



# Policy Brief

No. 08/  
July 2013

## Reproductive Health in Nigeria By Adeoti et al.

### The issues/problem investigated

Reproductive health indicators in Nigeria are poor as in many other countries in sub-Saharan Africa. The country has the second highest maternal mortality burden in the world which is estimated at 37,000 annually. In 2003, the national average of mothers who received standard antenatal health care from health professionals was about 60%. Out of this number, only about 37% of them eventually delivered in health care facility managed by qualified professionals. The proportion of births attended by skilled health personnel declined from 40 to 36.3 (percent?) between 1990 to 2004. Urban women are more than twice more likely to deliver in a health facility than rural women.

Nigeria has high fertility rate while contraception prevalence rate has remained low with an average of 13%. HIV prevalence rate among pregnant women aged 15-24 has decreased to 4.4% in 2005 and the absolute number of carriers has increased.

Child mortality shows a declining and rising trend between 1999 and 2003. The DHS (2003) reports that rural infant mortality rate (121 per 1,000) exceeds the urban rate (81 per 1,000) by a factor of 1.5. Also, child mortality rates in rural areas (139 per 1,000) exceed urban rates (78 per 1,000) by a factor of 1.8. Furthermore, while comparing Nigeria's mortality rates with that of some countries in sub-Saharan Africa and the average for developed countries, it becomes obvious that the prevalence of child mortality remains high and the challenge is urgent.

The percentage of children immunized from 12-24 months varies significantly in the different zones and between urban and rural areas. Child immunization is lower in rural areas (<10%) than urban centres (25%).

One of the Millennium Development Goals is to reduce child mortality and infectious diseases. Access to health facilities and services by a woman of child bearing age can reduce maternal and child mortality and related complications. This is expected to lead to increased productivity, economic growth and improve household welfare. The main objective of the study is to investigate household demand for child immunization and its impact on child mortality. Also to be examined is the implication of improved child health on economic growth and poverty reduction.

Many indicators of the use of reproductive health care services and reproductive health status show variations among subgroups of populations. Maternal deaths, skilled attendance at birth, infant and child mortality, contraceptive prevalence, antenatal care, and teenage pregnancies have been shown to vary according to urban/rural residence, education, ethnicity and income. This study also examines the issues of research interest in urban and rural Nigeria to identify the specific factors in different locations.

### **Method(s) of analysis (quantitative and qualitative)**

The mixed method was employed in exploring the objectives of the study. This involves both quantitative and qualitative analysis; with different samples and data set used in each case. The quantitative data were analyzed using the econometric model based on the household production model while the qualitative data analysis involved mainly narratives.

The 2004 National Living Standard Survey (NLSS) of households' data set was used for the quantitative analysis. In the empirical model, child mortality represents the number of children that were born alive but died in the household. Child mortality was regressed against individual, household and community characteristics. The mortality rate was hypothesized to be affected by child immunization status, household demographic characteristics and parent's welfare indicator. The model was analyzed using the, Ordinary Least Squares, Two Stage Least Squares and the Control function estimation techniques. This was done to obtain robust and unbiased estimates of the parameters using the most appropriate technique. The factors that influence the demand for immunization were identified in the first stage. The factors examined to influence the demand for immunization include the aforementioned factors, community literacy level of mothers in years and distance to drinking water in km as a proxy for distance to health infrastructure. The determinants of child mortality were determined in the second stage.

The qualitative data used were obtained through Focus Group Discussions (FGD), in-depth and key informant interviews conducted in 2008 to link access to child immunization with poverty reduction and economic growth. The interviewees were purposively selected to get the views of mothers and health professionals from varying socio-economic groups and rural/urban sectors in the six geo-political zones in the country. Information was obtained on issues involving the following:

- Access and demand for child vaccination and child mortality.

- How the time gained for having healthy children is utilized ie whether it will be employed in economic activities that will bring about enhanced income or be used for leisure.
- The level of their control over income saved as a result of having access to reproductive health care (leading to healthy children).
- The impact of having healthy children due to access to reproductive health care on the general welfare of the households.

### **Findings (quantitative and qualitative)**

1. The mean ages of fathers (45.06 years) and mothers (37.64 years) imply that they are in their active working age. The mean number of years in school by mothers in the community is 4.92. This implies on the average, mothers do not possess more than primary education. Low level of literacy in the community is expected to influence access to information on reproductive health services and also; appreciating the consequences of not demanding for it.
2. The distance to public infrastructure proxied by distance to drinking water is farther in rural areas than in urban areas and is 1.97km on the average for all. This shows that public infrastructures are not close to the respondents and could be a disincentive for patronizing such places particularly for women in the rural areas where transportation is poor.
3. Households that completed immunization are about a fifth of the sample. It reflects that there is low level of child immunization in the country.
4. The result revealed a negative relationship between child immunization and child mortality which confirms that child immunization reduces child mortality.
5. Rural areas have higher mortality rate relative to the urban areas. This is not unexpected in view of the poor health infrastructure in rural Nigeria. Also in rural and urban sectors, child immunization reduces child mortality. However, the sizes of the coefficients reveal a greater effect in urban areas than in rural areas. This may explain in part the higher rate of mortality in rural areas.
6. Also, as the welfare status of the household improves, mortality rate reduces as improved welfare status provides the means to expend on health and non-health inputs necessary to reduce child mortality. This is more pronounced in the rural area. Considering the high level of poverty in the country especially in the rural area, improved household welfare will improve access to health and non-health products necessary to reduce child mortality.
7. In rural and urban Nigeria, mothers' ages, area of residence and community literacy level of mothers are significant variables that influence the demand for immunization.
8. In rural areas, they have lower probabilities of demanding for immunization than those in urban areas. Communities with higher levels of literacy demand more for immunization.
9. The welfare status of the household is not significant in affecting the demand for immunization. This is not unexpected because at primary health care centres,

immunization is free. It is therefore possible to infer that the demand for immunization is not affected by the household welfare status.

10. Similarly, distance to drinking water which is used to proxy accessibility to health facilities is not significant. Nonetheless, the result shows negative relationship between distance to drinking water and the demand for immunization. This implies that the farther the distance to health care facilities, the less the demand for immunization. Considering the opportunity cost of mothers' time spent in going long distances, they may not be willing to go to public health care centers particularly in rural areas.
11. The low literacy level among women impairs their ability to work in the formal sector. They participate mostly in low income activities in the informal sector like petty trading and food processing.
12. All the women agree that child vaccination has a positive and complementary effect on child health and consequently reduce the possibility of child mortality. This supports the result generated from the quantitative analysis. In sum, the benefits derived by the mothers from getting their children vaccinated as expressed by those from the south-south and south east include:
  - Prevention of deadly diseases such as tetanus, tuberculosis, measles, polio etc
  - Effective allocation of time that would have been used in bringing their sick children to hospitals diverted to other productive and economic activities.
  - It allays fear of any major sickness that may occur in the future.
  - It greatly reduces the future cost on child's health.
  - It allows mothers to focus more on domestic and economic activities.
  - It allows more time for pleasure and relaxation of both mother and child.
  - It prevents negative cultural and religious beliefs e.g. witchcraft and removes the shame of being branded a witch
13. The women agreed that having healthy children allows them to have more free time, makes them emotionally and psychologically stable and this leads to enhanced output, income and productivity. Those from the south stated that it allows them more time for productive activities like trading, business, attending village meetings and church activities, spending more time on the farm and going to school. They also stated that having healthy children enables them to work for more hours, translating to more income.
14. Although women from the North are mostly full time housewives, some form of informal activities take place within their homes while their children perform errands like deliveries. Some engage in petty trading and food processing. Majority of respondents from northwestern Nigeria use their extra time to engage in relaxation. While those from the North central also use their extra time for relaxing they also engage in child care, house chores and business activities such as sale of perfumes,

tailoring and sale of pure water in sachets. The responses of mothers from the Northeast tallies with those from the Northwestern part of the country since most of them hardly engage in business activities.

15. About 50% of those from the south prefer doing business and trading, 30% prefer professional or civil service jobs, some 10% would like to engage in artisan work such as hair dressing, fashion design, bead making while the remaining 10% prefer to attend school to build their capacity. The fact that 90% of respondents intend to invest their time and enhance their income on productive business suggests that output/productivity of respondents in the south and south eastern Nigeria will likely be enhanced.
16. In rural southwest, the women do not desire a change in their economic activities but prefer to be assisted with improved processing technology and credit to increase their output and productivity.

## **Policy Implications**

Policy implications of this study include:

- Improving girl-child education will improve the demand for child immunization and also reduce child mortality. Also, it will enhance their chances of working in the formal sector and they can earn higher wages. Education will also improve their understanding of improved technologies and improve their productivities. This has a positive effect on output and household income and nutritional intake.
- Improved provision of health care facilities at distances not far away from rural households will also improve access to child immunization and lower child mortality. Considering the high level of poverty in the country coupled with inadequate access to health centres, drugs and personnel in the rural area of Nigeria, more efforts should be made by stakeholders in the health sector to improve the general healthcare situation in the rural areas in Nigeria.
- Evidently, child immunization reduces child mortality but there is low level of child immunization in the country. Increased sensitization and advocacy is required to increase vaccination coverage and the number of children that are fully immunized particularly in rural areas.
- Improved household welfare status reduces mortality. Efforts to increase economic opportunities like creating conducive investment environment, policies to encourage small and medium enterprises, increased access and benign conditions for obtaining formal credit etc should be aggressively pursued by the government.
- The present Government microfinance initiative must be expanded and strengthened to benefit more women in both urban and rural areas.
- Strategies to increase women's output and productivity should differ depending on geographical zone and sector. In general, women from the south are more active economically than their northern counterparts. Also, those in the urban sector are

into informal activities while those in the rural areas are more into agriculture and related enterprises.

In sum, provision of reproductive healthcare and immunization in particular reduces child mortality. It impacts positively on the health of the mother and improves productivity. Increased output and economic growth can be achieved from a psychologically and emotionally stable mother with healthy children. Empowering women through improved literacy, provision of credit and modern technology will enhance the use of their time.