



Evidence to Action

Reducing HIV Risk: Empowering Low-Income Women Through Cash Stipends

The Problem

Many countries have made significant progress toward the Millennium Development Goal of universal primary education. Yet secondary education remains elusive for many African girls. Reduced access to schooling – combined with social norms and pressure to marry early – can result in long-term barriers to equality. For some out-of-school adolescents, relationships with older men may be the only pathway to economic security. These girls are at higher risk of HIV infection, and are vulnerable to abuse and complications from pregnancy. They often lack control over contraception and HIV prevention decisions (including abstinence and condom use).

This Action Brief describes the evaluation of two versions of a cash transfer program in rural Malawi aimed at increasing girls' school attendance and family income. The study demonstrates that cash stipends can yield an array of benefits, including improved schooling outcomes and a reduction in early marriage, pregnancy and other risky behaviors.

The Promise

Conditional cash transfers are a common approach for encouraging school attendance in developing countries. These programs offer cash stipends to families, but only if their children attend school on a regular basis. In rigorous evaluations from Mexico, Brazil, and other countries, these conditional stipends have been shown to increase school attendance. They have also resulted in unanticipated benefits, like improved nutrition. However, it is unclear whether and when conditional transfer programs change recipients' behavior. Is the cash stipend enough to change social norms, or do payments need to be conditioned on children's school participation?

An alternative is to offer unconditional cash stipends to poor households. Unconditional cash transfers can



Monice (Program Field Manager) with program participant.
Photo courtesy of Beth Geoffroy.

be easier to administer, since there is no need to monitor school attendance. These stipends also can reach a wider range of needy individuals, including those who cannot meet conditions such as school attendance. This evaluation in rural Malawi randomly allocates an unconditional stipend to some families; other families are randomly selected to receive stipends dependent on their daughters' school attendance. The study tests how the conditionality of a stipend affects educational attainment, early marriage, and risky sexual behavior among adolescent girls.



Malawi's Program for Girl's Schooling

Funded by the World Bank, a girls' schooling program was implemented in Malawi in 2008, which paid school fees and a monthly stipend of US \$5-15 to young women and their families. The stipend corresponds to roughly 7-22% of household budgets in this region. The researchers targeted both current students and recent dropouts who had never been married, all between the ages of 13 and 22.

Two distinct versions of the program were offered. In the first version, participants only receive the stipend if the young woman attended school at least 80% of the time each month. In the second program, participants receive the money regardless of school attendance. This allowed researchers to test whether outcomes differ based on whether or not the stipend is conditional. The researchers also randomly varied in the amount of the cash stipend, to identify the most cost-effective payment size.

The Results

Cash Stipends Reduce Risky Sexual Behavior. Both conditional and unconditional stipends appear to reduce the frequency of sexual activity.

Pregnancy. Rates of pregnancy are an established proxy for risky sexual activity in this group of young women, since unprotected sex can lead to both pregnancy and HIV. In the study, pregnancy is reduced by

27% among those receiving the unconditional stipend.

Sexual Activity. Women who received conditional stipends are 30-45% less likely to report becoming sexually active, and report 25% fewer lifetime sexual partners. These results demonstrate that cash stipends reduce risky sexual behaviors as well as improving human capital.

To measure risky sexual behavior, researchers rely on respondents' information about their sexual history. Yet, people do not always volunteer complete and accurate information about sensitive topics. A forthcoming study will report on HIV test results, avoiding the shortcomings of self-reported data.

Conditional vs. Unconditional Stipends

Conditional stipends have the advantage of improving educational outcomes. While both conditional and unconditional stipends increase enrollment for all students, there is only an increase in school attendance, test scores and cognitive skills when the stipend is conditioned on girls' school attendance. Conditional stipends increased school attendance by 8% among students who were enrolled in school when the stipend program began. Students who had dropped out prior to being offered the stipend were three to four times more likely to return to school.

How Much is Enough? Lessons on the Size and Distribution of Stipends

For this program, cash stipends ranged in size from \$5–\$15 per month. Parents received the majority of the stipend, with a smaller portion paid directly to students. In the experiment, both the stipend amount and the share of the payment allocated to young women (versus their parents) were randomly assigned. By comparing families receiving different amounts of money, we can draw lessons about the effects of stipend size, and the sharing of cash among household members.

The size of a stipend—and its distribution to parents versus girls—matters only for those receiving unconditional stipends. For these families:

- >> Larger stipend amounts result in higher school enrollment rates and lower rates of early marriage.
- >> Marriage and pregnancy rates are lower when parents receive more money, while test scores increase when girls receive more money directly.

Unconditional stipends reduce early marriage and pregnancy among school dropouts. While teen pregnancy and early marriage did not change significantly among students whose stipend was conditional on attending school, the evaluation finds a 44% reduction in marriage rates and a 27% decline in pregnancy among students who received the unconditional stipend. These changes occurred almost entirely among those who dropped out of school after the stipend program began.

Policy Implications

This evaluation suggests that in some contexts, governments can use income support programs – both conditional and unconditional – to decrease the risky sexual behaviors that can lead to HIV among girls. Further, the benefits of conditional stipends are not limited to the specific behaviors they target. Although this stipend program targeted school attendance, risky sexual behavior (including dating older partners) substantially decreases as a result of the program.

As the evaluation highlights, a broad range of factors influence the outcomes of a cash transfer program. How well cash transfer programs work can depend on

the level of payment, the groups targeted by the program, and which behaviors are incentivized (if any). Therefore, cash transfer programs may have different effects in different contexts.

However, in the context of school-age girls in rural Malawi, there is clear evidence that conditional stipends should be offered when a program’s goals focus on changing a specific behavior, like school attendance. On the other hand, unconditional stipends are preferable when the goal is to focus on the social protection dimension of cash transfer programs. The unconditional approach is particularly effective for those, like school drop-outs, who are unwilling or unable to comply with rigid conditions like school attendance.

Stipends can have broad spill-over effects. Given that stipends yield numerous benefits, policymakers should consider the program’s spillover benefits (like reducing risky sexual behavior) when evaluating cost-effectiveness.

Notably, larger conditional stipends do not lead to additional behavioral changes. Funders of cash transfer programs should therefore identify the “minimum effective” stipend allocation, to maximize cost-effectiveness.



The Center of Evaluation for Global Action (CEGA) is the University of California’s premiere center for research on global development. Our faculty affiliates use two powerful techniques—rigorous evaluation and economic analysis—to measure the impacts of large-scale social and economic development projects. The Center integrates business and economic approaches with expertise in agriculture, public health, education, and the environment. As a result, we have produced some of the most influential and policy relevant studies in recent years, including cash incentives for women’s empowerment, low-cost water technology for rural communities, and early childhood health interventions for improved adult economic outcomes.

The evaluation reveals that conditional and unconditional payments each offer distinct additional benefits. Conditional transfers **improve attendance and test scores**, while unconditional stipends **lower marriage and pregnancy rates** for students who drop out of school after the program begins. However, both conditional and unconditional cash stipends appear to **decrease young women's risky sexual behavior**, and may thereby lower their risk of HIV infection.



Guardian and program participant.
Photo courtesy of Beth Geoffroy.

Why Randomized Experiments Matter

Randomized Controlled Trials (RCTs) are increasingly used by researchers to measure the welfare impacts of social programs. The fundamental power underlying RCTs is their ability to isolate the true causal impacts of a program, by stripping away confounding factors in the environment, communities, or individuals. In an RCT, we compare the welfare outcomes of a group of people exposed to a social program to those of an equivalent group lacking access to the program. The program and comparison groups are randomly assigned and, as a result, any observed differences in outcomes can be attributed solely to the impact of the intervention.

Read the Research

- Baird, S., McIntosh, C., and Özler, B. February 2011. "Cash or Condition? Evidence from a Cash Transfer Experiment." *Quarterly Journal of Economics*, forthcoming.
- Baird, S., Chirwa, E., McIntosh, C., and Özler, B. September 2010. "The Short-Term Impacts of a Schooling Conditional Cash Transfer Program on the Sexual Behavior of Young Women." *Health Economics: vol. 19, issue s1*.

Collaborators

The Malawi Schooling Project was implemented with support of the Global Development Network, the Bill and Melinda Gates Foundation, NBER Africa Project, World Bank Research Support Budget Grant, as well as several trust funds at the World Bank: Knowledge for Change Trust Fund, World Development Report 2007 Small Grants Fund, Spanish Impact Evaluation Fund, and Gender Action Plan Trust Fund.

Read these studies and find more information at <http://cega.berkeley.edu>