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Experimental Approaches to Assessing the Economic Determinants and Consequences of Contraceptive Adoption in Zambia

Little rigorous empirical evidence exists to substantiate claims that access to reproductive health services and technologies impact the economic lives of women and children, or that decisions about contraceptive use and fertility respond to improvements in economic opportunities. We will use survey and experimental data to establish these causal relationships in urban Zambia. We will assess the impact of increases in access to family planning services on reported fertility desires, contraceptive use, fertility, and economic outcomes. The baseline survey and intervention were implemented in Lusaka, Zambia in 2007. A follow-up survey will facilitate the investigation of the broader impact of contraceptive adoption on outcomes for women and children, a more thorough analysis of decisionmaking within the household about fertility and contraceptive adoption, and an investigation of the importance of peer effects.

Country where the research will take place

Zambia

How does the research describe the impact of population/reproductive health on poverty reduction and/or economic growth?

First, the research will shed light on the impact of contraceptive availability and use on women's labor force participation, household income, school enrollment, expenditures on education, and investments in child health such as vaccination and utilization of government-sponsored growth, nutrition monitoring programs, and clinic-based child health services. Injectable contraception and contraceptive implants are in principle available to women in Zambia through public clinics, but they are in practice rationed through stockouts and long wait times for appointments with family planning nurses; our experimental design increases access among randomly selected women through the distribution of vouchers guaranteeing free and immediate access to this method at the local public health clinic.

Second, we will shed light on the impact of male involvement in the decision to use contraceptive methods and the extent to which unmet need can be characterized as the outcome of bargaining between spouses with different fertility preferences. The study uses a novel setting and experimental design, implemented with a family planning clinic in Lusaka, Zambia, to test whether women who desire to limit fertility but do not

use contraception are constrained by spouses' preferences for children or unwillingness to use birth control.

Third, the proposed research will measure and characterize peer effects in contraceptive adoption by surveying social contacts of women in the original study one year from now. We hope to not only test for learning and information transmission through peer networks, but also to look for empirical signatures of the influence of peers through norms or a taste for imitation.

How will the research address a policy need, and what kind of policy lesson is expected?

We anticipate that this work will primarily impact policy by providing rigorous empirical evidence on whether and how to promote access to and use of modern contraceptive methods.

The work is directly relevant to the design of family planning services in much of Africa, where male involvement in family planning is actively debated. A better understanding of the influence of contraception on family health and well-being has important implications for the creation of family planning policies and designing family planning programs in resource constrained countries. In addition, by making use of the opportunity presented by the experiment to measure the importance of peer effects in contraceptive adoption, this study will provide evidence on the extent to which contraceptive knowledge spreads through social networks to create changes in norms about fertility choices.

Data used

This project draws a sample from a roster of mothers who have given birth in large public health clinics in a low-and-middle income area. Less than half the women included in the target sample were found—because the women had moved from the address on the roster or had never lived there (but used the address in order to obtain services from the clinic). Thus, the study population is supplemented with a second sample which was drawn by recruiting women based on house numbers in the catchment area. There are 1,994 women in the study; 1,150 were included in the treatment group.

Research results

Data collection and cleaning are ongoing. Since February 2009, follow-up data has been collected for the *Gender, Intra-household Decisionmaking, and the Demand for Children* project. The follow-up survey will enable investigation of the broader impact of contraceptive adoption on outcomes for women and children and a more thorough analysis of decisionmaking within the household about fertility and contraceptive adoption. Follow-up work includes tracking back and interviewing respondents from 2007. Analogous surveys of

husbands of women originally interviewed will also be conducted.

Preliminary results show that takeup among women assigned to receive the vouchers with their husbands was 9.7 percent lower than among women randomly assigned to receive the vouchers alone. We find evidence that this reduction in take up was larger if husbands wanted more children than their wives. There is no evidence that assignment to couples treatment reduces voucher use for women whose husbands want no more children, and evidence for a 10.2 percent reduction in use in the subsample of women whose husbands do want more children.

Additionally, we find evidence that the effect of the couples treatment was greater for couples in which the husband's ideal exceeded the wife's ideal. In addition, the treatment effect was significantly larger for younger couples (measured by either the husbands' and wives' ages), also consistent with a story in which differentials in future preferences over fertility drive differences in demand for use of the voucher. In contrast, we find no evidence that takeup was differentially lower when husbands were less educated.