Maternal Mortality Risk and the Gender Gap in Desired Fertility

Men's higher demand for children has a significant influence on family planning decision-making in Zambia.[1] Researchers are testing ways to increase husbands' knowledge of maternal mortality risks to more closely align the fertility demand of husband and wife, allowing couples to achieve mutual short- and long-term fertility goals in a transparent partnership. If promising pilot results are maintained in this larger study, information on maternal mortality risk could be incorporated in existing community-based health initiatives in line with the Ministry of Health's goal of increasing household family planning demand.

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Policy Issue

Women around the world continue to report substantial unmet need* for modern contraceptives.[2] Limited physical access to reliable contraception in low-income or rural areas is only partially responsible. Even where contraceptive resources are available, family planning decisions often involve two individuals with conflicting fertility preferences. Zambian women have, on average, a desired number of 4.5 children, compared to men's reported ideal family size of 5.0 children and the actual fertility rate of 5.3.[3] According to a recent body of literature, including the researchers' 2007 study on private access to contraceptives in Zambia, this gender demand gap can have a measurable effect on take-up of contraception. That is, even when contraceptives are easily accessible, men's higher demand for children can significantly reduce contraceptive adoption.[1,4-8] However, the determinants of men's fertility demand, both in general and relative to women, remain poorly investigated.

Women's intrinsically higher cost of childbearing may be a determinant of the gender gap in fertility demand. In countries with high maternal mortality ratios, like Zambia,[3] the physical cost—and hence the gender difference in the total cost of childbearing—is particularly large, likely lowering women's demand for children, relative to men. Further polarizing fertility demand across genders, men tend to have fewer opportunities to learn about the magnitude of maternal risk and thereby less precise knowledge of their wives' risk. Indeed, studies from across Africa have documented men's relative lack of knowledge about maternal mortality and the misconceptions (see Box 1)[9] they hold about its causes.[10,11] Given that the intrinsic cost of childbirth differs across genders, women cannot close the information gap through mere communication. That is, their husbands may view them as untrustworthy, given that, for them, childbirth is inherently costlier. For this reason, providing an accurate, credible benchmark against which men can evaluate their wives' risk may resolve the information gap.

The study tests the hypothesis that differential demand for contraceptives originates because women have more accurate information about the maternal mortality risk of high parity and low birth spacing. If providing reliable maternal health information to men can bridge the gender gap in demand for family planning, we expect it to serve as an effective tool for increasing household family planning demand.

Details of the Intervention

The study is taking place in the catchment area of the Chipata and Chaisa Clinics, two government-run facilities that serve low-income areas in Lusaka. Approximately 967 couples of child-bearing age are invited to attend a community meeting together. Upon arrival, they are split into gender-specific meetings, in which they receive the information dictated by their randomly assigned treatment condition, described in Table 1. After the meeting, vouchers for free family planning services are distributed using willingness-to-pay experiments. Couples that are unable to attend the community meeting will receive the training directly at their residence. Extensively trained facilitators deliver the informational content of the workshops, using visual materials and scripts designed for the study. The content of the workshops was developed in collaboration with clinic nurses, the Zambian Ministry of Health, and local NGOs, such as the Society for Family Health.

TABLE 1: TREATMENT CONDITIONS

Treatment	1 - HusMM	2 - WifeMM	3 - Control
Husband	Maternal mortality	Family planning	Family planning
Wife	Family planning	Maternal mortality	Family planning

* The World Health Organization defines unmet need as the portion of fecund, sexually active women who report not wanting any more children or wanting to delay the next child, but are not currently using a contraceptive method.

BOX 1: TRADITIONAL BELIEFS AND LEARNING ABOUT MATERNAL RISK IN ZAMBIA

Maternal mortality remains very high in many parts of the developing world, especially in sub-Saharan Africa. While maternal deaths are observable, it may not be straightforward for individuals to learn about risk factors. Novel data from the baseline survey on male and female perceptions of maternal risk in Zambia documents that superstitions about causes of maternal mortality are pervasive and uncovers evidence that such beliefs impede learning about maternal health risk levels and correlates. In our data, people who hold traditional beliefs disregard past birth complications completely in assessing future risk, unlike those who hold modern beliefs. This misconception likely impedes efforts to reduce maternal health risk, and reproductive health policies should, therefore, be designed to increase information on health-related risk factors.

Results and Policy Lessons

The results of two small-scale pilots conducted in 2010 and 2012, as well as baseline findings from 2015, support the hypothesis. In these pilots, husbands in treatment couples attended a community meeting on maternal mortality, while wives received neutral health information; in control couples, neither spouse received maternal mortality information. In 2012, 40% of treatment couples redeemed a voucher that granted access to free contraception, while none in the control group redeemed the voucher. This finding is consistent with results of the earlier pilot, in which 23% of treatment couples redeemed the voucher, compared to 6% of control couples. As hypothesized, these results indicate that supplying information on maternal health risk to men disproportionally impacts fertility and contraception outcomes.

Preliminary data on baseline fertility, demand for contraceptives, attitudes towards family planning, and knowledge about maternal health also supports the hypothesis. The average ideal number of children is larger for men than for women in a statistically significant way; women are better informed about the causes of complications during pregnancy; and the larger the demand gap in the household, the lower the probability that spouses communicate about maternal risk.

From late-2016 to mid-2017, the midline survey will track a number of important short-term and medium-term outcomes to measure the impact of providing this targeted information to different members of the household. The key outcomes include changes in knowledge and beliefs about the prevalence of maternal mortality, its risk factors, and prevention, as well as intra-household dynamics, household demand for family planning, take-up of contraception, and ultimately, realized fertility. In addition, administrative records from the two partner clinics provide information on take-up of contraception and redemption of the family planning voucher. Following the midline, an endline survey will examine longer-term fertility outcomes, including number of children and birth spacing, as well as maternal and child health.

Should the midline and endline surveys yield promising results similar to the pilots, there are multiple existing pathways through which this intervention could be scaled throughout Zambia, including the Ministry of Health's existing Community Health Assistant (CHA) program, a low-cost government cadre in which community-based health workers conduct household visits and group meetings to provide preventative education and referrals for health services. Another potential vehicle for the curriculum would be the Safe Motherhood Action Groups, community-based volunteer groups that deliver essential information on safe motherhood to men and women. This scale-up would be the culmination of eight years of collaborative partnership with the Ministry of Health, as they seek ways to increase family planning support and use.

The research will also shape how economists think about preferences and decision-making within the family. By engaging in dissemination locally and globally, the results will be helpful to—and reach millions in—similarly challenged environments beyond Zambia, many of which also have existing health networks that could be leveraged.

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