make informed healthcare decisions, secure essential medical services, and improve the overall well-being of their families. Such holistic approaches are indispensable for reducing child and maternal mortality rates in the region.

Recommendations

Based on the findings of the study, the following key recommendations are proposed to enhance the economic empowerment of childbearing mothers and reduce child and maternal mortality in South East, Nigeria:

1. The government should implement policies that support economic empowerment for childbearing mothers, including access to micro-credit, land for agriculture, and resources for entrepreneurial activities.
2. The government should create employment opportunities for women to provide financial independence, enabling them to access healthcare services during pregnancy and childbirth.
3. The government should facilitate easier access to healthcare services for economically disadvantaged childbearing mothers, particularly through subsidized healthcare schemes for prenatal and postnatal care.
4. There should be development of community-based economic empowerment programs offering vocational training, skills development, and access to small-scale financing for rural childbearing mothers.
5. The government should collaborate with non-governmental organizations and donor agencies to provide financial and educational resources to empower women in South East Nigeria.

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