# Understanding Male Fertility Preferences in Zambia

Last updated on August 23, 2016

## Pre-trial Fields

### Trial Information

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### Location(s)

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### Region

| Africa |

### Primary Investigator

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<td>Keesler Welch</td>
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<tr>
<td>Roberta Ziparo</td>
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<tr>
<td>Nava Ashraf</td>
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<tr>
<td>Erica Field</td>
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<tr>
<td>Alessandra Voena</td>
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Additional Trial Information

Status
On going

Start date
2014-04-01

End date
2017-04-30

Keywords
Health

Additional Keywords
Maternal Mortality, family planning, fertility, women's health

JEL code(s)

Secondary IDs

Abstract

The purpose of this study is to understand the determinants of men’s preferences for fertility and family planning. Surveys such as the Demographic and Health Surveys have shown that men in developing countries report a higher desired total fertility than their wives (Becker, 1999). However, little is known about what forces drive such preferences. A previous study Intra-household Decision-making and Excess Fertility: An Experimental Study of Concealable Contraceptives conducted by this research team in Lusaka (Ashraf et al. 2009) assigned married women to receive a voucher, which guaranteed ease of access to a range of modern contraceptives, either alone or in the presence of their husbands. The study revealed that women who received the voucher alone were 23% more likely to visit a family planning nurse and 38% more likely to receive a concealable form of contraception than women who received the voucher in the presence of their husbands, leading to a 57% reduction in unwanted births 9-14 months later. This behavior was mainly observed among women who had lower desired number
of children than their husbands. Discordant preferences in the ideal number of children seem thus to have an important effect on household decisions about family planning. Understanding where such differences originate can inform policy-makers who intend to implement family planning policies that target men, and ultimately can contribute to reducing women’s unmet need for contraceptives.

This new study thus builds upon the findings of the previous study in attempting to understand the cause of, and potential trigger factors to impact, and differential fertility preferences among men and women. The final study design that we are submitting with this proposal is the result of two years of exploratory research to refine both the research questions and the research/treatment design, so that the study results will be best suited to inform policy in a meaningful way.

**External Link(s)**

IPA project summary  
J-PAL evaluation summary  

**Sponsors & Partners**

### Sponsor(s)

### Partner(s)

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Experimental Details

Interventions

Intervention(s)

After the baseline survey, the study respondents will be invited to attend community meetings (intervention) at a common location where each spouse will attend a different type of meeting and receive a different informational curriculum.

The intervention will consist of three intervention arms (approximately 250 couples will be randomly assigned to each arm for invitation). Random assignment will be stratified by the following:
1) A categorical variable that represents the husband's ideal birth spacing for children as perceives by their wives
2) A binary variable showing if the couple has children or not.
3) Husband knows someone in the family who died at child-bearing
4) Woman aged over 35

The three intervention arms are:

1. Wife receives maternal mortality (MM) curriculum, husband receives family planning (FP) curriculum
2. Husband receives MM curriculum, wife receives FP curriculum
3. Both husband and wife receive FP curriculum

Measures of demand for family planning are going to be recorded at the time of intervention. These new measures include:

- Wife’s willingness to pay (WTP) for her spouse to receive MM treatment: The women that receive access to the MM curriculum will be asked for their WTP for a ticket that will provide their husband access to the same meeting that they just attended. This will shed light on the barriers to communication about maternal risk in the household and the existence of demand for the services provided by the intervention.
- Husbandâ€™s WTP for a voucher to get priority access to FP services:
The men will be asked to declare their WTP for a voucher that provides free access to family planning counseling and services at the clinic. In order to ensure that a large enough number of men from the sample get access to the voucher, so that we have sufficient power to measure voucher take up, we want to ensure that 60% of them get access to the voucher at zero price. This will be randomly determined as the 10 men in each community meeting will select a sealed envelope from amongst 10 sealed envelopes. 6 of these envelopes (or 60% of the meeting attendance) will have a zero price written within it and the prices in the rest of the envelopes will be randomly determined by the computer. Thus, this allocation of prices is completely random and depends on the envelope selected by each respondent.
The respondent will use up to 15 kwacha from their transport reimbursement (25 ZMK) for participating in the WTP experiment.

### Intervention Start Date

2015-11-23

### Intervention End Date

2016-05-29

### Outcomes

#### Outcomes (end points)

(1) Take-up/continuation of contraceptive use (regularity of use, satisfaction with chosen method); (2) Pregnancy; (3) Spousal negotiating over fertility and birth control use; (4) Joint family planning goals, including number of offspring and desired spacing; (5) Husbandâ€™s willingness to pay for family planning services at the point of intervention to gauge change in demand for these services as a result of the intervention.

#### Outcomes (explanation)

### Experimental Design

#### Experimental Design

a) Baseline

The sample size for this study is approximately 750 couples (1500 people) from the Chipata and Chaisa catchment area in Lusaka, Zambia. The couples were first screened (check exclusion criteria below) by community health workers (CHWs) who visited house numbers that were randomly generated from a list of all houses in the sample area. These CHWâ€™s later returned to the households they had successfully screened and who were eligible to participate in the study with enumerators who proceeded to interview the couple (separately), after obtaining consent from both the husband and the wife using consent forms.
The baseline survey took approximately 2 hours for the men and 2.5 hours for the women and was conducted separately to ensure complete privacy of each respondent. During the baseline, the respondents were also informed about a community meeting that they would be invited to a couple of months later and two additional follow-up surveys.

b) Intervention
After the baseline survey, these respondents will be invited to attend community meetings (intervention) at a common location where each spouse will attend a different type of meeting and receive a different informational curriculum.

The intervention will consist of three intervention arms (approximately 250 couples will be randomly assigned to each arm for invitation). Random assignment will be stratified by the following:
1) A binary variable that represents discordant preferences for children: does the man want more children than the woman or not.
2) A binary variable showing if the couple has children or not.
3) Husband knows someone in the family who died at child-bearing
4) Woman aged over 35

The three intervention arms are:

1. Wife receives maternal mortality (MM) curriculum, husband receives family planning (FP) curriculum
2. Husband receives MM curriculum, wife receives FP curriculum
3. Both husband and wife receive FP curriculum

Since we faced numerous challenges tracking husbands at baseline, we have developed new measures of demand for family planning that will be recorded at the time of intervention. These measures will allow us to accommodate the reduced sample by offering additional statistical power as well as answer new questions that have emerged through our analysis of baseline data. These new measures include:

- Wife’s willingness to pay (WTP) for her spouse to receive MM treatment:
  The women that receive access to the MM curriculum will be asked for their WTP for a ticket that will provide their husband access to the same meeting that they just attended. This will shed light on the barriers to communication about maternal risk in the household and the existence of demand for the services provided by the intervention.
- Husband’s WTP for a voucher to get priority access to FP services:
  The men will be asked to declare their WTP for a voucher that provides free access to family planning counseling and services at the clinic. In order to ensure that a large enough number of men from the sample get access to the voucher, so that we have sufficient power to measure voucher take up, we want to ensure that 60% of them get access to the voucher at zero price. This will be randomly determined as the 10 men in each community meeting will select a sealed envelope from amongst 10 sealed envelopes. 6 of these envelopes (or 60% of the meeting attendance) will have a zero price written within it and the prices in the rest of the envelopes will be randomly determined by the computer. Thus, this allocation of prices is completely random and depends on the envelope selected by each respondent. The respondent will use up to 15 kwacha from their transport reimbursement (25 ZMK) for participating in the WTP experiment.
c) Midline
A midline survey will be conducted after the community meetings are held. At the conclusion of this second lengthy survey, 10 ZMK will be offered as a token of appreciation, as previously suggested by the ethics review board; the late-stage timing of this is designed so that it can in no way influence the couple’s decision to participate in the study or community meeting.

d) The Endline survey conducted approximately one year after participation in the community meetings, will collect the same information as the baseline survey, and is intended to track changes.
To make sure that no confidential information about previous surveys provided by the women in the previous study will be revealed, the enumerator will not be given any information regarding past answers given by household members.

d) Exclusion criteria
The following is the exclusion criteria for this study:
1. Any household whose wife had diabetes, heart disease or high blood pressure at baseline (screened from self-reports and all participants who use the voucher for family planning services will be evaluated by a nurse to determine the safety of contraceptive use);
2. Any household whose wife was younger than 18 years of age or older than 40 at baseline, since bone accretion is particularly important in the former group and there is a greater risk of osteoporosis in the latter group;
3. Any household whose wife is less than 8 weeks postpartum (since the medication is excreted in breast milk and it is not known whether this could affect child development; screened from initial visit by CHWs);
4. Any household whose wife has been sterilized or had a hysterectomy (screened from initial visit by CHWs);
5. Any household whose wife is currently using permanent or semi-permanent forms of contraception such as loops, implants, and Intra-uterine devices.
6. Men or women who are not currently married (screened by initial visit by CHWs);
7. Any household whose wife is currently pregnant (screened from initial visit by CHWs);
8. Any household where the couple is currently actively trying to get pregnant.
9. Households who have not been found at the address they provided and whose new address could not be found or is no longer in the Chipata Clinic catchment area (for the follow-up sample only).

Power calculations
Power calculations were performed based on men’s willingness to pay for a voucher to access family planning estimated from our pilot study. Observations were clustered at the level of the community workshop, assuming a 5% intra-cluster correlation. Compliance rates (attendance of the community meeting and non-attrition) were assumed to be 80%. Conditioning on the sub-sample of households for which the husband is eligible to participate in the study ((MM + FP)h and FPh), we are able to detect a 0.95 difference in WTP between the treatment and control group at 5% significance with 0.9 power with 250 observations per treatment arm. Assuming the same intra-cluster correlation and compliance rate for women, we are able to detect a 2.07 difference in willingness to pay for the intervention, again, at 5% significance with 0.9 power with 250 observations per treatment arm.
Experimental Design Details

Randomization Method
Randomization done in office by computer

Randomization Unit
couples

Was the treatment clustered?
No

Experiment Characteristics

Sample size: planned number of clusters
No clusters

Sample size: planned number of observations
750 couples around the Chipata clinic in Lusaka, Zambia

Sample size (or number of clusters) by treatment arms
250 couples invited per treatment arm

Minimum detectable effect size for main outcomes (accounting for sample design and clustering)

Supporting Documents and Materials

Documents

IRB

INSTITUTIONAL REVIEW BOARDS (IRBs)

IRB Name
Harvard Institutional Review Board
IRB Approval Date
2013-09-10
IRB Approval Number
18907

Analysis Plan

Analysis Plan Documents

Post-trial Fields

Post-trial Information

Study Withdrawal
This trial has not been withdrawn.

Intervention

Intervention Completion Date
Data Collection Complete?
Final Sample Size: Number of Clusters (unit of randomization)
Was attrition correlated with treatment status?
Final Sample Size: Total number of observations
Final Sample Size (or number of clusters) by treatment arms

Data Publication

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**Reports and Papers**

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