

Maternal Mortality Risk and the Gender Gap in Desired Fertility in Zambia



Maternal mortality remains very high in many parts of the developing world, especially in sub-Saharan Africa. Limited awareness of risk factors for maternal mortality such as maternal age and birth spacing may contribute to persistently high death rates, and public health campaigns to increase awareness of risk factors could help curb maternal mortality. Data shows that men, in particular, tend to underestimate maternal mortality risk, which may lead to their lower demand for contraception. Researchers are working with Zambia's Ministry of Health and local NGOs to evaluate the impact of providing information to men and women about maternal mortality risk on knowledge of risk, demand for family planning, and maternal and child health outcomes. If the program has a positive impact, as pilot results suggest, the curriculum and its focus on men could be incorporated into existing community-based health initiatives in line with the Ministry of Health's goal of increasing household family planning demand.

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. Evidence from Zambia shows that men on average want to have more children than their wives and that this preference hinders contraception use, but little evidence exists on the reasons for men's fertility preferences and if they can be influenced.

Studies from across Africa have documented men's lack of knowledge, compared to women, about maternal mortality and the misconceptions (see Box 1)³ they hold about its causes.^{4,5} This study tests whether the difference in men and women's demand for children is driven by women having more accurate information about the maternal mortality risk of high parity and low birth spacing, given they bear the physical burden. If providing reliable maternal health information to men can bridge the gender gap in demand for family planning, researchers expect it to serve

RESEARCHERS

Nava Ashraf, London School of Economics and Political Science

Erica Field, Duke University

Alessandra Voena, University of Chicago

Roberta Ziparo, Aix-Marseille University

COUNTRY

Zambia

PARTNER

International Growth Centre (IGC)

as an effective tool for increasing households' demand for family planning.

If the evaluation yields positive results, this low-cost intervention could be scaled throughout Zambia using existing community health systems. The most likely pathway to scale would be through Safe Motherhood Action Groups (SMAGs) and Community Based Distributors (CBDs), volunteer groups that deliver essential information on safe motherhood and family planning, respectively, to their communities. They work closely with Community Health Assistants (CHAs), a low-cost government cadre, in which community-based health workers conduct household visits and group meetings to provide education on and referrals for mainly mother and child health services. This research would provide evidence of the need to invest more in these programs and effective ways to target information on maternal health risk and family planning to men.

Context of the Evaluation

Zambia has a high rate of maternal mortality, even relative to neighboring countries; 1 out of 59 women die in childbirth during their lifetime. Men and women's different fertility preferences and, therefore, different demands for family planning services may play a role in maternal health outcomes. 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

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. An initial survey on male and female perceptions of maternal risk in Zambia found that that superstitions about causes of maternal mortality are pervasive and that such beliefs impede learning about maternal health risk levels. The survey revealed that 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. Reproductive health policies should therefore be designed to increase information on health-related risk factors.

fertility rate of 5.3.⁶ According to a recent body of literature, including the researchers' 2007 study on private access to contraceptives in Zambia, men's higher demand for children can significantly reduce contraceptive adoption, even when contraceptives are easily accessible.^{1,7-11} An initial survey found that superstitions about causes of maternal mortality are pervasive and that such beliefs impede learning about maternal health risk levels.

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. 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 based on the group to which they've been randomly assigned (see 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 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.

From 2016 to 2017, researchers are tracking 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. An endline survey will examine longer-term fertility outcomes, including number of children and birth spacing, as well as maternal and child health.

TABLE 1: TREATMENT CONDITIONS

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

Results and Policy Lessons

Pilot Results

The results of two small-scale pilots conducted in 2010 and 2012, baseline findings from 2015, and an immediate post-intervention survey from 2016, suggest that information about maternal mortality encourages contraception use. In 2012, 40 percent of couples in a group who had attended a community meeting on maternal mortality 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 percent of couples who received the information redeemed the voucher, compared to 6 percent of couples in the comparison group.

Results are forthcoming from the full-scale evaluation described above.

References

1. Ashraf, Nava, Erica Field, and Jean Lee. "Household Bargaining and Excess Fertility: An Experimental Study in Zambia." *The American Economic Review* 104, no. 7 (2014): 2210-2237.
2. "Unmet need for family planning." World Health Organization. Accessed December 30, 2016. http://www.who.int/reproductivehealth/topics/family_planning/unmet_need_fp/en.
3. Babalola, Stella, and Adesegun Fatusi. "Determinants of use of maternal health services in Nigeria - looking beyond individual and household factors." *BMC Pregnancy and Childbirth* 9, no. 1 (2009): 43.
4. Field, Erica. "Traditional Beliefs and Learning about Maternal Risk in Zambia." Allied Social Sciences Associations Annual Meeting, Chicago, IL, January 8, 2017.
5. Nicholas, D. D., D. A. Ampofo, S. Ofori-Amaah, R. O. Asante, and A. K. Neumann. "Attitudes and practices of traditional birth attendants in rural Ghana: implications for training in Africa." *Bulletin of the World Health Organization* 54, no. 3 (1976): 343.
6. *Zambia Demographic and Health Survey 2013-14*. Rockville, Maryland, USA: Central Statistical Office [Zambia], Ministry of Health [Zambia], and ICF International, 2015.
7. DeRose, Laurie F., F. Nii-Amoo Doodoo, and Vrushali Patil. "Fertility Desires and Perceptions of Power in Reproductive Conflict in Ghana." *Gender & Society* 16, no. 1 (2002): 53-73.
8. Doodoo, F. Nii-Amoo, and Maria Tempenis. "Gender, Power, and Reproduction: Rural-Urban Differences in the Relationship Between Fertility Goals and Contraceptive Use in Kenya." *Rural Sociology* 67, no. 1 (2002): 46-70.
9. Ezeh, Alex Chika. "The Influence of Spouses over each Other's Contraceptive Attitudes in Ghana." *Studies in Family Planning* (1993): 163-174.
10. Hollos, Marida, and Ulla Larsen. "Which African men promote smaller families and why? Marital relations and fertility in a Pare community in Northern Tanzania." *Social Science & Medicine* 58, no. 9 (2004): 1733-1749.
11. Hollos, Marida, and Ulla Larsen. "Marriage and contraception among the Pare of northern Tanzania." *Journal of Biosocial Science* 36, no. 03 (2004): 255-278.
12. Lawoyin, Taiwo O., Olusheyi OC Lawoyin, and David A. Adewole. "Men's Perception of Maternal Mortality in Nigeria." *Journal of Public Health Policy* 28, no. 3 (2007): 299-318.

Innovations for Poverty Action - Zambia

Plot 26, Mwambula Street
Jesmondine, Lusaka, Zambia
info-zambia@poverty-action.org | +260 211 29 00 11

For more information:

www.poverty-action.org/study/understanding-male-fertility-preferences-zambia