



HUMAN CAPITAL INITIATIVE



Mahesh Karra is an Assistant Professor of Global Development Policy at the Frederick S. Pardee School of Global Studies at Boston University and Associate Director of the Human Capital Initiative at the Global Development Policy Center. His academic and research interests are broadly in development economics, health economics, quantitative methods, and applied demography.

Understanding Women’s Preferences For and Use of Family Planning in Urban Malawi

MAHESH KARRA AND KEXIN ZHANG

KEY RESULTS

- The contraception prevalence rate in urban Malawi is high - 87.4 percent of the women in our sample were currently using a contraceptive method at screening.
- Injectables are the most commonly used method (44.7 percent) followed by implants (30.2 percent) and pills (7.2 percent).
- The main reasons cited by women for using the current family planning methods were: “method effectiveness” (48.3 percent), “no unpleasant side effects” (31.5 percent), “lasts long” (20.3 percent), “no risk of harming health” (13.1 percent), and “no effect on regular monthly bleeding” (10.8 percent).
- In urban Malawi, women’s preferences for contraceptive methods are often not concordant with their actual method use, i.e., 36.7 percent of the current users wanted to switch from the current method to another method if given the choice.
- Among the women who wanted to switch, a majority regarded implants as an ideal method to switch to (57.4 percent), which were followed by injectables (16.9 percent) and pills (8.8 percent).

This policy brief is jointly published with Innovations for Poverty Action. Visit <https://www.poverty-action.org/publications> for a full list of IPA publications.





Kexin Zhang is a sixth-year Ph.D. candidate at the Department of Economics at Boston University. Her research interests are broadly in development economics and urban economics, with a focus on women's empowerment and the economic impact of transportation infrastructure. She has been overseeing a randomized controlled trial examining behavioral bias in women's family planning decisions in Malawi in collaboration with Innovations for Poverty Action.

percent). The main reasons for wanting to switch to the new method was that it lasts long (34.1 percent), is effective in preventing pregnancy (28.1 percent), has no unpleasant side effects (25.3 percent) and does not require visiting clinic or re-supply (23.7 percent).

- The reasons cited by the potential switchers for not yet switching were: "does not know enough about the method" (32.5 percent), "costs too much" (10 percent), "fear of side effects" (9.6 percent) and "preferred method not available" (9.2 percent).

DESCRIPTION OF PROBLEM/CURRENT POLICY ISSUES

Unlike many domains in health, the provision of family planning services is not only measured by the achievement of good reproductive health outcomes but also considers the objective of helping women and couples maximize a complex set of preferences around future fertility and well-being. In family planning, the role of the client as the key actor in her receipt of care (in this case, her choice of contraceptive method) is distinct from most other contexts in health decision-making where providers often play the leading role in determining which type of treatment is best for a patient. A family planning program would therefore prioritize women and couples to have a right to "full, free and informed choice" over contraceptive methods. For this reason, family planning programs dedicate significant resources into providing complete and accurate information so that women are able to make an informed choice about the full range of contraceptive methods that are available to them. As a result, clients typically do not receive modern contraceptive methods without receiving a consultation session with a counselor, during which time they are informed about available methods.

Although counseling has been identified as an essential component to high quality service provision, little is known about how the information and contraceptive methods that are presented during counseling sessions shape the way women make informed choices about their preferred method. Studies have shown that a woman's fertility intentions, which affect her contraceptive preferences, are also likely to change over her reproductive lifetime. A woman might therefore change her mind frequently over a relatively short time period such that her stated preference for contraception (what she says that she will do) could differ greatly from her actual choice of method (what she actually does). Given that a stated goal of programs is to be able to meet women's reproductive health needs, being able to link a woman's stated preferences for family planning to her eventual contraceptive behavior would likely have significant implications for family planning service provision.

To better understand these issues, researchers at Boston University and Innovations for Poverty Action conducted a study with a sample of married women in Lilongwe, Malawi. The key goal of the study was to evaluate how women's preferences for contraceptive methods and eventual contraceptive use might change in response to more user-centered approaches to family planning counseling.

CONTEXT: MALAWI

The contraceptive prevalence rate (CPR) in Malawi has been increasing over time; according to the Malawi Demographic and Health Survey (DHS), 32.6 percent among women of reproductive age (ages 15-49) and 46.1 percent among married women of reproductive age were using a method of family planning in 2010. In 2016¹, the CPR rose to 45.2 percent and 59.2 percent for each of these groups, respectively. Injectable contraceptives were the most popular method in Malawi in 2010 used by 22.5 percent of women, which were followed by IUDs (9 percent) and female sterilization (8 percent). This method mix of women has not changed significantly over time among married

¹ The 2015-16 Malawi Demographic and Health Survey (MDHS)

women in Malawi, with the use of injectables, IUDs and female sterilization being 30 percent, 11.5 percent and 10.9 percent, respectively in the DHS 2015-16.

In spite of the increase in contraceptive use, there has been a high level of contraception discontinuation in Malawi- an estimated 37 percent of Malawian women who use a family planning method discontinue their method within twelve months from starting the method (2015-16 DHS). While part of this discontinuation can be attributed to a reduced need for contraception, such a high level of discontinuation over such a short period of time suggests that there may exist other barriers that prevent women from realizing their ideal choice of contraceptive method. Analysis of DHS surveys from other countries² suggest that almost half of women in Egypt, Indonesia and Zimbabwe and around two-thirds of women in Bangladesh, Colombia and Peru discontinue their contraceptive method within two years.

EVALUATION

In 2019, researchers collaborated with Innovations for Poverty Action Malawi and the Good Health Kauma Clinic in Lilongwe to evaluate how user-centered counseling approaches to family planning would affect women's preferences for contraceptive methods and how these preferences were being realized over time.

A total of 785 women were selected for the study based on the following eligibility criteria:

- They were married,
- They were between 18 and 35 years old,
- They lived in the city of Lilongwe, and
- They were not pregnant, nor did they give birth in the six months prior to recruitment.

After the initial screening and interview, women received a family planning counseling session with a trained counselor at their homes. After completing the counseling session, women were provided with free transportation (a private taxi service) to visit the Good Health Kauma Clinic, where they could receive any family planning method and related services for free for one month. Whenever a woman wanted to go to the clinic, she could contact the field manager and schedule a time for her visit. On the day of the clinic visit, an IPA field manager would travel to the woman's home to pick her up in the private taxi and then accompany her to the clinic. The woman would be dropped off at her home following the visit.

All women who visited the clinic were interviewed about their experience, preferences for family planning, and choice of method (if they did choose to take up contraception) after their visit. At the end of the one-month period, women who did not visit the clinic were interviewed either by phone or at home. In this interview, women were asked about their current contraceptive use, their (possibly new) preferences for family planning, and importantly, reasons why they did not go to the clinic for services if they had previously intended to go.

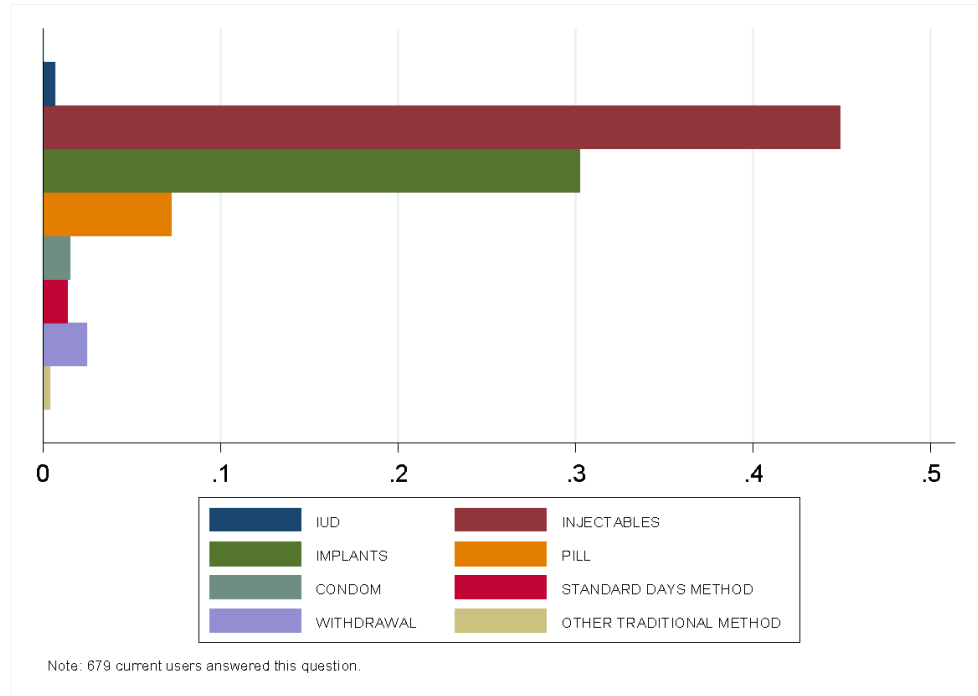
RESULTS

Contraceptive use among women in our study is high; 87.4 percent of women were currently using at least one family planning method at the time of recruitment. Injectable contraception was the most

² Ali, Mohamed M, and John Cleland. "Contraceptive Switching after Method-Related Discontinuation: Levels and Differentials." *Studies in Family Planning* 41, no. 2 (June 7, 2010): 129-33.

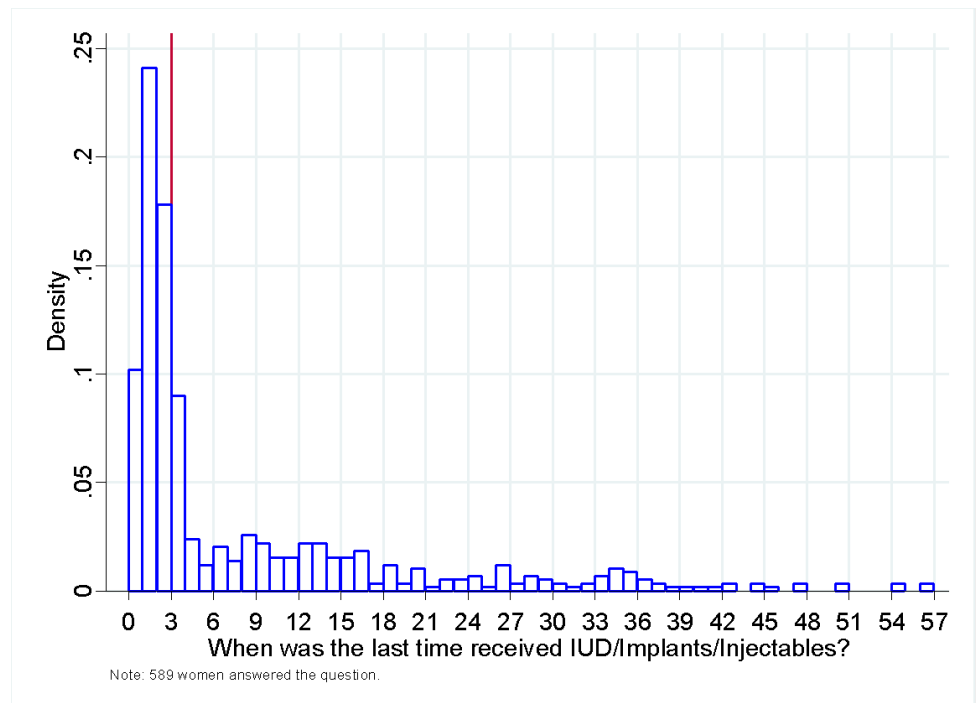
commonly used method (44.7 percent) followed by implants (30.2 percent) and pills (7.2 percent) (see Figure 1 below). Sixty percent of women who were currently using injectables, implants, or IUDs either received or resupplied that method (in the case of injectables) within three months prior to the survey (see Figure A1 below).

Figure 1: Baseline: Current Contraceptive Method



Source: Boston University Global Development Policy Center, 2021.

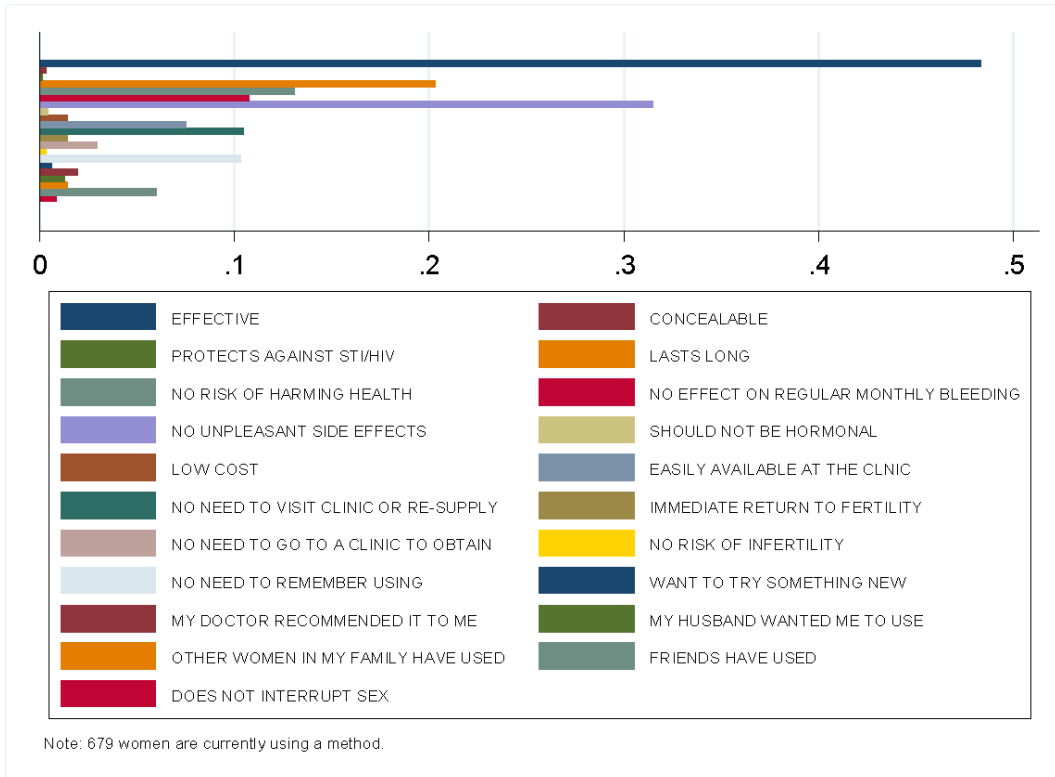
Figure A1: Number of Months Since Receiving IUD/Implants/Injectables Last Time



Source: Boston University Global Development Policy Center, 2021.

When asked why they chose their current method, most women reported “method effectiveness” (48.3 percent), followed by “no unpleasant side effects” (31.5 percent), “lasts long” (20.3 percent), “no risk of harming health” (13.1 percent), and “no effect on regular monthly bleeding” (10.8 percent). Other reported reasons for choosing their particular method were related to method convenience, including “no need to visit clinic to re-supply the method” (10.46 percent), and “no need to remember using the method” (10.31 percent) (see Figure 2 below).

Figure 2: Reasons for Using the Current Method

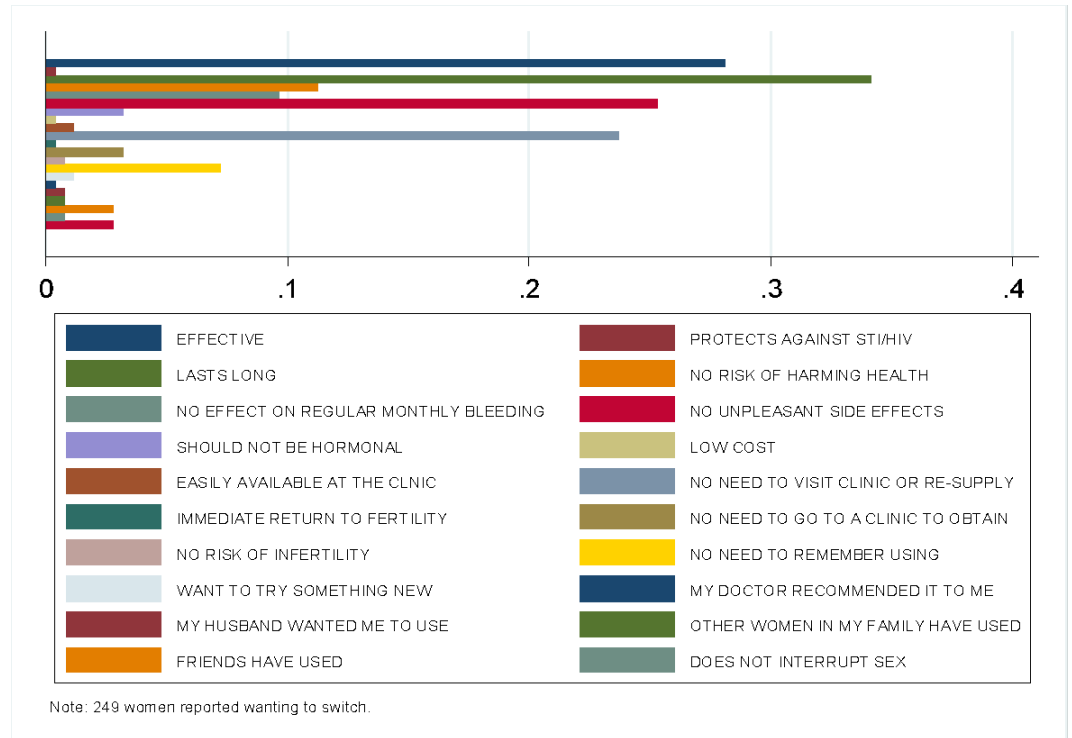


Source: Boston University Global Development Policy Center, 2021.

BARRIERS TO CONTRACEPTION USE EXIST FROM THE DEMAND SIDE

To understand whether women were currently on their ideal contraceptive method, current users were asked whether they would choose to switch their current method if they had the choice to switch. Out of the 679 current users, 249 (36.7 percent) reported that they wanted to switch. When asked which method they would like to switch to, the majority of these women, most of whom were using injectables, chose to list implants as their ideal method, reporting that it lasts longer than their current method (34.1 percent), is more effective in preventing pregnancy (28.1 percent), has no unpleasant side effects (25.3 percent), and does not require visiting clinic or re-supply (23.7 percent) (Figure 3).

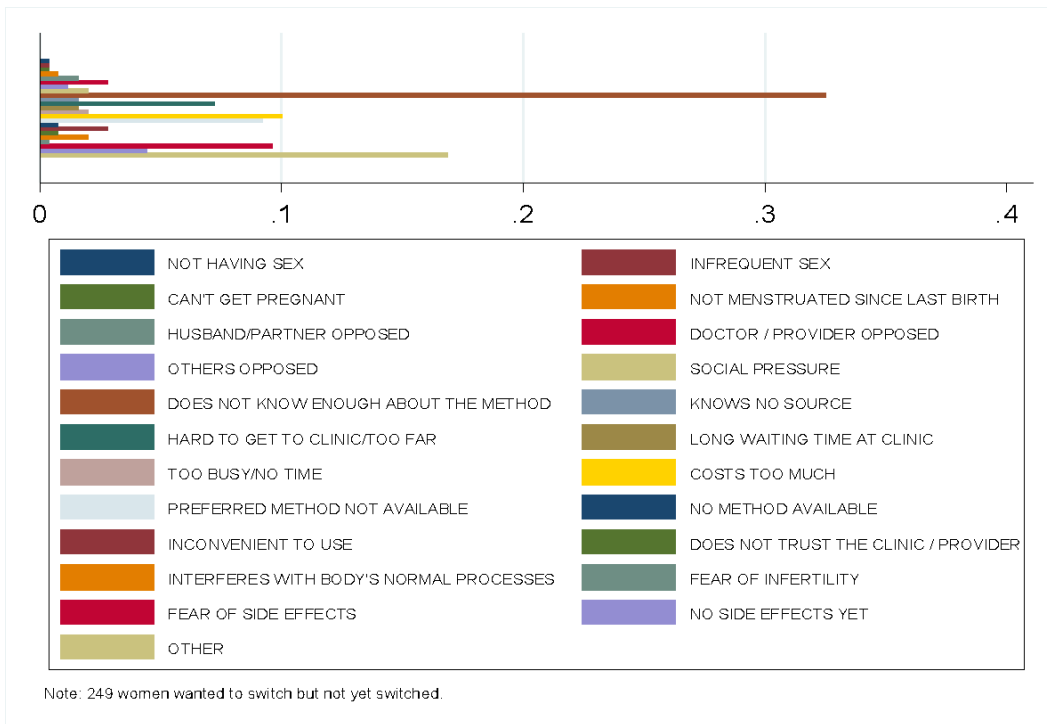
Figure 3: Reasons for Wanting to Switch to the New Method



Source: Boston University Global Development Policy Center, 2021.

When asked why they had not yet switched to their method of choice (Figure 4), most women reported that they did not know enough about the method (32.5 percent), that the method costed too much (10 percent), that they were afraid of potential side effects (9.6 percent), and that their preferred method not available (9.2 percent). These findings indicate that demand-side barriers continue to exist for women and have prevented a significant proportion of potential switchers from switching to their ideal contraceptive method.

Figure 4: Reasons for Not Yet Switching to the New Method

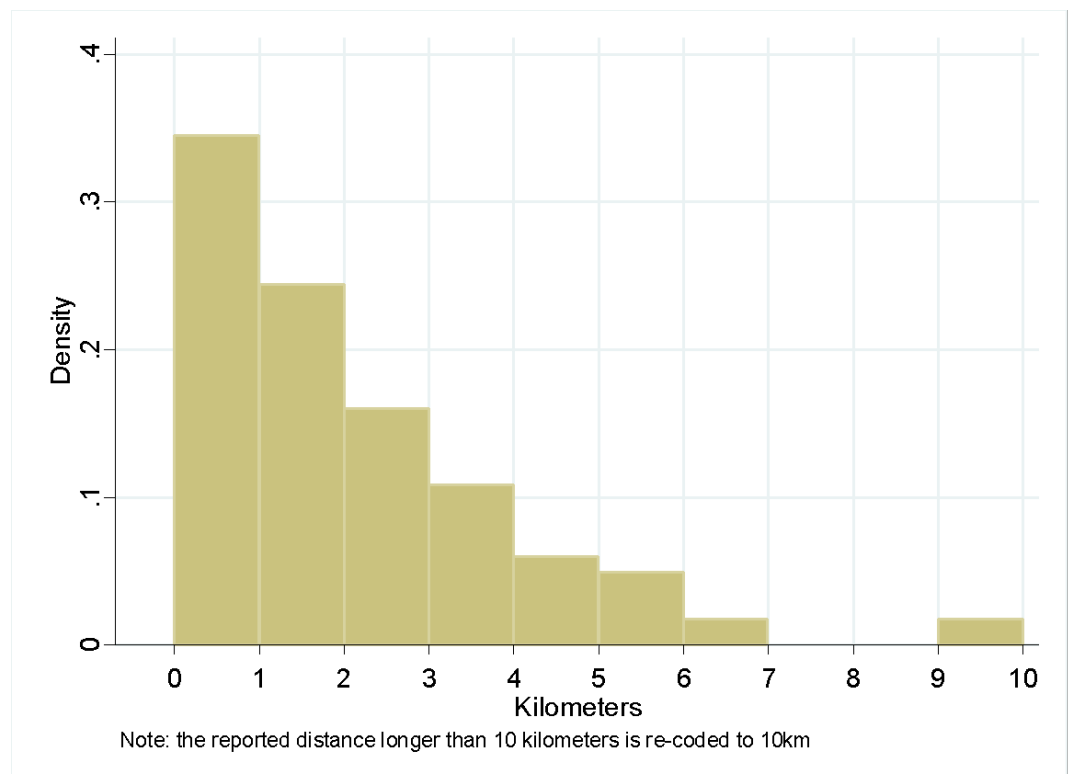


Source: Boston University Global Development Policy Center, 2021.

BARRIERS TO CONTRACEPTION USE EXIST FROM THE SUPPLY SIDE

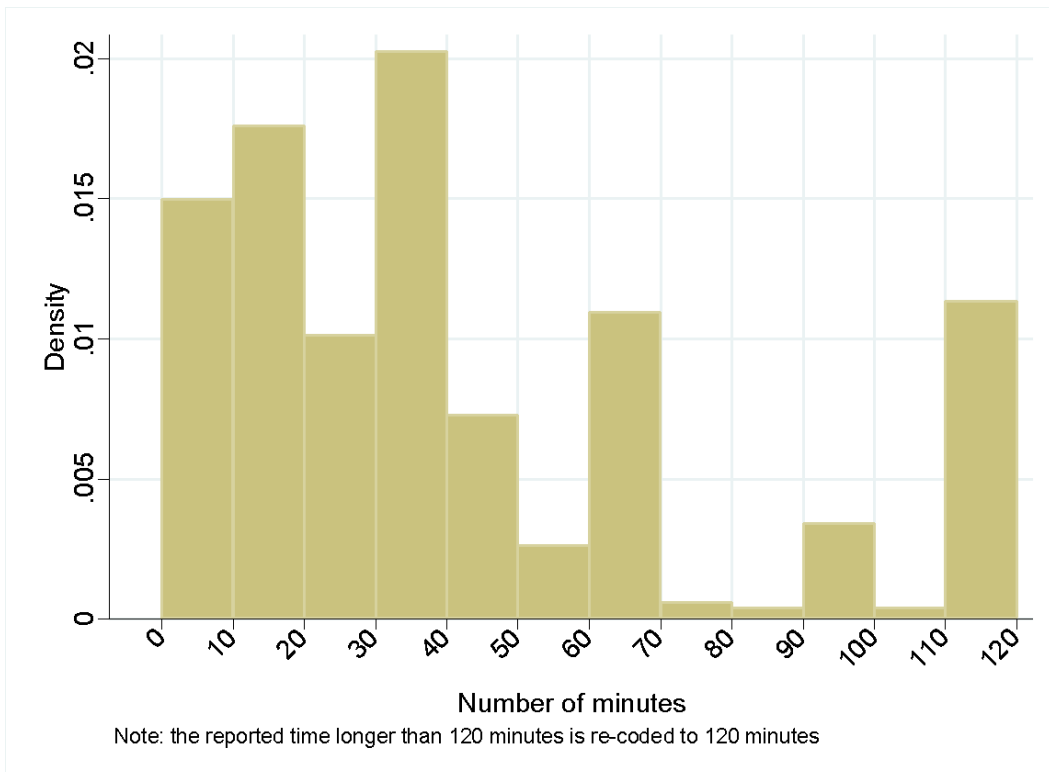
Supply-side barriers continue to impede women’s method-seeking process. A large proportion of current users in our study received their last contraceptive method from government health centers (36.3 percent) and from private hospitals and clinics (27.7 percent). However, women, on average, needed to travel 1.71 kilometers to their nearest service provider to obtain a family planning method (Figure 5) and spend an average of 41 minutes to travel to obtain the method (Figure 6). Around 45 percent of women reported having received some type of family planning counseling in the past three months. Women reported receiving counseling from a range of service providers, including government hospitals (36.2 percent) and government health centers (23.8 percent); however, a significant proportion of women (22.2 percent) also reported receiving counseling primarily from their friends or relatives – this finding may, in part, reflect existing barriers to care-seeking. Given the amount of time and effort that women would need to take to seek care, combined with the amount of time and effort that providers would need to make to effectively counsel and care for each client, it quickly becomes clear that helping women to realize their family planning goals is a challenging task that is hard to achieve.

Figure 5: Distance to Obtain a Family Planning Method



Source: Boston University Global Development Policy Center, 2021.

Figure 6: Time Needed to Travel to the Place to Obtain a Family Planning Method

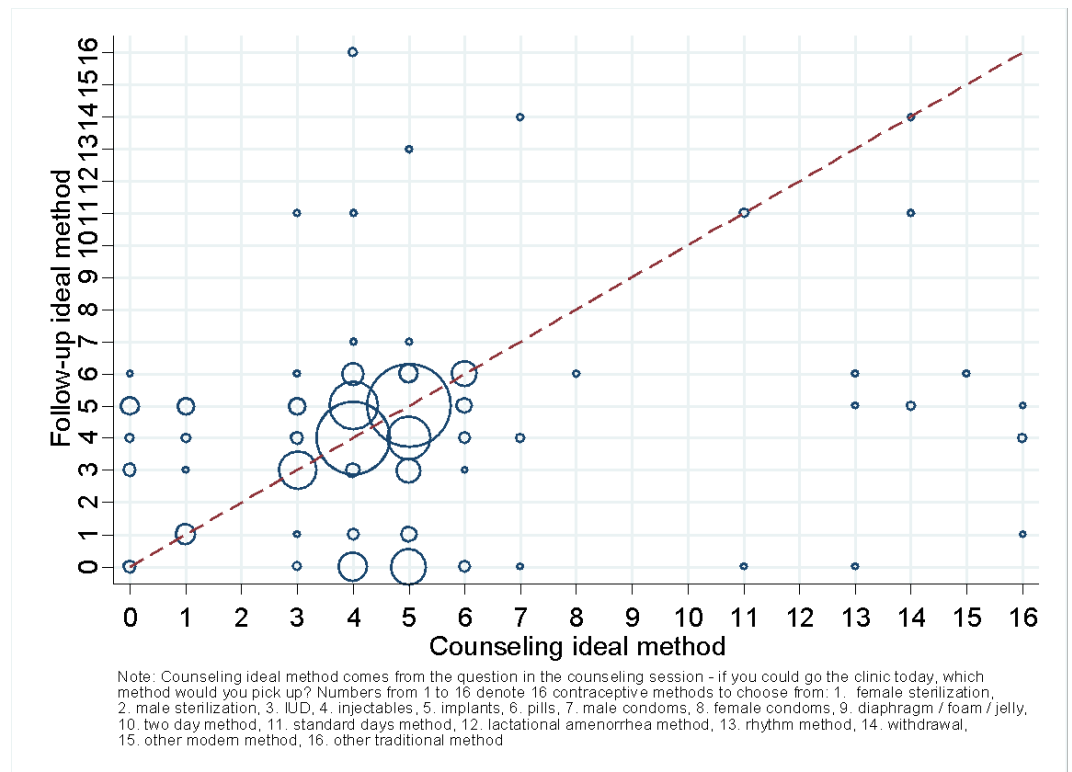


Source: Boston University Global Development Policy Center, 2021.

WOMEN'S PERCEIVED IDEAL METHOD IS CHANGING OVER TIME

It is often presumed that women's preferences for contraception, and particularly her preferred choice of contraceptive method, are relatively stable over time. However, we find that women were changing their preferred contraceptive method frequently over a relatively short period of time. Figure 1 shows the change in woman's reported ideal method from the time when a woman had her counseling session to the time when she was next interviewed, on average, 59.3 days after counseling. The X-axis presents the woman's ideal contraceptive method at counseling³, and the Y-axis presents the woman's ideal method at the follow-up interview. The bubbles that fall on the red dashed diagonal correspond to those women who reported the same ideal method at both stages, and all the off-diagonal bubbles suggest a change of ideal method. The sporadic distribution of bubbles away from the diagonal in Figure 7 indicates that women's reported ideal method has been changing tremendously over time - 43.6 percent of women reported different ideal methods between the counseling and the final follow-up sessions.

Figure 7: End-of-Counseling Ideal Method and Follow-up Ideal Method



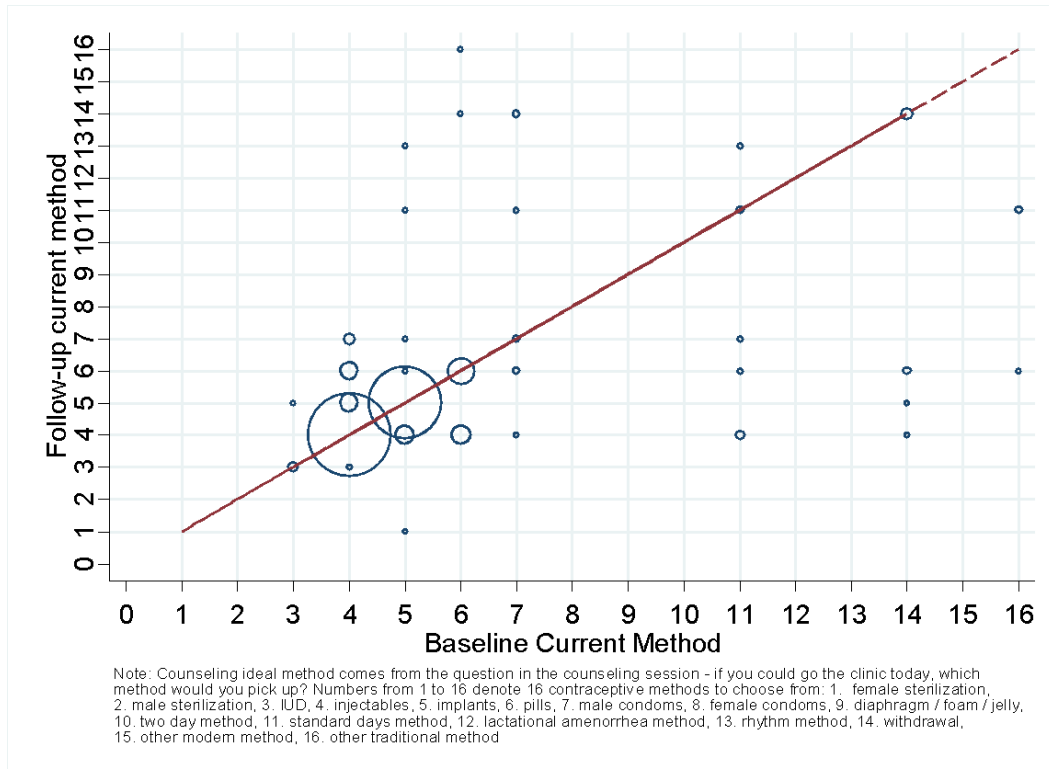
Source: Boston University Global Development Policy Center, 2021.

³ Numbers from 1 to 16 denote 16 contraceptive methods to choose from: 1. female sterilization, 2. male sterilization, 3. IUD, 4. injectables, 5. implants, 6. pills, 7. male condoms, 8. female condoms, 9. diaphragm / foam / jelly, 10. two day method, 11. standard days method, 12. lactational amenorrhea method, 13. rhythm method, 14. withdrawal, 15. other modern method, 16. other traditional method

WOMEN'S CURRENTLY USED METHOD IS CHANGING OFTEN, BUT NOT AS RAPIDLY AS IDEAL METHOD

Similarly, women's current method of family planning has also been changing over time, as is shown in Figure 8. Around 14.8 percent of women changed their currently used methods from baseline to their last follow-up. Comparing Figure 7 and Figure 8, fewer women changed their actual use of contraceptive method relative to the number of women who changed their minds about their ideal contraceptive method. This suggests that women's stated preferences for contraceptive methods are likely to change more than their actual contraceptive use - their stated preferences for contraceptives (i.e. the method that they say they want) changes more frequently than their actual contraceptive behavior (i.e. method that they actually use).

Figure 8: Baseline and Endline Current Method



Source: Boston University Global Development Policy Center, 2021.

WOMEN'S REALIZATION OF THEIR IDEAL METHODS OVER TIME REMAINED SUB-OPTIMAL

Since both women's stated ideal methods and current methods have been varying over time, one natural question to ask is whether women have been able to consistently meet their family planning preferences over time - in other words, are women actually using the contraceptive method that they deem as ideal?

Our findings show there exists significant differences between women's ideal stated method and the contraceptive method they were actually using. This discrepancy exists over time, both at the time of the counseling session and at the time of the final interview. At the counseling session, 42 percent of women were using a contraceptive method that differed from their perceived ideal method; at the final interview, however, 55 percent of women were using a method that was different from their

ideal stated method. These all suggest that women are not necessarily using a method that they identified as their ideal method of choice, and there is room for improvement in women's preference realization in contraception.

POLICY LESSONS

The findings from our study have significant implications for policies, programs, and interventions that aim to improve family planning and reproductive health services for women in Malawi, as well as more generally. In particular:

- **Women's stated and realized preferences for family planning are malleable and sensitive to a range of factors.** Given that women are likely to change their minds frequently and over short periods of time, service providers need to be able to adopt flexible approaches to assessing women's preferences and to meeting women's reproductive health needs, which is the key goal of an effective family planning program. Being able to link a woman's stated preferences for family planning to her eventual contraceptive behavior would have significant implications for service provision.
- **Service providers need to be responsive to changes in women's choice of contraceptive method, and particularly women's desires to switch methods, even if may come at a greater cost to them.** A third of current contraception users in Malawi have an intent to switch to another method from the current ones but have not yet done so mainly due to lack of knowledge (32.5 percent), high cost (10 percent), fear of side effects (9.6 percent), and unavailability of the preferred method (9.2 percent). While switching methods often is accompanied by an additional cost to the service provider (additional time to counsel women on the new method and to inform them of the benefits and risks of the new method, costs associated with providing the new method, costs to remove the old method, etc.), service providers need to factor in these costs when responding to women's needs, which in turn would yield the best reproductive health outcome for women.
- **To minimize costs associated with switching methods, service providers would benefit from conducting a more comprehensive initial counseling session with women.** A more thorough initial visit with women may minimize future misperceptions about methods and may also allow women to make a more informed contraceptive decision from the onset.

REFERENCES

- Ali, M.M., Cleland, J. (2010) Contraceptive Switching after Method-Related Discontinuation: Levels and Differentials. *Studies in Family Planning* 41(2): 129–133. <https://doi.org/10.1111/j.1728-4465.2010.00234.x>.
- Ashraf, N., Field, E., Lee, J. (2014) Household Bargaining and Excess Fertility: An Experimental Study in Zambia. *American Economic Review* 104(7): 2210–2237. <https://doi.org/10.1257/aer.104.7.2210>.
- Ashraf, N., Field, E., Voena, A., Ziparo, R. Maternal Mortality Risk and the Gender Gap in Desired Fertility, n.d., 36.
- Debpuur, C., Bawah, A. (2002) Are Reproductive Preferences Stable? Evidence from Rural Northern Ghana. *Genus* 58(2): 63–89.
- Deck, C., Jahedi, S. (2015) The Effect of Cognitive Load on Economic Decision Making: A Survey and New Experiments. *European Economic Review* 78: 97–119. <https://doi.org/10.1016/j.euroecorev.2015.05.004>.



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.

www.bu.edu/gdp

The views expressed in this Policy Brief are strictly those of the author(s) and do not represent the position of Boston University, or the Global Development Policy Center.

- Delavande, A. (2008) Pill, Patch, or Shot? Subjective Expectations and Birth Control Choice. *International Economic Review* 49(3): 999-1042.
- El-Khoury, M., Thornton, R., Chatterji, M., Kamhawi, S., Sloane, P., Halassa, M. (2016) Counseling Women and Couples on Family Planning: A Randomized Study in Jordan. *Studies in Family Planning* 47(3): 222-238. <https://doi.org/10.1111/sifp.69>.
- Hartmann, M., Gilles, K., Shattuck, D., Kerner, B., Guest, G. (2012) Changes in Couples' Communication as a Result of a Male-Involvement Family Planning Intervention *Journal of Health Communication* 17(7): 802-819. <https://doi.org/10.1080/10810730.2011.650825>.
- Hensher, D.A. (2006) How Do Respondents Process Stated Choice Experiments? Attribute Consideration under Varying Information Load. *Journal of Applied Econometrics* 21(6): 861-878. <https://doi.org/10.1002/jae.877>.
- Hogarth, R., Einhorn, H.J. (1992) Order Effects in Belief Updating: The Belief-Adjustment Model. *Cognitive Psychology* 24(1): 1-55. [https://doi.org/10.1016/0010-0285\(92\)90002-J](https://doi.org/10.1016/0010-0285(92)90002-J).
- Johnson-Hanks, J., Hamory-Hicks, J., Miguel, E., Mueller, M.W. Reflecting on Major Life Decisions: Changing Your Mind and Not Recalling It, n.d., 25.
- Kim, Y.M., Kols, A., Mucike, S. (1998) Informed Choice and Decision-Making in Family Planning Counseling in Kenya. *International Family Planning Perspectives* 24(1): 4-42.
- Lundgren, R.I., Gribble, J.N., Greene, M.E., Emrick, G.E., Monroy, M. (2005) Cultivating Men's Interest in Family Planning in Rural El Salvador. *Studies in Family Planning* 36(3): 173-188. <https://doi.org/10.1111/j.1728-4465.2005.00060.x>.
- McCarthy, A.S. His and Her Fertility Preferences: An Experimental Evaluation of Asymmetric Information in Family Planning, n.d., 45.
- Shattuck, D., Kerner, B., Gilles, K., Hartmann, M., Ng'ombe, T., Guest, G. (2011) Encouraging Contraceptive Uptake by Motivating Men to Communicate About Family Planning: The Malawi Male Motivator Project. *American Journal of Public Health* 101(6): 1089-1095. <https://doi.org/10.2105/AJPH.2010.300091>.
- Terefe, A., Larson, C.P. (1993) Modern Contraception Use in Ethiopia: Does Involving Husbands Make a Difference? *American Journal of Public Health* 83(11): 1567-1571.
- Thaler, R. (1980) Toward a Positive Theory of Consumer Choice. *Journal of Economic Behavior & Organization* 1(1): 39-60.
- Wang, C.C., Vittinghoff, E., Hua, L.S., Yun, W.H., and Rong, Z.M. (1998) Reducing Pregnancy and Induced Abortion Rates in China: Family Planning with Husband Participation. *American Journal of Public Health* 88(4): 646-648.