

## Reproductive Health and Child Health in Africa: An Overview

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In 2007, the African Economic Research Consortium (AERC) initiated a collaborative research project on *Reproductive Health, Economic Growth, and Poverty Reduction in Africa*. The framework papers prepared to guide country case studies on this topic were published in an edited volume after the conclusion of the project (Ajakaiye and Mwabu, 2010). Nine country case studies (four from Anglophone Africa and five from Francophone Africa) were submitted for publication in a special issue of this *Journal*. At least four additional papers from the AERC Thematic Research Groups were submitted. At the end of the external review process, nine papers were accepted for publication: five from Central and West Africa and four from Eastern Africa.

Reproductive health care is an important determinant of child health. Since the quality of the labor force is linked to child health *in utero* (Ajakaiye and Mwabu, 2007), reproductive health services have a strong bearing on economic growth and poverty reduction. To a certain extent, the high poverty rates in Africa can be traced to inadequacies in reproductive health services (Benefo and Schultz, 1996). Acceleration of growth and poverty reduction in Africa can be achieved by implementing interventions that improve child health in utero and in childhood. However, central to the success of such interventions, is maternal health, which should also be vigorously promoted.

The papers in this volume provide techniques that can be used to analyze cost-effectiveness reproductive health services and to assess their impacts on child health. Each paper focuses on a particular technique and its concrete application in a specific context. The aim in each case is to illustrate how the economic tools in question can be applied to illuminate policy issues in a variety of contexts. There are two papers on cost-effectiveness analysis, seven on impacts of reproductive health services and socioeconomic factors on child health.

The first paper in the volume is by Sarah Ssewanyana and Ibrahim Kasirye who examine the cost effectiveness of family planning methods in prevention of excess fertility in Uganda. The authors find that only about 20% of women within the child bearing age use modern methods of contraception. Injections are found to be the most cost effective contraception intervention. However, the authors caution against a blanket use of this intervention. The next paper is on cost-effectiveness of family planning provision in Kenya. Mercy Mugo and Peterson Muriithi study cost effectiveness of family planning delivery in government and non-government health facilities. They find that the couple years of protection (a metric for service effectiveness)

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varies widely across facilities. Peripheral facilities, such as clinics and dispensaries are found to be more cost-effective than hospitals.

The third paper (by A Adeoti and O. Oni) examines the relationship between child immunization and child mortality in rural Nigeria. A robust inverse correlation is documented. Immunization is an important component of reproductive health care. It averts excess fertility by reducing child mortality – that can spur precautionary or replacement fertility.

The fourth paper is on the link between mother's tetanus immunization and birth weight in Senegal. In this paper, Latif Dramani and Oumy Laye show that anti-tetanus vaccination is positively correlated with birth weight. This important finding is replicated in Guinea by A. Kaba, S.F. Doumbouya, and Mama Keita. The basic idea underlying the finding is that tetanus immunization protects a newborn from tetanus mortality, and this protection motivates the mother to further shield the fetus from other harm, such the health risks associated with smoking and drinking. This indirect effect of tetanus immunization is known in the literature as the complementarity hypothesis (Dow et al., 1999).

In the sixth paper, Janvier Mwishu-Kasiwa demonstrates strong positive effects of household wealth on birth weight in the Democratic Republic of Congo. The effects are shown to be moderated by gender of the child and by mother's area of residence. In the next paper, Phyllis Machio documents Kenyan evidence in support of large negative correlations between child mortality and reproductive health care – proxied by antenatal care and skilled delivery. The mechanisms underlying the correlations are carefully explained. The eighth paper (by Grace Kumuchulesi) examines the factors associated with persistence of high levels of child malnutrition in Malawi. Dominance analysis is used to document time trends and intensities of various forms of malnutrition. Persistence of certain forms of malnutrition is uncovered. It is argued that interventions to address this persistence should target specific behaviors and living conditions in households and communities. However, further research is needed to design and implement such policies. The last paper (by Daniel Tambi Mbu and Johannes Tabi Atemnkeng) looks at the effects of maternal immunization against tetanus on birth weight in Cameroon. They find large, positive correlations nationally, and across residence and economic strata.

Taken together, the papers in this volume provide valuable tools to do two things: (a) to assess cost-effectiveness of reproductive health services and commodities; (b) to measure their impacts on child health. The papers also provide evince on interventions that can be implemented to improve the quality of the future labor force in Africa.

## References

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