

The Effect of Free Contraception on Fertility in Burkina Faso

Researchers:

Pascaline Dupas

Seema Jayachandran

Adriana Lleras-Muney

Pauline Rossi

Sector(s): Gender, Health

Fieldwork: Innovations for Poverty Action (IPA)

Location: Burkina Faso

Sample: 14,545 households

Target group: Families and households

Outcome of interest: Fertility

Intervention type: Information Subsidies Edutainment

AEA RCT registration number: AEARCTR-0002885

Data: <http://doi.org/10.3886/E215841V1>

Research Papers: The Negligible Effect of Free Contraception on Fertility: Experimental Evidence...

Partner organization(s): Ministry of Health of Burkina Faso

Although fertility levels have declined worldwide, many countries in sub-Saharan Africa are experiencing a slower shift. To examine whether this is due to lack of access to contraception or households wanting large families, researchers conducted a randomized evaluation among households in rural Burkina Faso. Providing married women with access to free contraception over a three-year period did not reduce birth rates. Birth rates also remained unchanged when free contraception was paired with information to correct misconceptions about child mortality or village meetings or an edutainment film aimed at ensuring exposure to a diversity of views about family size and modern contraception.

Policy issue

Over the past fifty years, the number of children born per woman has declined from a global average of five in 1970 to 2.3 in 2025, though many countries in sub-Saharan Africa have not experienced a similar decline. For example, Burkina Faso's fertility rate was 4.8 in 2018. One prominent view is that many pregnancies are unplanned and might have been avoided if women had better access to reliable and diverse birth control methods.

In practice, whether this "unmet need" for contraception is indeed a key factor sustaining higher fertility rates in sub-Saharan Africa is unclear. Most previous research has focused on how access to contraception influences its use, rather than looking at its effect on fertility outcomes. Accounting for existing perceptions about child mortality risks and acceptance of birth control, how does free contraception impact fertility rates?

Context of the evaluation

The Government of Burkina Faso considered introducing a policy to provide free access to family planning services as part of a broader effort to strengthen reproductive health and expand access to essential care. In light of this, researchers designed a randomized evaluation to anticipate the potential impacts on fertility of such a policy.

The study focused on married women of reproductive age. On average, the women in the sample were 28 years old and their spouses were 38 years old. Most women (83 percent) had not received formal education. Households were often low-income: one percent of households had access to an electricity network, 48 percent owned a radio, 47 percent had cemented or tiled flooring, and 43 percent reported having a toilet.

Before the study began, the average woman reported 3.5 pregnancies. Around 92 percent of participants expressed the desire for more children, with 35 percent indicating they would like to have another child within the next two years and many reporting wanting six children. Awareness of modern contraceptive methods was high among participants. Around 46 percent had used modern contraception at some point, and 31 percent were currently using it. Twenty percent of respondents reported concerns about potential health risks. Meanwhile, forty percent of women indicated an unmet need for contraception, and 41 percent stated they would not be able to afford contraceptives if they chose to use them.



Village in Burkina Faso

J-PAL

Details of the intervention

Researchers collaborated with the national Ministry of Health of Burkina Faso to conduct a randomized evaluation to measure the impact of providing free contraception on fertility outcomes. The study covered 100 public health centers across twenty provinces

and 500 villages, with five villages selected around each health center. The evaluation involved multiple levels of randomization:

1. *First randomization (health center level):*
 1. *Full subsidy group (250 villages):* In fifty health centers, women received vouchers that could be applied to any family planning services available at participating health centers. These vouchers covered the entire costs.
 2. *Comparison group (250 villages):* In the remaining fifty health centers, women received vouchers for a ten percent discount on family planning services and products.
2. *Second randomization (village-level, within each health center's catchment area):*
 1. *Group intervention villages (three of five villages per area or 300 villages):* These villages were assigned to one of three group-based interventions:
 1. *Debates (100 villages):* Villages were invited to a village meeting at which debates were organized on the pros and cons of large families, modern contraception, and the importance of beliefs that encourage having more children.
 2. *Debates with facts (100 villages):* Villages were invited to a village meeting, at which debates (on the same topic as above) were organized, followed by information on recent trends for child mortality in the region.
 3. *Group edutainment film (100 villages):* Villages were invited to a public screening of a movie debating the pros and cons of large families, modern contraception, and the importance of beliefs that encourage having more children.
 2. *Individual intervention villages (two of five villages per area or 200 villages):* Some households in these villages received household-level interventions. Villages were assigned to one of two groups:
 1. *Low saturation (100 villages):* 15 percent of households were assigned to the individual intervention arms described below.
 2. *Medium saturation (100 villages):* 30 percent of households were assigned to the individual intervention arms below.
3. *Third randomization (household-level, within 200 villages):* Within the low and medium saturation villages from the second randomization, households were randomly assigned to receive one of the following interventions:
 1. Information about recent trends in the child mortality rates.
 2. Screening of the edutainment film using a tablet computer.
 3. Comparison group: no additional intervention.

Household-level interventions were conducted in people's homes and, whenever possible, involved family members to foster discussion on the topics covered.

Women received their vouchers in spring 2018 and seventy percent accepted the subsidy. The village-level and household-level interventions were also conducted in spring 2018. The Covid-19 pandemic delayed data collection by a year, so the voucher program extended until 2021.

Results and policy lessons

Free access to contraception did not lower women's birth rates in rural Burkina Faso. Offering free contraception also did not affect fertility when combined with information to correct misconceptions about child mortality or debates or an edutainment film aimed at ensuring exposure to a diversity of views about family size, modern contraception, and the importance of beliefs that encourage having more children.

Free contraception. There was no effect of providing free contraception on fertility rates, including among women who reported they could not afford contraception before the program began.

Exposure to diverse views: Debates or edutainment film screenings providing exposure to different views about contraception did not influence fertility rates, regardless of whether participants received the full subsidy. Individuals who watched the edutainment film were also not any more likely to reduce their fertility. The interventions did not change individual beliefs or perceptions of social norms.

Child mortality information. About half of participants thought the child mortality risk they faced matched the risk experienced by the previous generation (i.e. that of their mothers) despite a decline since the early 2000s. Informing participants of the decline in their region did not impact the birth rate, regardless of whether they had free access to contraception or not. Researchers noted that participants may not have believed the information regarding infant mortality due to personal experience, or that political instability or Covid-19 may have minimized progress.

These findings are informative for current policy debates, as subsidized access to modern contraception is a central focus of women's empowerment programs globally. Researchers suggested that while access to reproductive health services is a human right, it is no silver bullet for economic development. Researchers conclude that fertility levels are largely shaped by underlying economic factors, so policies that foster economic development will likely play a larger role in shaping fertility choices than policies focused on family planning access alone.

Dupas, Pascaline, Seema Jayachandran, Adriana Lleras-Muney, and Pauline Rossi. 2025. "The Negligible Effect of Free Contraception on Fertility: Experimental Evidence from Burkina Faso." *American Economic Review* 115 (8): 2659–88.