

# **“But what happens to the poor?”- Economic inequality in preventive aspects of maternal and child health care in rural Nigeria**

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## **Extended Abstract**

**Background:** Recent studies have documented sharp inequalities in access to and utilization of health care across the developing world. However, very few studies have considered the aspect of health inequalities in Africa, having a substantial proportion of population in poverty and even fewer have examined within-country inequalities in programme variables of preventive health care, like immunization of children or antenatal care for pregnant women. The present paper seeks to examine the extent of economic inequalities in preventive aspects of maternal and child health care in rural Nigeria, the most populous nation of Africa, with a predominantly rural population and considerable proportion of young children and pregnant women. Nigeria has higher fertility rates compared to other African nations like Ghana, Cameroon, Cote’D’Ivoire and Benin and also has the lowest immunization rate among all the African nations covered in the DHS (13 percent). Antenatal care among pregnant women is also scarce in Nigeria, even lower among the poorer households in rural areas.

**Objectives:** The main objective of this paper is to examine the magnitude of economic inequality in one of the most important dimensions of maternal and child health, that of immunization and antenatal care. It is widely believed that these aspects of preventive care are the least iniquitous. We argue in this paper that, in fact there exists sufficient disparities in access and use of these preventive services within Nigeria based on the economic capabilities of households.

**Methods and Materials:** The data for this paper has been taken from the Nigeria Demographic and Health Survey 2003 (2003 NDHS), a representative sample of 7620 women covering 7225 households in Nigeria. Frequency distribution and bivariate analysis was carried out to depict the scenario of maternal and child health services for women and children belonging to different economic strata, as reflected by the quintiles

of the DHS wealth index separately calculated for this paper using principal components analysis. Multilevel logit analysis was carried out to find out the individual as well as community level effect on utilizing preventive health care services. We have used Gini Concentration Index and Lorenz Curves as summary measures of economic inequality represented by differentials in service use according to the wealth quintiles.

**Major Findings:** The findings reveal that economic well being of the household to which women or children belong, plays a crucial role in explaining the variation in service utilization. There is concentration of women deprived to receive adequate maternal care among the poorest quintile of economic status. Findings from the hierarchical multilevel analysis suggest that living in a poorer community, or in economically backward rural areas is doubly disadvantageous for women in children in the poorer households. There is a confounding effect of community level barriers on individual attributes impeding access to preventive maternal and childcare.

Inequality in utilization is also more pronounced for ‘between-groups’ as opposed to ‘within-group’ disparities for the wealth quintiles. This means that, when analysis was carried out based on different geographical regions of Nigeria, there was not significant variation in the proportion reporting access, for e.g. reporting full immunization or complete antenatal care among the respondents belonging to same wealth quintiles, however, differentials between the quintiles in the proportion utilizing the services were substantial.

The comparatively lower value of the Gini coefficient suggests that for rural Nigeria as a whole, inequality is not very sharp, but it still points out towards the heterogeneity in use and access among the different regions and also among population sub-groups within a given region, based on economic status.

**Conclusion:** The paper notes that factors that can be easily influenced like improved access to preventive health facilities, through both supply side interventions as well as generating social awareness regarding the importance of preventive care, and affordability of the households towards usage of these services need to be effectively stressed upon in national policies. (636 words)

**Keywords:** Inequality, preventive maternal and child health care, Nigeria, wealth index, health care utilization.