Assessing the Impact of Universal Healthcare Coverage on Maternal and Child Health Outcomes in Nigeria

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Abstract. *The purpose of this research was to determine how universal healthcare coverage in Nigeria would affect maternal and infant health. 500 households across four states in Nigeria provided information for this cross-sectional research. Data analysis using descriptive statistics revealed that the NHIS has helped increase access to and use of maternal and child healthcare services, leading to a decrease in maternal and child death rates. Inadequate funding, infrastructure, and health workforce were also cited as obstacles to implementing the NHIS in the study. Maximizing the NHIS's effect and achieving further gains in maternal and child health outcomes will require addressing these challenges and social determinants of health, such as poverty, education, and access to clean water and sanitation. These results have substantial implications for healthcare policymakers and providers in Nigeria and other low-income nations. Improving maternal and child health outcomes and decreasing household healthcare expenses are two major goals of universal healthcare coverage initiatives like the NHIS.*

Keywords: *Universal Healthcare Coverage, Maternal Health, Child Health*

INTRODUCTION

With an estimated 917 maternal deaths per 100,000 live births and 132 under-five deaths per 1,000 live births, Nigeria has one of the highest maternal and child mortality rates in the globe, as reported by Oyekale & Oyekale (2020). Improving the health of mothers and children in Nigeria could be facilitated by expanding access to healthcare for all Nigerians. This thesis aims to evaluate how the introduction of universal healthcare in Nigeria has affected maternal and infant health. The purpose of this research is to learn how national health care affects the health of mothers and their children through factors like prenatal care, vaccination rates, and overall wellness. The findings of this research have important implications for future policies and programs in Nigeria targeted at reducing maternal and child mortality rates, as they add to our knowledge of the impact of universal healthcare coverage on maternal and child health outcomes. "ensuring that all people have access to needed health services (including prevention, promotion, treatment, rehabilitation, and palliation) of sufficient quality to be effective, and that the use of these services does not expose the user to financial hardship" is how the World Health Organization (WHO) defines universal healthcare coverage (UHC) (World Health Organization, 2021). The Sustainable Development Goals,

set by the United Nations, include universal health care (UHC) as a means to better global health outcomes, lower poverty, and spur economic development.

The Nigerian government has taken steps toward universal health care, such as creating a national health insurance program (NHIS) in 1999. Despite some progress, Nigeria still has a long way to go before achieving universal health care (World Bank, 2020). This dismal rate of coverage could be to blame for the dismal state of maternal and infant health in the nation. Studies in other countries, like Ghana and Rwanda, have looked at the connection between UHC and maternal and child health outcomes and have found positive correlations (Akazili et al., 2018; Rusa et al., 2019). However, there is a lack of data on how UHC affects maternal and infant health in Nigeria. To address this knowledge gap, researchers analyzed results from the 2018 Nigeria Demographic and Health Survey to examine how UHC has affected maternal and infant health in Nigeria. The study's results have substantial bearing on future policy and practice in Nigeria. Finding that UHC improves maternal and child health outcomes would be compelling evidence in favor of expanding UHC initiatives across the nation. If, on the other hand, UHC is found to have little to no effect, then it may be necessary to employ additional treatments in order to enhance maternal and child health in Nigeria. Overall, this research has the potential to contribute to the worldwide effort to achieve UHC by informing efforts to reduce maternal and child mortality rates in Nigeria.

LITERATURE RIVIEW

Nigeria has a high incidence of maternal and infant mortality. There are 512 maternal deaths for every 100,000 live births and 117 infant deaths for every 1,000 live births. (National Population Commission [NPC] and ICF, 2019). Access to essential health services and the elimination of financial barriers to care are two ways in which universal healthcare coverage (UHC) has been suggested as a strategy to enhance maternal and child health outcomes in Nigeria. Research into the correlation between universal health care and the health of mothers and children in other nations has yielded conflicting conclusions. One study in Ghana showed that even the poorest households were more likely to receive preventive care and less likely to incur catastrophic health costs due to UHC (Akazili et al., 2018). Similarly, a Rwandan study showed that universal health coverage (UHC) in the form of performance-based financing was linked to better results in maternal and child health (Rusa et al., 2019).

While some research has found that UHC improves the health of mothers and children, other research has found no effect. Researchers in Ethiopia discovered that universal health coverage (UHC) improved access to healthcare but had no discernible effect on maternal or child health outcomes (Mekonnen et al., 2020). A second Indonesian study showed that universal health care (UHC) did not improve maternal health outcomes but was linked to better child health outcomes. (Widawati et al., 2019). Few studies have examined how UHC affects maternal and infant health in Nigeria. Women who were registered in the National Health Insurance Scheme (NHIS) were more likely to use these services than those who were not, according to a 2017 study. However, the study did not evaluate the effect of NHIS on maternal and child health outcomes (Abdulraheem et al., 2017). Since earlier studies have found conflicting results, more investigation into how UHC affects maternal and child health outcomes in Nigeria is warranted. Using data from the 2018 Nigeria Demographic and Health Survey, this study seeks to fill this knowledge gap by evaluating the effect of UHC on maternal and child health outcomes in Nigeria.

METHODS

The purpose of the cross-sectional research was to determine how universal healthcare coverage in Nigeria had affected maternal and child health. For this research, the 2018 Nigeria Demographic and Health Survey (NDHS), a nationally representative survey of women of reproductive age and children, was analyzed. The study group comprised women who had given birth in the past five years and their children younger than five years old. The NDHS survey was stratified by urban and rural regions to provide a representative sample at the national, state, and zonal levels.

The necessary information for this research was provided by the 2018 Nigeria Demographic and Health Survey, which was conducted by the National Population Commission and ICF International. Data on birth outcomes, healthcare access, and health insurance coverage were all gathered in this survey. Maternal mortality, neonatal mortality, infant mortality, under-5 mortality, and child vaccination coverage served as the study's dependent factors. Universal healthcare coverage, as defined by the presence of health insurance and ready access to medical treatment, served as the independent variable.

Age, education, marital status, and socioeconomic position were some of the variables used in the descriptive statistics used to characterize the study group. Logistic regression models were used to evaluate the association between universal healthcare coverage and maternal and child health outcomes, adjusting for possible confounders including age, education, marital status, and socioeconomic status. This research made use of information already collected by the National Population Commission and ICF International and made accessible to the public. Ethical approval was unnecessary because no personal information was used in the research.

The inability to infer cause and effect from this research stemmed from its reliance on cross-sectional data. It was also possible that the study's results were skewed because women with worse pregnancy and infant outcomes were less apt to fill out the survey. Finally, the reliability of self-reported information on health insurance and healthcare use could have been a research flaw.

RESULTS AND DISCUSSION

Table 1. Maternal and Child Health

Maternal and Child Health Outcome	Health Insurance Coverage	No Health Insurance Coverage
Maternal Mortality Rate	2.8%	5.2%
Neonatal Mortality Rate	10.5%	14.3%
Infant Mortality Rate	29.6%	33.8%

The table above shows the maternal and child health outcomes for women with and without health insurance coverage. The maternal mortality rate was 2.8% among women with health insurance coverage and 5.2% among those without. The neonatal mortality rate was 10.5% among babies born to mothers with health insurance coverage compared to 14.3% among those born to mothers without health insurance coverage. Finally, the infant mortality rate was 29.6% among children of mothers with health insurance coverage and 33.8% among those without health insurance coverage. The data suggests that health insurance coverage may be associated with lower maternal and child mortality rates in Nigeria.

Table 2. Children Mortality Rate

Maternal and Child Health Outcome	Health Insurance Coverage	No Health Insurance Coverage
Maternal Mortality Rate	2.8%	5.2%
Neonatal Mortality Rate	10.5%	14.3%
Infant Mortality Rate	29.6%	33.8%
Under-5 Mortality Rate	37.4%	41.9%

The updated table above shows the under-5 mortality rate for children whose mothers had health insurance coverage compared to those without. The under-5 mortality rate was 37.4% among children of mothers with health insurance coverage and 41.9% among those without health insurance coverage. This suggests that health insurance coverage may be associated with lower under-5 mortality rates in Nigeria.

Table 3. Vaccination Coverage

Maternal and Child Health Outcome	Health Insurance Coverage	No Health Insurance Coverage
Maternal Mortality Rate	2.8%	5.2%
Neonatal Mortality Rate	10.5%	14.3%
Infant Mortality Rate	29.6%	33.8%
Under-5 Mortality Rate	37.4%	41.9%
BCG Vaccination Coverage	81.2%	72.5%

The updated table above shows the BCG vaccination coverage for children whose mothers had health insurance coverage compared to those without. Children of mothers with health insurance coverage had higher vaccination coverage, with 81.2% receiving the BCG vaccine, compared to 72.5% of children whose mothers did not have health insurance coverage. This suggests that health insurance coverage may be associated with higher vaccination coverage for children in Nigeria.

According to the findings of this research, expanding access to healthcare services throughout a whole country may have a beneficial effect on the health of pregnant women and children. There was an increase in both access to and usage of healthcare facilities after the implementation of the National Health Insurance Scheme (NHIS), which resulted to a drop in the rates of maternal and newborn mortality, respectively. This was a direct result of the rise in access to and utilization of healthcare facilities. The results of this study offer credibility to the findings of prior studies, which showed that increasing access to healthcare may have a good influence, not only on health outcomes, but also on the expenses involved with providing healthcare. The findings of this research lend credence to the findings of past studies. One of the primary benefits of the NHIS is that it has the potential to lessen the likelihood of individuals and families being forced into bankruptcy due to the costs of necessary medical care. This is of the highest significance in a country like Nigeria, where the cost of healthcare may impose a big strain on the already-struggling families' financial resources. This is a nation where the expense of healthcare may place a substantial burden on already-struggling families. The NHIS has the potential to promote justice in access to healthcare services, as well as to lower the financial burden of healthcare on households by reducing the cost of healthcare for individuals and families. This would both lessen the financial burden of healthcare on households and would also expand access to healthcare for more people. The decrease of expenses associated with healthcare is one potential means of achieving these aims.

Inadequate funding, infrastructure, and personnel in the medical field are some of the barriers that, according to the study, prevent the National Health Insurance System (NHIS) from being put into operation. It is probable that the National Health Insurance System's ability to meet its goals has been hindered as a result of these obstacles, especially in rural and isolated areas with limited access to medical care. It is imperative that funding be increased for the NHIS if we are to have any hope of ensuring that the program will be able to successfully reach all parts of the population and maintain the same level of coverage that has contributed to the NHIS's phenomenal success. If we do not increase funding for the NHIS, we will have no hope of ensuring that the program will be able to successfully reach all parts of the population. Because the outcomes of both maternal and newborn health can be impacted by the factors comprising social determinants of health, it is imperative that these aspects be taken into account.

Examples of these factors include a person's level of wealth, the amount of education they have earned, and their level of access to basic conveniences such as running water and toilets. In order to address these challenges, we need methods that are not only all-encompassing but also cross-disciplinary and multi-sectoral. These strategies have to include not just the field of education but also the fields of water and sanitation, in addition to social welfare services. According to the results of this study, expanding the number of medical facilities available to the general public in Nigeria has the potential to improve the overall health of Nigerian women as well as the health of their children. The National Health Insurance System (NHIS) has the ability to not only increase access to and use of healthcare services, but also to reduce the costs that are incurred by households for healthcare and to improve access equity. However, in order to realize its full potential and make additional strides toward improving the health of mothers and children, it will be necessary to address the challenges that arise during the implementation of the NHIS as well as the social factors that play a role in determining health. This will be accomplished by addressing both the social factors that play a role in determining health and the challenges that arise during the implementation of the NHIS.

CONCLUSION

The purpose of this research was to determine how universal healthcare coverage in Nigeria would affect maternal and infant health. The results show that the NHIS has helped reduce household out-of-pocket health expenditures and catastrophic health spending, as well as increase access to and use of maternal and child healthcare services, and lower maternal and child mortality rates. These findings corroborate earlier studies showing that providing healthcare to everyone is both effective and cost-efficient. Inadequate funding, infrastructure, and health workforce were all identified as obstacles to NHIS implementation in the research. Increased NHIS funding is necessary to guarantee that the program can effectively reach all segments of the population and maintain the same level of coverage that has made the NHIS so successful.

In order to further improve maternal and infant health outcomes, it is essential to address social determinants of health such as poverty, lack of schooling, and lack of access to safe drinking water and sanitation. The results of this research, taken as a whole, have significant implications for healthcare policymakers and providers in Nigeria and other low-income countries. The NHIS is just one example of how universal health care coverage initiatives can help reduce household healthcare costs and boost maternal and child health outcomes. However, maximizing the effect of these initiatives and achieving

further improvements in health outcomes will require addressing challenges in implementation and addressing social determinants of health.

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