Abstract

Background

Immunization coverage in many parts of Nigeria is far from optimal, and far from equitable.

Nigeria accounts for half of the deaths from Measles in Africa, the highest prevalence of circulating wild poliovirus in the world, and the country is among the ten countries in the world with vaccine coverage below 50 percent. Studies focusing on community-level determinants therefore have serious policy implications.

Methods

Multilevel multivariable regression analysis was used on a nationally-representative sample of women aged 15-49 years from the 2003 Nigeria Demographic and Health Survey. Multilevel regression analysis was performed with children (level 1) nested within mothers (level 2), who were in turn nested within communities (level 3).

Results

Results show that the pattern of full immunization clusters within families and communities, and that socio-economic characteristics were important in explaining the differentials in full immunization among the children in the study. At the individual level, ethnicity, mothers’ occupation, and mothers’ household wealth were characteristics of the mothers associated with full immunization of the children. At the community level, the proportion of mothers that had hospital delivery was a determinant of full immunization status.

Conclusion

Significant community-level variation remaining after having controlled for child- and mother-level characteristics is indicative of a need for further research on community-levels factors, which would enable extensive tailoring of community-level interventions aimed at improving full immunization and other child health outcomes.