

# **Worth the Effort? Combining Sexual and Reproductive Health and Economic Empowerment Programming for Married Adolescent Girls in Amhara, Ethiopia.**

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## **Background**

Despite recent progress in preventing child marriage at the global level, an estimated 142 million girls will be married before the age of 18 should current trends continue (UNFPA 2012)). Research suggests that these girls will experience higher rates of domestic violence than their unmarried peers (UNICEF 2005), be far more likely to drop out of school (e.g. Erulkar et al. 2004), live in poorer households (UNICEF 2005), be at greater risk of contracting sexually transmitted diseases, including HIV/AIDS (e.g. Clark 2004), have more children at earlier aged (UNICEF 2014) and experience significantly higher rates of maternal mortality and morbidity (UNFPA 2004). Meeting the sexual and reproductive health (SRH) needs of this population has proven to be particularly challenging given the lack of mobility, social isolation and economic restrictions that typically accompany child marriage.

The past decade has seen a much greater emphasis on the development of more effective programming approaches that are backed up by rigorous efforts to assess their impact, including in the field of girl-centered programming. While this period has seen the emergence of a number of very promising programming approaches, a number of challenges remain, including questions around accessing the most vulnerable girls, the scalability of these approaches, and the efficacy of particular programming combinations. In this paper, we address the last of these challenges through the use of a uniquely detailed dataset specifically collected to address this question. More specifically, we use data from the evaluation of an innovative program working with married adolescent girls in Amhara, Ethiopia to examine whether combination programming (in this case SRH and economic empowerment (EE)) results in greater improvements across a range of SRH outcomes than programming focused on delivering SRH training alone.

There are a number of reasons to expect the combined approach to result in improved outcomes in both areas relative to programming focusing on one alone. In terms of SRH, improving the economic

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prospects of girls may improve access to services, increase the incentives to delay or more effectively space childbearing through providing other life alternatives, and improve the decision-making power girls have within their households. In terms of EE, improving the SRH of girls may increase the confidence they have in engaging more fully in income generation through reducing the risk of unplanned pregnancies or medical complications, reduce health care expenditures, and allow girls and their families to plan their lives more effectively. When combined, these factors may result in a synergistic relationship where improvements in both areas match or exceed those resulting from programming focusing on one area only. However, programmers are often reluctant to implement combination programming, because they may feel it could dilute program content, would involve programming outside their areas of expertise, or because of a lack of clear evidence of the additional benefits that may result from a combined approach.

The results of the analyses we propose here will therefore be of particular use to programmers attempting reach adolescent girls who face a variety of interlinked challenges that are not easily addressed in traditional programming approaches, especially those focused on health and economic outcomes. The results will also be of interest to researchers and other stakeholders interested in meeting the various needs of married adolescent girls, a group often overlooked by programmers and researchers alike.

## **Data**

The data used in this paper will be drawn from the evaluation of the Towards Improved Economic and Sexual/Reproductive Health Outcomes for Adolescent Girls (TESFA) project, implemented by CARE Ethiopia in the Amhara region. While Ethiopia has seen dramatic declines in the proportion of girls married before age 18, the Amhara region continues to be characterized by very high rates of child marriage, low use of family planning, poverty and low female empowerment. The TESFA program focused specifically on mitigating the effects of child marriage through the provision of EE and SRH training to 5,000 ever-married adolescent girls aged 14-19 using a group-based peer education framework. The program was evaluated using a quasi-experimental design, with program participants assigned to one of four programmatic groups: an arm where only SRH-training is delivered, an EE-only, a combined program arm, and a control arm receiving a delayed version of the program. Longitudinal quantitative data (pre-post intervention) were collected from a cohort of 3103 participant girls between October 2011 and April 2013, with information collected on a range of economic outcomes (including experience with savings, loans, income generation, attitudes, knowledge and practice regarding family planning, and a range of background characteristics, including couple communication and experience with intimate partner violence). Qualitative data were also collected at baseline. This design allows for direct comparisons of the relative effectiveness of each arm in improving the EE and SRH conditions of the girls and the effect of each of these compared to a de facto 'do nothing' scenario, where the girls did not receive any programming.

As in many settings, married adolescents are an extremely marginalized and difficult to reach population in Amhara, presenting a number of challenges to program delivery. The TESFA project built on CARE's well-established Village Savings and Loan Association (VSLA) model, with girls organized into groups of 10-20 in size and program content delivered primarily via trained peer-educators over a period of a year.

Groups met every two weeks, resulting in roughly 26 meetings over the course of the year. These groups were supported by community-based Social Analysis and Action (SAA) groups comprised of community members, which received broader training on issues such as gender and power while acting as community liaisons for the project.

The baseline data indicate very low levels of both SRH knowledge and use of existing SRH services. Slightly over half of all respondents (55.8%) had ever used any form of modern contraception, with 44.6% reporting currently using a method (with the overwhelming majority of users (91.5%) relying on injectables). Less than half (47.1%) reported having visited a health clinic to obtain contraceptives in the six months prior to the survey. Furthermore, only 57% reported having heard of modern contraceptives (based on a list of most common methods) and almost three quarters (72.5%) had not heard of any method other than injectables. When asked about the prevention of sexually transmitted diseases (STDs), 41.9% did not know of any way to prevent STDs and relatively few had an accurate understanding of transmission pathways and other key components of truly informed knowledge.

## Methods

The analytical approach taken in this paper is designed to explore whether the combined program results in improvements in SRH and EE that match or exceed those generated for those participating in the program arms offering each in isolation. While the evaluation design allows for comparisons between each of the program arms, our focus is specifically on the differences in key outcomes between the SRH-only and combined programming, with limited comparisons also done with the control arm. As such the analytical sample consists of 2,696 respondents: 1,110 in the SRH-only arm, 1,109 in the combined arm, and 478 in the control arm.

Using this two-time period panel data, we estimate the effects of the participating the SRH program and the combined SRH and economic empowerment program relative to no program for a range of outcomes. These outcomes will be primarily related to SRH (including *current use of contraceptives*, a visit to a *family planning clinic* in the past 6 months, whether or not the respondent *discussed with her husband* the decision to use family planning, her *knowledge of STIs*, and whether or not she has ever had an *HIV test*), but will also include a selection of economic and social outcomes (e.g. engagement in paid employment, planned use of savings, measures of couple communication). This will allow a robust assessment of both the impact of the program both in terms of SRH outcomes specifically and broader measures influencing well-being.

A difference-in-differences model using the full panel– both time periods – will be employed to estimate the effect of the intervention, based on a linear probability model. The specific model used is of the form:

$$Y_{it} = \beta_0 + \beta_1 * \text{period} + \beta_2 * \text{arm} + \beta_3 * (\text{period} * \text{arm}) + \beta_4 * X_{it} + \epsilon_{it}, t=0, 1, i= 1... N$$

where  $\beta_4$  is the effect of a vector of covariates that we include as control variables (see below for further details). The time effect is measured with  $\beta_1$ , the arm effect is measured with  $\beta_2$ , and the interaction effect,  $\beta_3$ , is the additional effect of the program over time. If *this* coefficient is significant, we assume a causal effect of the program on the outcomes that is related to the program. In the context of these models, controls are included in order to test some of the assumptions of difference and difference models. The controls we will include in our models are age, whether or not the respondent is living with a man, a categorical variable for number of children (with answer categories of none, one, two, three or four (keeping in mind that all the program participants were young women), a variable that asked how many nights in the last week the respondent went to bed hungry, and finally a variable that measures where the respondent accessed water for herself and her family.

Preliminary results based on a basic difference-in-difference approach suggest that respondents in both the SRH-only and Combined arms saw gains in SRH that significantly outstripped those in the control group (based on t-tests of differences in mean change, between baseline and endline both within and across intervention arms). However, with few exceptions, these gains were also significantly larger in the SRH-only arm compared to the combined arm. For example, girls in the SRH-only arm saw an increase of 29 percentage points (from 52% to 81%) in the percentage who had visited a health clinic in the prior six months expressly for the purpose of obtaining family planning, compared to a gain of 17 percentage points for the Combined arm (from 52% to 69%) and 10 percentage points (from 50% to 60%) for the control arm. However, the participants in the combined arm saw greater improvements in economic outcomes than those in the SRH-only arm (for example, the percentage of program participants in the combined arm reporting saving for productive investment increased by 25 percentage points compared to an increase of one percentage point for those in the SRH-only arm). These very preliminary findings suggest that adding an economic empowerment training component to SRH program does not enhance the performance of programs in terms of SRH outcomes but may offer greater all-round benefits to participants by enhancing their economic opportunities. Should these findings be verified using the more robust multivariate approach described above, they will provide program designers with critical information on how to more effectively design their programming to best meet the needs of their target populations in addition to providing a broader assessment of the impact of an innovative program addressing a particularly marginalized group.

## References

Clark, S. (2004). "Early Marriage and HIV Risk in Sub-Saharan Africa." *Studies in Family Planning* 35(3) pp. 149-160.

Erulkar, A. T. Mekbib, N. Simie, and T. Gulema (2004). *The Experience of Adolescence in Rural Amhara Region Ethiopia*. UNFPA, UNICEF and Population Council. Population Council: New York

United Nations Children's Fund (2005). *Early Marriage: A Harmful Traditional Practice*. UNICEF: New York.

United Nations Children's Fund (2014). *Ending Child Marriage: Progress and prospects*. UNICEF, New York, 2014.

United Nations Population Fund and the University of Aberdeen (2004). *Maternal Mortality Update 2004: Delivering Into Good Hands*. UNFPA: New York.

United Nations Population Fund (2012). *Marrying Too Young: End Child Marriage*. UNFPA: New York