

Effects of tuition-free primary education on women's access to family planning and on health decision-making: A cross-national study (2019)



This research brief presents key findings from the following article:

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BACKGROUND

- In a series of multinational agreements since 2000, governments committed to working toward universal access to reproductive healthcare services, including family planning.
- Yet in 2017, at least 1 in 10 married or in-union women of reproductive ages globally had an unmet need for family planning.
 - Even in areas where contraception is readily and cheaply available, high rates of unwanted births exist, underscoring the importance of obstacles to the use of contraception other than its supply.
 - Women's decision to use contraception to restrict fertility is influenced by their social settings, including home, school, work, and the community.
- This paper examines whether girls' increased access to education, as measured by their exposure to tuitionfree primary education policies, increases their health decision-making and use of contraception as women.
- This is the first study using a cross-country approach to evaluate whether laws and policies eliminating tuition fees for primary education are causally related to improvements in women's reproductive health and health decision-making.

METHODS

• Data on education policy reforms, including years

of adoption, built on WORLD's novel database of information about national education policies and legislation for 193 countries as of 2016.

- This study also used data on women's health decision-making and reproductive health collected in the Demographic and Health Surveys (DHS) from 2000 to 2016 to assemble a panel of 323,047 women and 105,954 men in 17 low- and middle-income countries (selected because they administered at least 3 DHS surveys between 2000 and 2016 and had definitive dates of education policy reforms in WORLD's database).
 - The DHS collect information from households about whether women are meeting their need for family planning—that is, in the case that they want to delay or stop the birth of a child, whether they are using any contraception; and, among contraception users, whether they use modern contraceptive methods (injectable and oral hormones, implants, intrauterine devices, spermicides, condoms, diaphragms, or sterilization).
 - Surveys also assess the degree of autonomy women have, through questions about their ability to decide matters related to their own and their partners' health.
- This study used a difference-in-differences approach to estimate the effect of tuition-free education policies on the probabilities of a woman:
 - using any contraception
 - (among women using contraception) using modern contraceptive methods
 - having a say in her health decisions (separately for "none," "joint," and "independent")
 - having a say in her husband's or partner's health



TABLE 4: Effects on decision-making authority (odds ratio)

	1	2	3	4
	Women reported having some say in her health decisions	Women reported having joint say in her health decisions	Women reported having independent say in her health decisions	Women reported having some say in her health decisions for new contraceptive user
Full exposure to policy	1.432***	1.528***	1.156	1.496***
	(0.12)	(0.14)	(0.22)	(0.15)
N	287726	216550	186474	52589
Partial exposure to	1.006	1.084	0.882	1.077
policy	(0.09)	(0.07)	(0.14)	(0.12)
N	292801	220837	190185	53189
	Manager to describe the described	Men reported women having	Men reported women having	Men's years of education
	Men reported women having some say in his health decisions	joint say in his health decisions	independent say in his health decisions	men's years of education
Full exposure to policy	some say in his health	joint say in his health	independent say in his health	1.084
Full exposure to policy	some say in his health decisions	joint say in his health decisions	independent say in his health decisions	·
Full exposure to policy	some say in his health decisions 1.203**	joint say in his health decisions 1.337***	independent say in his health decisions	1.084
	some say in his health decisions 1.203** (0.09)	joint say in his health decisions 1.337*** (0.12)	independent say in his health decisions 1.179 (0.15)	1.084 (0.09)
N	some say in his health decisions 1.203** (0.09) 56440	joint say in his health decisions 1.337*** (0.12) 43895	independent say in his health decisions 1.179 (0.15) 34203	1.084 (0.09) 78159

Standard errors are in parentheses and are clustered at the country level. All regressions include country fixed effects, birth year fixed effects, survey year fixed effects, and all control variables. Country-level controls include log of GDP per capita, unemployment rate, and share of urban population. Individual-level controls include indicator for rural-urban residence, indicator for married or cohabiting, and logs of respondents' and partners' ages. Column 4 in panel 2 is not an odds ratio. A woman who was fully exposed to the policy had access to the tuition-free primary education policy throughout primary school, while a woman with partial exposure had access to the policy for at least one year, but not all years, of primary school. *p < 0.1 **p < 0.05 ***p < 0.01.

decisions

- Fixed effects for country and year were included to control for unobserved time-invariant confounders that varied across countries and any temporal trends in women's autonomy and use of contraception that were shared across countries. The study also included a set of survey year dummies.
- The authors also conducted a mediation analysis to calculate the extent to which policy-induced changes in health decision-making facilitated the use of contraception.

FINDINGS

- Married or in-union women who were exposed to tuitionfree education policy throughout primary school had a 47% greater likelihood of meeting their family planning needs, relative to women without exposure to tuition-free primary education policies.
- Married or in-union women with similar policy exposure had a 152% greater likelihood of relying on modem methods when using contraception when compared to women without access to tuition-free primary education.
- In addition, women who had access to tuition-free primary education for all of their primary school years had a:
 - 43% greater likelihood of reporting having some say in

their own health-related decisions.

- 20% greater likelihood of reporting having some say in their partners' health-related decisions.
- 1% to 5% of the improvements in reproductive health were due to the increase in women's autonomy/decisionmaking that better access to education brings about.
- With the exception of the estimated coefficients on the women's decision-making in matters of their partners' health, the study's results were robust to various sensitivity tests.

DISCUSSION

- The large effects of tuition-free primary education policies suggest that investments in these policies could be helpful in achieving improvements in women's reproductive health and should be a priority for health policymakers, along with other policies to ensure that all children can enroll in and complete school.
- This study also demonstrated a significant impact of tuition-free education on women's health decisionmaking. Although the contribution of women's greater autonomy to increased met family planning need was modest, this outcome represents but one of the many health benefits of increased autonomy.

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