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Timeline

2016-2019

Sample Size

2.143 women

Research Implemented by IPA

Yes

The Impact of Family Planning on Fertility, Birth Spacing, and Child Development in Urban Malawi

Abstract

Improving access to family planning in sub-Saharan Africa has the potential to help women and couples achieve their desired family size, reduce high-risk pregnancies, and improve child health and growth. In Malawi, Innovations for Poverty Action worked with researchers to measure how an increase in access to family planning—through information, free transportation, and reimbursements for family planning services—impacted women's fertility, health, and well-being. Researchers found that women were 6 percentage points more likely to be using contraception after two years of exposure to the services and were at lower risk of short birth spacing, among other positive outcomes. Preliminary results also suggest that the intervention reduced child stunting and increased young children's cognitive development.



Policy Issue

Despite a decline in birth rates and improvements to maternal health care, the total fertility rate and the number of unintended pregnancies and unwanted births remain high in sub-Saharan Africa. Providing young women with access to family planning may help them to effectively meet their desired family size, avert unintended pregnancies, and healthily time and space children over their reproductive years. It may also increase their capacity to attend and complete school and eventually obtain formal employment. Increased access to family planning services may also improve children's growth and/or development. If improved access to contraceptives allows families to better space births, mothers may experience less nutritional depletion and children may be breastfed longer, improving young children's growth. If families have fewer children, they may also increase their investments in the children that they do have.

Despite the known and potential benefits of family planning, young women in developing countries often lack access to basic information about contraception, side effects, and sexually transmitted infections, and among those women who report awareness, many tend to harbor misperceptions about contraceptives or possess only superficial information about these issues. To address these challenges, family planning programs have become increasingly common in developing countries. These programs either aim to increase demand for family planning by, for example, providing sexual and reproductive health behavior change programs or by informing women and couples about the benefits of family planning, or to increase the supply of services by improving access to contraceptives and family planning services. Yet little is known about the effectiveness of these approaches.

Context of the Evaluation

Although family planning services in Malawi are provided for free in public sector clinics, women often face several key barriers to access. These include (i) a lack of information on the benefits of family planning and healthy birth spacing, a lack of access to services, and a lack of method choice, (ii) long waiting times at public facilities, (iii) high transport costs to facilities, and (iv) a fear of contraceptive-related side effects. In addition, women who seek family planning services at private or commercial sector clinics often receive higher quality care but are required to pay out-of-pocket for receiving services and commodities. This study aims to determine the effect of a package that addresses these key barriers to access and leaves the question of the relative importance of each barrier to future research.

The study was carried out in Lilongwe, the capital of Malawi. To be eligible for the study, a woman must have been between the ages of 18-35, from Lilongwe, married, and either pregnant or have recently given birth in the past 6 months from when she was initially approached at baseline.



Details of the Intervention

Innovations for Poverty Action worked with researchers to measure the impact of increased access to family planning services on women's fertility and health, as well as the physical and cognitive development of their children. Researchers randomly assigned 2,143 eligible women to either a program group or a comparison group, consisting of 1,026 and 1,117 women, respectively.

Women in the program group were offered a two-year long family planning package that included three services:

- 1. **Information and counselling**: Women were offered a family planning information package and up to six private counseling sessions at home by a trained family planning counselor over a one-year period. The sessions focused on the benefits of contraceptives and healthy birth spacing.
- 2. **Free transportation to clinics**: Women were offered free transportation to a private family planning clinic that offered a full range of family planning services and had low waiting times.
- 3. **Reimbursements**: Women received financial reimbursement for family planning services, which included any out-of-pocket expenditures related to the receipt of family planning care, costs for treatments that are received at the family planning clinic (e.g. medications, contraceptive methods, consultation fees, exam fees, costs associated with the treatment of contraceptive-related side effects), and free over-the-phone consultations and referral services from a doctor in the event that she experiences contraindications or side effects related to her use of family planning.

Researchers measured the impact of the intervention one and two years after the program began. After the program ended, they measured knowledge of family planning and modern contraceptive use. Intermediate outcomes include fertility outcomes (parity, birth spacing), changes in desired fertility, and unmet need for family planning. The biological or adopted children of women were measured if they were under six years old and present in the household at time of surveying. In total, 2,545 children were recorded in the study.

Results and Policy Lessons

Preliminary results*

Fertility and Family Planning

Researchers found that improved access to family planning services postpartum increased the likelihood of using contraceptive and long-acting contraceptive methods. The intervention also lowered the risk of short birth spacing.

After the first year of the intervention, there was no significant increase on contraceptive use or long acting contraceptive methods among women who were offered the intervention. However, in the second year, researchers found a 6 percentage point increase in postpartum



contraceptive use and a 5 percentage point increase in long-acting contraceptives in the treatment group. Researchers observed a 4 percentage point increase in contraceptive implant use but no evidence of a significant change in injectable use.

Findings indicate that women in the program group were at a lower risk of short birth spacing. In the first year, researchers found no effect of the intervention on fertility and birth spacing. However, in the second year, women in the treatment group had a 43 percent lower chance of pregnancy within 24 months of their last birth. The decrease in a woman's risk of pregnancy was accompanied by a 44 percent decrease in the risk of a woman having two live births within a 33-month period.

Child Growth and Cognitive Development

After one year, researchers found that the program had a positive impact on a variety of child health outcomes. The intervention had a large 0.19-0.20 standard deviation effect on children's 'height for age z-score', which is used to measure stunting and is often used as a proxy for health and nutrition over the lifespan of a child. The effect is increased to 0.29-0.31 standard deviations for children between 6 and 36 months. This effect of the intervention on height-for-age is considered especially large because the intervention did not specifically focus on children.

During the second year follow up, researchers found that the intervention had a positive impact on child cognitive development based on findings from the Caregiver Reported Early Development Instruments (CREDI) scores. The intervention had no effect on children's weight for age z-score.

Results on longer term maternal health, child health, and economic outcomes are forthcoming.

The results of this study suggest that improving access to high-quality postpartum family planning services through strategies such as those undertaken in this study can enable women to more effectively time and space births. Moreover, the results show that family planning services can also have positive impacts on children's health and development outcomes.

*Results are preliminary and may change after further analysis and/or peer review.

Sources

- [1] Bloom, David E., David Canning, Günther Fink, and Jocelyn E. Finlay. "Fertility, female labor force participation, and the demographic dividend." Journal of Economic Growth 14, no. 2 (2009): 79-101.; Canning, David, and T. Paul Schultz. "The economic consequences of reproductive health and family planning." *The Lancet* 380, no. 9837 (2012): 165-171.
- [2] Char, Arundhati, Minna Saavala, and Teija Kulmala. "Assessing young unmarried men's access to reproductive health information and services in rural India." BMC public health 11,



no. 1 (2011): 1.; Sharan, Mona, Saifuddin Ahmed, Mismay Ghebrehiwet, and Khama Rogo. "The quality of the maternal health system in Eritrea." *International Journal of Gynecology & Obstetrics* 115, no. 3 (2011): 244-250.

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