

## Researcher

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Updated: September 2009



# Effects of Reproductive Health on Poverty in Malawi

Our research will investigate the causal effect of reproductive health on poverty, primarily using data on randomized interventions that relate specifically to reproductive health. Our poverty indicators will include not only current variables such as household consumption and female labor supply, but also investments in the health and education of children, which are known to be critical for long-term poverty reduction.

We will focus on Malawi, a highly policy-relevant context for understanding the relationship between reproductive health and poverty in sub-Saharan Africa. Both poverty and poor reproductive health are widespread in Malawi, though there is little understanding of the causal relationship between the two. Poverty might affect reproductive health and vice versa. The challenge of this research is to disentangle the causal effect of reproductive health on poverty.

## Country where the research will take place

Malawi

## How does the research describe the impact of population/reproductive health on poverty reduction and/or economic growth?

The research aims to answer the following questions:

- Does pregnancy-related mortality and morbidity reduce investment in children's human capital?
- While breastfeeding improves infant health, does it reduce female labor supply and either increase or decrease household consumption?
- Parental HIV infection reduces child schooling, but may reduce or increase child work. As a consequence, does Voluntary Counseling and Testing (VCT) also increase school and affect child work?
- Does collectively generated information about reproductive health increase contraceptive use and reduce HIV infection?

## How will the research address a policy need, and what kind of policy lesson is expected?

The research will investigate the externalities in terms of human capital accumulation of improving reproductive health. This will help policymakers have a wider perspective on the benefits of improving reproductive health and how it can fit within a safety net program.

## Methods used

We will use instrumental variable and panel data methods where the dependent variable is a measure of poverty or human capital accumulation; variables associated with reproductive health are considered as endogenous regressors. Randomized interventions described below will be used as instruments. If it is assessed that the interventions are too broad to be excluded from the instrumental variable regression, then we will use reduced form regressions and investigate the different channels through which the interventions can affect the outcomes of interest: measures of poverty and reproductive health.

## Data used

To answer these questions, we will use two sources of data from Malawi. Both data sets contain randomized interventions, which are widely considered to be the gold standard in establishing causality. This is because, apart from the intervention, any observed or unobserved variables that affect the outcome of interest (poverty) will, on average, be the same in the groups that were randomized in and those that were randomized out of the intervention.

The first source of data relates to a cluster randomized controlled trial that is designed to improve the health of women during and after pregnancy, as well as the health of their newborn infants (MaiMwana Project). The project began in 2006, and will end in 2009. We will survey 3,300 households in areas that are and are not affected by the intervention to obtain detailed information on poverty indicators. Each household will be interviewed twice, which will allow use of panel data methods. The second source of data comes from five rounds (1998, 2001, 2004, 2006 already collected, 2008 scheduled) of a longitudinal household survey (Malawi Diffusion and Ideational Change Project). The initial survey in 1998 included approximately 1,500 ever-married women and 1,100 spouses of these women. Randomized experiments contained in the surveys include the offering of monetary incentives to individuals to engage in Volunteer Counseling and Testing for HIV and to adopt risk-avoidance strategies.