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Advancing Women's Sexual and Reproductive Health: Lessons from World Bank Group Gender Impact Evaluations

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Synopsis

Gender equality cannot be achieved until women have control over their sexual and reproductive health (SRH) decisions, including those that determine their risk for HIV and other sexually transmitted infections (STIs) and for unintended, inadequately spaced, and early pregnancies. Drawing on lessons from seven impact evaluations (IEs) supported by the World Bank Group (WBG), this brief highlights lessons learned about strengthening SRH interventions to support women's achievement of their own reproductive intentions. These IEs indicate that implementing comprehensive, interactive interventions in schools and community settings, increasing access to education for girls, and promoting girls' empowerment and agency offer promise in improving SRH outcomes, particularly among adolescents. However, more rigorous and long-term impact evaluations are needed to better understand how to effectuate sustainable impacts on these outcomes, especially adolescent childbearing.

Background

Control over sexual and reproductive health is a fundamental element of gender equality and is critical to achieving an array of other important development outcomes (World Bank Group, 2014). Agency over SRH denotes the ability to choose whether, when, and with whom to have sex, to ask a partner to use a condom, and to make decisions about childbearing and one's own health (WBG, 2014). Yet around the globe, millions of women and girls are unable to exercise agency over these decisions, as evidenced by 80 million unintended pregnancies each year and high levels of unmet need for family planning in developing countries (Singh and Darroch, 2012).

Early sexual initiation puts girls at greater risk for HIV and other STIs, early pregnancy, and early childbearing (Hindin and Fatusi, 2009).



One in five girls in developing countries becomes pregnant before the age of 18. The lifetime opportunity costs of teen pregnancy have been estimated to range from 1 percent of annual gross domestic product in China to as much as 30 percent in Uganda, measured solely by lost income (Chaaban and Cunningham, 2011). In developing countries,

pregnancy-related causes are the largest contributor to the mortality of girls ages 15 to 19—nearly 70,000 deaths annually (WBG, 2014; UNFPA, 2013). In Sub-Saharan Africa, HIV prevalence among young people decreased by almost half between 2001 and 2012, but prevalence among young women remains more than double that among young men (UNAIDS, 2013).

There is growing evidence that improving these SRH outcomes is directly linked to the economic status of women and their families. Women's increased use of contraception has resulted in lower fertility rates in many countries. Having fewer children can improve the overall well-being of women and girls, resulting in improved health of mothers and increased female participation in the workforce (ICRW, 2013). Lower fertility increases life expectancy and allows women to spend less time on childbearing and childrearing and to instead pursue economic opportunities outside the home.



Smaller family size also improves children's health and leads to higher educational attainment (WBG, 2014; UNFPA, 2012). In addition, recent research suggests that when family sizes are smaller, the economic value of human capital increases and household decision making power among men and women becomes more equitable (WBG, 2014; Doepke, 2009).

As a development objective, the need to improve sexual and reproductive health

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outcomes is clear, especially now that young people 10 to 24 comprise nearly a third of the global population. But we are just beginning to understand what works to expand the voice and agency of women and girls in this domain, particularly in developing countries.

Evidence from the World Bank Group

In recent years, the World Bank Group has increased investments in gender-informed programs, research, and impact evaluation, including through numerous programs to improve SRH outcomes and IEs to assess the success of these interventions. This brief synthesizes learning from IEs on SRH outcomes to identify effective programming components that improve these outcomes.

Evaluated programs target specific populations and can measure a variety of outcomes. Among WBG gender IEs on sexual and reproductive health, the outcomes most commonly evaluated are: teen pregnancy and childbearing, sexual risk behaviors including condom use, and knowledge about safe sex practices.

Drawing from the 161 IE papers within the enGENDER IMPACT (eGI) database, we identified those that measured programmatic impact on these outcomes. Thirteen IEs included SRH as a component of their interventions. Of those programs, seven measured the outcomes of interest and are discussed in further detail below. (**See Table 1 for a summary of included IEs**). In addition, two of these interventions measured rates of early marriage among program participants, which is an important outcome given the connection between early marriage, girls' sexual initiation, and teen pregnancy and childbearing. However, child marriage is not discussed in detail here, as it is the subject of another brief in this series, *Preventing Child Marriage: Lessons from World Bank Group Gender Impact Evaluations*.

Summary of SRH Outcomes Measured by WBG Gender IEs

Teen Pregnancy and Childbearing

Teen pregnancy and childbearing are important risk factors for maternal mortality, increased school dropout rates, and negative long-term economic earning potential. Lowering rates of fertility and delaying pregnancy can increase a woman's life expectancy and enable her to pursue economic opportunities that improve her health and well-being, as well as that of her children and family (WBG, 2014).

Five out of the seven IEs assessed *teen childbearing*, measured as live births by girls before the age of 18 (Baez et al., 2011; Dupas, 2011; Bandiera et al., 2012; Duflo et al., 2006; Heath and Mobarak, 2012). This measure does not necessarily capture all pregnancies among respondents. A sixth IE measured *teen pregnancy*, based on self-reported pregnancy before age 18, without regard for the outcome of the pregnancy (Baird et al., 2010). For the purpose of this brief, we include them as one category "teen pregnancy and childbearing", which was captured by six out of the seven IEs. Measures included questions asking about pregnancy incidence, and whether or not girls in the interventions had "begun childbearing" since the onset of the program.

Sexual Risk Behaviors

A number of sexual behaviors can lead to unwanted pregnancy and increase the risk of acquiring HIV and other STIs. These include early onset of sexual activity, nonuse or misuse of contraceptives, having multiple sexual partners, and drug and alcohol use (Guttmacher, 2003). Decreasing risk behaviors can lead to fewer unintended pregnancies, decreased incidence of HIV and other STIs, and contribute to greater economic opportunity and workforce participation, particularly for women and girls (ICRW, 2013). It is important to note that where traditional gender norms prevail and power within sexual relationships is held by men, reducing these risks is often

beyond a woman's control (Jewkes and Morrell, 2010).

Impact evaluations of SRH programs have many ways of assessing and measuring sexual risk behaviors. These can vary a great deal depending on the population targeted by the intervention, the desired behavior change, and the actual components of the intervention carried out in practice. Four of the seven included IEs measured the number of lifetime partners (Baird et al., 2010; Duflo et al., 2006; Dupas, 2011; Packel et al., 2012), three measured onset of sexual activity (Baird et al., 2010; Duflo et al., 2006; Dupas, 2011), and one IE measured abstaining from sexual activity as well as choosing "less risky" sexual partners (Packel et al., 2012) as outcomes reflecting sexual risk behaviors. Five measured condom use as an outcome of the program.

One intervention included in the seven IEs in this analysis measured the impact of a conditional cash transfer (CCT) behavior change program in Tanzania aimed at reducing sexual risk behaviors and decreasing the incidence of HIV and other STIs (Packel et al., 2012). In addition to measuring the number of partners, risk behavior was also assessed through reports of abstinence and engaging in sexual activity with "risky" partners, defined as having sex without a condom with a non-marital partner in the last four months (Packel et al., 2012). One final risk behavior of interest in these IEs was forced sex. Given the increased chance of acquiring HIV or another STI through forced sex, this outcome illustrates a critical risk to women's and girls' agency over their bodies.

Condom Use

Condom use is the most widely measured risk behavior among these IEs because of its link to unintended pregnancy and HIV risk, as well as to safe-sex negotiation and contraceptive decision-making power. We therefore consider this outcome separately from other sexual risk behaviors in the discussion that follows.

Across the five interventions, condom use was assessed by asking a variety of questions to participants, including whether they were sexually active, whether they used a condom at last sex, and how frequently they used condoms (ever, always, often, sometimes, or never).

Knowledge

In many cultural contexts, gendered social norms that deem it inappropriate for girls to learn about sexuality limit their ability to learn about SRH in school as well as from family and community members (WBG, 2014). In addition, girls and women can face stigma around being sexually active—a stigma not often experienced by boys and men (Fairhurst et al., 2004; WBG, 2014). These norms prevent girls from learning and making informed SRH decisions and can give boys and men the more prominent role in decision making around sex and contraceptive use (WBG, 2014; McCleary-Sills et al., 2012). For these reasons, increasing access to information about SRH is a key factor in allowing all individuals to make better decisions around sexual practices and avoid risky behavior. Knowledge is power, and the power to make better decisions will lead to improved sexual and reproductive health outcomes.

In the seven IEs discussed here, two specifically measured knowledge around HIV and pregnancy (Duflo et al., 2006; Bandiera et al., 2012). In one school-based intervention in Kenya, knowledge was measured as identifying different ways to protect oneself from HIV, and participants were asked their opinions about the efficacy of condom use to prevent pregnancy and HIV transmission (Bandiera et al., 2012).

In a second intervention measuring knowledge outcomes (Duflo et al., 2006), HIV knowledge was measured using a six-question index asking about HIV transmission and testing, while pregnancy knowledge was measured by asking one true/false question of female participants: “A woman cannot become pregnant at first intercourse or with occasional sexual relations.” This program provided safe

spaces, skills training, and sexual education for girls with peers and mentors.

So What Works? Implications for Future Programming

Multiple approaches and strategies were used in each of the seven programs evaluated within the scope of this analysis. The following highlights programmatic components of interventions that impacted the SRH outcomes of interest.



Teen Pregnancy and Childbearing

Across all six interventions, there was a significant effect on teen pregnancy and childbearing when comparing the intervention and control groups, though with some differences in effect size and significance for subgroups. For example, the Zomba Cash Transfer Program in Malawi showed that girls who were previously not enrolled in school were less likely to experience early pregnancy after participating in the program compared to controls. However, no change in pregnancy outcomes was seen among girls who were already enrolled in school when the intervention began (Baird et al., 2010). Programs in Kenya and Uganda, also targeting adolescent girls, found statistically significant decreases in the incidence of childbearing in groups exposed to the programs compared with the control group (Duflo et al., 2006; Dupas, 2011; Bandiera et al., 2012).

Effective programs for decreasing pregnancy and childbearing included the following components: provision of conditional cash

transfers for schooling, reduction in the cost of education, provision of vocational training, and provision of information on health and risky behaviors, including the relative risk of HIV infection by partner's age. In addition, one IE measuring the effects of garment factory job opportunities on education and childbearing outcomes for girls (Heath and Mobarak, 2012) found declines in births before age 16 and 18 among girls whose towns had a factory. Programs promoting abstinence-only education for teens did not show any change in pregnancy or childbearing outcomes (Dupas, 2011).

In regard to *onset of sexual activity*, three IEs saw statistically significant decreases in the proportion of participants who had ever had sex compared with the control groups (Baird et al., 2010; Duflo et al., 2006; Packer et al., 2012). However, in one program targeting girls who were in school as well as those who had dropped out prior to the intervention, the reduction was statistically significant only among the girls who had dropped out prior (Baird et al., 2010). A reduction in the *number* of partners reported by program participants was seen in only one of these three IEs—the CCT program for school girls in Malawi (Baird et al., 2010). However, once again reductions were statistically significant only among girls who had dropped out of school prior to the program. Evidence of greater programmatic impact among school leavers suggests that the CCT intervention is more protective for girls with the highest risk profile. In one program, which provided risk information to teenagers in Kenya (Dupas, 2011), there was not a decrease in the number of partners overall, but there was a significant decline in the number of cross-generational partners among teenage girl participants, and an increase in sexual activity among teen boys, indicating a possible shift from girls choosing older (i.e., riskier) partners to choosing partners closer to their own age.

Sexual Risk Behaviors

The evaluation by Packer et al. (2012) found that at the four-month follow-up, over half of study participants reported they had changed

at least one behavior as a result of the intervention. These changes included having abstained from sex, having had fewer sexual partners, and having had less risky partners. Interestingly, significantly more men than women reported any change in behavior—notably abstaining from sex and having less risky partners.

Only one of these IEs (Bandiera et al., 2012) measured the outcome of forced sex, but the results were staggering. For girls who participated in this intervention in Uganda, the incidence of forced sex decreased by half. More detailed discussion of this analysis of changes in sexual coercion can be found in another brief in this series: ***Gender-Based Violence Prevention: Lessons from World Bank Impact Evaluations***.

Condom Use

Three out of the five IEs that measured condom use showed significantly higher use among those exposed to the intervention compared with those who were not (Bandiera et al., 2012; Duflo et al., 2006; Packer et al., 2012). These three programs include girls' clubs in Uganda that promote vocational training and health education simultaneously through mentoring, a school-based program in Kenya encouraging students to debate the role of condoms and to write essays on how to protect themselves against HIV/AIDS, and an HIV and STI testing and prevention CCT program in Tanzania for men and women ages 18 to 30. Of the remaining IEs, the Zomba program in Malawi (Baird et al., 2010) saw no programmatic impact on self-reported condom use, while the final IE measuring teenager's response to HIV risk information in Kenya (Dupas, 2011) showed an increase in condom use among girls exposed to the intervention, but that increase was not statistically significant. These results suggest that components of effective interventions aiming to increase condom use incorporate interactive education and discussion sessions among peers and mentors, and provide cash incentive to reduce sexual risk behaviors.

From these five IEs, we know that key components of effective interventions for reducing sexual risk behaviors overall include those that: give girls access to free education, specifically allowing girls who were previously not in school to return to the classroom; provide safe spaces for skills training and sexual education for girls, including discussions around empowerment in relationships with men; and inform girls and boys about the increased risk of cross-generational sexual activity. For older men and women, there is some evidence that providing financial incentives to change behavior can reduce sexual risk behaviors, especially among men.

Knowledge

The IEs assessing knowledge change found significant increases in knowledge among girls and boys in schools implementing teacher training with condom debates and essay writing on the topic. Increased knowledge about **condom use as effective protection against HIV** and about **correct condom use preventing pregnancy** was documented among the intervention group. Girls in this group also increased their knowledge of **correct condom use preventing HIV transmission**. Among those exposed to just the teacher training, the only significant outcome around knowledge was among boys—evidenced by an increase in the number who mentioned abstinence as a way to protect oneself from HIV. The intervention in Uganda found statistically significant increases in both HIV knowledge and pregnancy knowledge among program participants (Bandiera, 2012).

The results of these two IEs measuring knowledge outcomes suggest that successful interventions to increase knowledge around HIV, pregnancy, and SRH as a whole combine traditional sexual education curricula with interactive and didactic learning methods in a classroom-based approach. In addition, programs directed at teen girls exclusively work best when the interventions are combined to teach vocational skills and health education, while increasing empowerment and agency.



Components of Effective Programming

Programs that aim to improve SRH are implemented both in school curricula and in community-based interventions outside of the classroom. Ideally, SRH programs would be comprehensive in nature, aiming to reduce risk behaviors, increase condom use and SRH knowledge, with the long-term outcome of empowered decision making as evidenced by, for example, delayed pregnancy, decreased unintended pregnancy, and reduced adolescent childbearing.

Reducing the cost of school attendance for girls and ensuring access to education is a key component to increasing knowledge, reducing risk behaviors, and decreasing teen pregnancy and childbearing. Incorporating interactive components of SRH education curricula in schools in addition to teacher training and explanation of risk reduction also decreases risk behaviors and increases condom use. Given gender norms and stigma around sexual health, adolescent girls are a particularly vulnerable group with respect to SRH outcomes. These IEs indicate that providing safe spaces where girls can learn vocational training, receive SRH education from peers and mentors, and increase their empowerment and agency in relationships leads to improved SRH knowledge, reduced risk behavior, and lower levels of teen pregnancy and childbearing. Providing cash incentives can influence sexual risk behaviors such as condom use, particularly among men. The greater observed increase in reported condom

use among men compared to women likely reflects underlying differences in the power and control men have in regard to decision making around sexual behaviors, in particular condom use. Future programming should also address decision-making power around contraception and sexual risk and aim to increase women's control over these critical SRH decisions.

Limitations

While there appear to be a number of consistent findings in what works to improve SRH outcomes, some limitations to this analysis exist. All of the programs within our scope are based in in Africa (Malawi, Tanzania, Kenya, Uganda), which limits the extent to which these findings may be generalized to other contexts. In addition, a majority of our programs address SRH among adolescents, and the findings may not be applicable to adults and those in more stable relationships. Other IEs identified by enGENDER IMPACT included measures of adherence to antiretroviral therapy, counseling, testing, and care seeking for HIV, and STI prevalence. IEs of those programs were not

included in this analysis as each outcome was measured by only a single program.

Conclusion

It is evident that a multi-pronged approach to SRH education and programming is necessary to increase knowledge around HIV and pregnancy, reduce teen pregnancy and early childbearing, and decrease sexual risk behavior not only among adolescents but also among adults. Based on the results of these IEs, approaches that combine SRH education in classrooms with peer engagement and discussion seem to be the most effective approach to improving SRH outcomes in adolescents. Keeping girls in school and specifically targeting girls for interventions are key to ensuring better SRH outcomes. More rigorous evaluations of what works to promote girls' and women's agency over their sexual and reproductive decisions are needed and should occur over longer periods of time to more accurately measure long-term effects, particularly for childbearing and pregnancy outcomes.

enGENDER IMPACT

enGENDER IMPACT is an online gateway for Gender-Related Impact Evaluations. At www.worldbank.org/engenderimpact you will find profiles summarizing key information about World Bank Group funded gender-related impact evaluations. These profiles are organized around priority areas for policy action, including: reducing health disparities, shrinking education and skills gaps, increasing economic opportunities, boosting voice and agency, and addressing gender-based violence. enGENDER IMPACT aims to share knowledge from previous evaluations and encourage more and better evaluations in key gender topics.

References

- Baez, J. E., Alam, A., and Del Carpio, X. V. (2011). Does Cash for School Influence Young Women's Behavior in the Longer Term? Evidence from Pakistan.
- Baird, S., Chirwa, E., McIntosh, C., and Özler, B. (2010). The short-term impacts of a schooling conditional cash transfer program on the sexual behavior of young women. *Health economics*, 19(S1), 55-68.
- Bandiera, O., Buehren, N., Burgess, R., Goldstein, M., Gulesci, S., Rasul, I., and Sulaiman, M. (2012). Empowering Adolescent Girls: Evidence from a Randomized Control Trial in Uganda. Working Paper. *Results reported here are based on an updated paper published in 2014: <http://www.theigc.org/sites/default/files/Bandiera%20et%20al%202014.pdf>
- Chaaban, J., and Cunningham, W. (2011). "Measuring the Economic Gain of Investing in Girls: The Girl Effect Dividend," Policy Research Working Paper 5753, World Bank, Washington, DC, 2011.
- Doepke, M., and Tertilt, M. (2009). Women's Liberation: What's in It for Men? *Quarterly Journal of Economics* 11, (92). 379–420.
- Duflo, E., Dupas, P., Kremer, M., and Sinei, S. (2006). Education and HIV/AIDS prevention: evidence from a randomized evaluation in Western Kenya. *World Bank Policy Research Working Paper*.
- Dupas, P. (2011). Do Teenagers Respond to HIV Risk Information? Evidence from a Field Experiment. *American Economic Journal: Applied Economics*, 3(1) 1-34.
- Fairhurst, K., Ziebland, S., Wyke, S., Seaman, P., and Glasier, A. (2004). Emergency Contraception: Why can't you give it away? Qualitative findings from an evaluation of advance provision of emergency contraception, *Contraception* 70, 25–29.
- Guttmacher Institute. (March/April 2003). *Perspectives on Sexual and Reproductive Health*. Vol 35, No 2.
- Heath, R., and Mobarak, A., (2012). Does Demand or Supply Constrain Investment in Education? Evidence from Garment Sector Jobs in Bangladesh.
- Hindin, M., and Fatusi, A. (2009). Adolescent Sexual and Reproductive Health in Developing Countries. *International Perspective on Sexual and Reproductive Health*, 35 (2), 58-62.
- Jewkes, R. and Morrell, R. (2010). Gender and sexuality: Emerging perspectives from the heterosexual epidemic in South Africa and implications for HIV risk and prevention. *J Int AIDS Soc*; 13(6).
- Joint United Nations Programme on HIV/AIDS (UNAIDS), Global Report (2013). UNAIDS Report on the Global AIDS Epidemic 2013. New York: UNAIDS.
- McCleary-Sills, J., McGonagle, A., and Malhotra, A. (2012). *Women's Demand for Reproductive Control: Understanding and Addressing Gender Barriers* (Washington, DC: International Center for Research on Women).
- Packel, L., Dow, W., De Walque, D., Isdahl, Z., and Majura, A. (2012). Sexual behavior change intentions and actions in the context of a randomized trial of a conditional cash transfer for HIV prevention in Tanzania. World Bank Policy Research Working Paper, (5997).
- Stoebenau, K., Pande, R., and Malhotra, A. (2013). Has fertility decline contributed to improvements in women's lives? *International Center for Research on Women Fertility & Empowerment Working Paper Series*. 012-2013-ICRW-FE. 1-40.
- Singh, S., and Darroch, J. (2012). Adding It Up: Costs and Benefits of Contraceptive Services, Estimates for 2012. New York: Guttmacher Institute and UNFPA.
- UNFPA, *State of the World's Population: Motherhood in Childhood: Facing the challenge of adolescent pregnancy*, (New York: UNFPA, 2013).
- UNFPA, *State of the World's Population: By Choice, Not By Chance: Family Planning, Human Rights and Development*, (New York: UNFPA, 2012).
- World Bank Group (2014). *Voice and Agency: Empowering Women and Girls for Shared Prosperity*.

Photo Credits:

1. Woman with her child, India, **Photo: John Isaac**
2. Statisticians entering data into the database for further processing and analysis, Turkmenistan. **Photo: World Bank**
3. High school students in La Ceja, Department of Antioquía, Colombia. **Photo: Charlotte Kesl**
4. A student explains to her class how to prevent HIV/AIDS, Cambodia. **Photo: Masaru Goto**

Table 1

Summary of SRH outcomes measured by WBG Gender IEs

		Outcomes of Interest Measured in IE			
		Teen Pregnancy and Childbearing	Sexual Risk Behaviors	Condom Use	Knowledge of safe sex practices
Impact Evaluation	Citation				
The Short-Term Impacts of a Schooling Conditional Cash Transfer Program on the Sexual Behavior of Young Women in Malawi	Baird et al., 2010	✓	✓	✓	
Education and HIV/AIDS Prevention: Evidence from a randomized evaluation in Western Kenya	Duflo et al., 2006	✓	✓	✓	✓
Empowering Adolescent Girls: Evidence from a Randomized Control Trial in Uganda	Bandiera, et al., 2012	✓		✓	✓
Do Teenagers Respond to HIV Risk Information? Evidence from a Cluster Randomized Control Trial in Kenya	Dupas, 2011	✓	✓	✓	
Sexual Behavior Change Intentions and Actions in the Context of a Randomized Trial of a Conditional Cash Transfer for HIV Prevention in Tanzania	Packel et al., 2012		✓	✓	
Does Demand or Supply Constrain Investments in Education? Evidence from Garment Sector Jobs in Bangladesh	Heath and Mobarak, 2012	✓			
Does Cash for School Influence Young Women's Behavior in the Longer Term? Evidence from Pakistan	Baez et al., 2011	✓			