



HUMAN CAPITAL INITIATIVE



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Increased Access to Postpartum Family Planning Services Encourages Modern Contraceptive Use and Healthy Birth Spacing

FINDINGS FROM THE MALAWI FAMILY PLANNING STUDY (MFPS)

MAHESH KARRA, DAVID CANNING, DAN MAGGIO, MUGI GAO, BAGREY NGWIRA

Improving access to postpartum family planning services for new and expecting mothers increased contraceptive use by 5.9 percentage points. The result was driven by an underlying increase in long-term contraceptive use by 5.4 percentage points. Women who were offered improved access to postpartum family planning services were 42 percent less likely to have a second pregnancy during the two-year survey period.

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Context: Lilongwe, Malawi

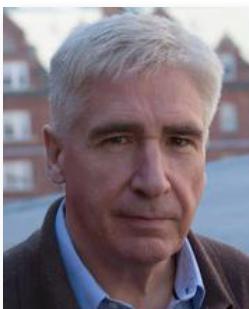
Sample Size: Size: 2,143 pregnant and postpartum women, married, aged 18-35

Timeline: September 2016 to February 2019

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Daniel Maggio is a PhD Candidate at the Dyson School of Applied Economics and Management at Cornell University. He is interested in the causes of undernutrition and poor cognitive development in children and the design and evaluation of interventions that intend to reduce these.

INTRODUCTION

The World Health Organization (WHO) recommends that a woman wait at least 24 months after a live birth before getting pregnant again. Poorly spaced births are associated with higher rates of mortality and morbidity for both women and children.¹ Improved access to postpartum family planning can help women to better space pregnancies and time their next birth, and family planning programs have become increasingly widespread to address these challenges. Yet, little is known about the role of postpartum family planning on women's contraceptive use, fertility choices, and birth spacing. To fill this knowledge gap, researchers conducted a randomized controlled trial that provided new and expecting mothers in Lilongwe, Malawi with access to a range of postpartum family planning services over a two-year period, between September 2016 and February 2019.

INTERVENTION

Women assigned to the treatment arm were offered a multi-component family planning package over a two-year period. The package consisted of a counseling component, a transport component, and a financial reimbursement component.

- **Counseling:** women were offered up to six (6) free home visits from a trained family planning counselor where they were counseled on the benefits of contraceptives and healthy birth spacing.
- **Transportation component:** offered women a free on demand taxi service to the Good Health Kauma Clinic where they could receive contraceptive services.
- **Financial reimbursement component:** offered women with 17,500 Malawi Kwacha (roughly \$25 PPP) that they could use to purchase family planning services from the Good Health Kauma Clinic.²

ACCESS TO FAMILY PLANNING SERVICES

In spite of declining birth rates and improvements to maternal health care, the total fertility rate (the average number of children per woman) remains high in Malawi. In 2017, the average total fertility rate in Malawi was 4.2 births per woman. Estimates from the 2015-16 Malawi Demographic and Health Survey (MDHS) show that the contraceptive prevalence rate, which measures the proportion of women of reproductive age who are using a contraceptive method, was 59.2 percent among married women of reproductive age in Malawi. This represents a significant increase in contraceptive use from the 46.1 percent prevalence rate from the 2010 MDHS. In spite of the increase in contraceptive use, postpartum family planning access and use remains low, and 18.7 percent of women in Malawi report an unmet need for family planning; that is, they seek to either limit or space births but are not using a method of family planning to do so.

¹ World Health Organization, "Report of a WHO Technical Consultation of Birth Spacing." Geneva, Switzerland: World Health Organization, 2005.

² All women in the treatment group also received an emergency package in case they experienced contraceptive-related side effects.

Women in Malawi face a range of barriers to accessing high quality postpartum family planning services, including:

- *Informational barriers* (lack of awareness or knowledge of postpartum family planning options).
- *Physical barriers* (distance to care, long travel times to health facilities, high cost of transport, poor access to effective transport).
- *Barriers that impede effective service provision* (long waiting times at clinics, user fees for services, lack of availability of services and supplies, poorly trained service providers, among others)³.
- Women and children often receive postnatal care from different locations and through different providers, which often compels a woman to make the choice to seek care for her child at the expense of her own care⁴.

These barriers to access are common to interventions that aim to increase access to and utilization of postpartum health care services and are key barriers that we aimed to address through our intervention.

THE MALAWI FAMILY PLANNING STUDY

Women were eligible to be recruited into the study if at the time of baseline, they were:

1. Married,
2. Either pregnant or less than six months postpartum,
3. Between the ages 18 and 35, and
4. Living in Lilongwe, Malawi

Women were randomly assigned to either receive the intervention or the Malawi Ministry of Health's standard family planning programming. The intervention took place in the two-year period between November 2016 and November 2018. A baseline survey was conducted between September 2016 and January 2017. Two follow up surveys were also conducted. The first ran from August 2017 until February 2018 while the second ran from August 2018 until February 2019. In this brief, we examine the impacts of the intervention on contraceptive use and birth spacing.



Muqi Guo is a second-year Ph.D. candidate in Population Health Sciences at the Department of Global Health and Population at the Harvard T.H. Chan School of Public Health. Her research interests are family planning, fertility, and women's well-being. Over the past two years, she has worked on a number of studies and impact evaluations related to the provision of family planning and reproductive health in Malawi, Sri Lanka, Tanzania, and Nepal.



Bagrey Ngwira, who passed away in April 2020, was one of first graduates from the College of Medicine in Malawi. He also earned an MSc at the London School of Hygiene & Tropical Medicine and enrolled at the Liverpool School for a PhD program, where he continued his work with an initial countrywide mapping of the prevalence of lymphatic filariasis in Malawi. The study became the platform for a national program and was published in *Filaria Journal*.

³ Jody R. Lori et al., "Characteristics of Maternity Waiting Homes and the Women Who Use Them: Findings from a Baseline Cross-Sectional Household Survey among SMGL-Supported Districts in Zambia," *PLoS One* 13, no. 12 (2018): e0209815, <https://doi.org/10.1371/journal.pone.0209815>.

⁴ John Cleland, Iqbal H. Shah, and Lenka Benova, "A Fresh Look at the Level of Unmet Need for Family Planning in the Postpartum Period, Its Causes And Program Implications," *International Perspectives on Sexual and Reproductive Health* 41, no. 3 (2019): 9.

KEY FINDINGS

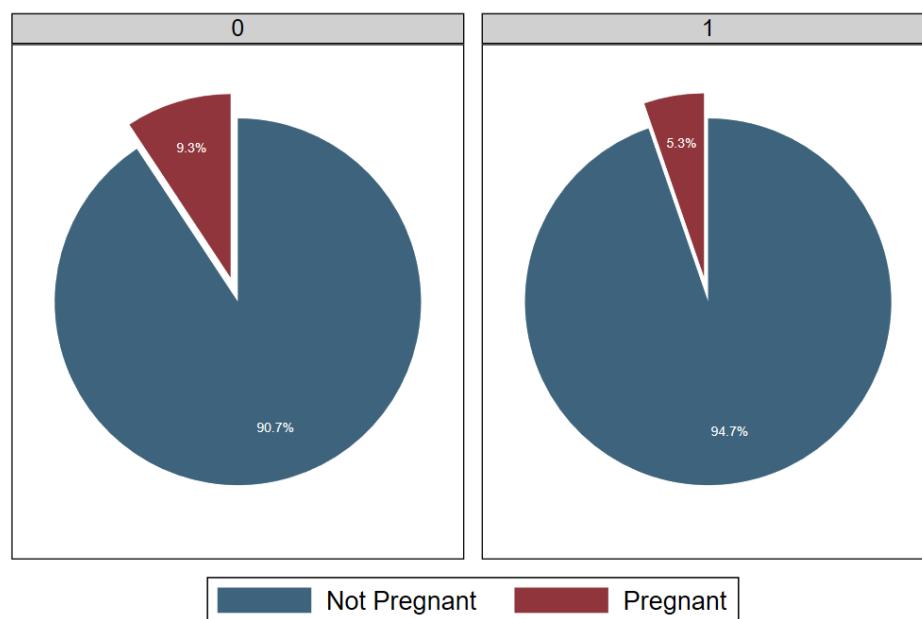
Postpartum family planning services encourage contraceptive uptake.

- Women were 5.9 percentage points more likely to be using contraception after two years of exposure to the intervention.
- The increase in contraceptive use was driven by a 5.4 percentage point increase in long-acting method use.⁵
- Demand for contraceptive implants increased by 4 percentage points as a result of the intervention.

Women with greater access to postpartum family planning services are at lower risk of short birth spacing.

- Women in the intervention group had a 43 percent lower risk of a subsequent pregnancy within a 24-month period.
- 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.

Figure 1: Proportion of Women who are Pregnant by Endline



Source: Boston University Global Development Policy Center, 2021.

⁵ We define a long acting contraceptive method as a method that extends women fertility protection for a period greater than 6 months. Under this definition, long acting methods are implantable contraceptives, IUDs, and sterilization.



The Human Capital Initiative (HCI) is a research initiative at Boston University's Global Development Policy Center. The GDP Center is a University wide center in partnership with the Frederick S. Pardee School for Global Studies. The Center's mission is to advance policy-oriented research for financial stability, human wellbeing, and environmental sustainability.

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POLICY RECOMMENDATIONS

Our findings suggest that:

- Improving access to high quality postpartum family planning services would enable women and couples to more effectively time and space their next births.
- In practice, the effective provision of postpartum family planning and maternal health services face multiple barriers. Our study provides evidence that a comprehensive postpartum intervention can help overcome some of these barriers.

Despite the comprehensive nature of this program, we believe it to be a reasonably cost-effective policy. Over the course of two years, the cost per client, including the counselors, taxi drivers, reimbursements for family planning services, and all administrative and operational costs, was just over \$50. As a comparison, a similar intervention in Matlab, Bangladesh cost \$180 per client.

In addition to the immediate positive effects on child and mother mortality and morbidity, we can also extrapolate some of the other societal and development benefits that a policy like this would have decades into the future. Women with access to family planning are more likely to achieve higher levels of education and participate in the labor force. Encouraging healthier birth spacing may lead to a decrease in maternal mortality, which could in turn benefit household investment in girls. For instance, it may result in the convergence of educational levels between boys and girls, due to an increase in the relative benefit of educational investment in girls when women's life expectancy is raised. Positive externality like this would be directly in line with the thematic area of Gender Capacity and Development as laid out in the Malawi Growth and Development Strategy II (MGDS II). Policies that benefit women have been linked to faster economic development (and vice versa), and this policy should be no exception. Especially in the context of comprehensive government efforts to boost development, policy to provide access to family planning and to encourage healthy birth spacing will help not just the women and their children, but the community as whole.