

# BUILDING A BRIGHTER FUTURE

## Experimental Evidence on the Impact of Financial Literacy and Reproductive Health Education For Adolescent Girls in Tajikistan

### Overview

The small Central Asian country of Tajikistan is defined by both its stunning landscape—dominated by the 20,000-foot peaks of the Pamir and Alay mountain ranges—and its dramatic poverty. Recent data show that 47% of families live below the poverty line and only 7% of the land is arable.<sup>1</sup> The country has struggled since its independence from the Soviet Union and ensuing five years of civil war. While Tajikistan is largely calm today, independence and war left families—and especially women—vulnerable. In the search for stability, Tajiks revived traditional cultural and social values that has led to the withdrawal of girls and women from public life and placed more focus on their domestic responsibilities. At the same time, men are migrating to Russia for work—migrants now comprise an estimated 600,000 to 1 million of the total Tajikistan population of 7.7 million and are the hub of HIV infection because of their contact with sex

### KEY FINDINGS

In Tajikistan, the Aflateen+ program **demonstrated significant positive impact on:**

- » Girls' knowledge of HIV/AIDS.
- » Girls' support for more equitable gender roles.
- » Girls' frequency of saving (but not amount).
- » Girls' propensity toward entrepreneurship and a career.

The evaluation **did not find attributable effects of the program on:**

- » Girls' knowledge on reproductive health or basic health and nutrition.
- » Girls' strength of social ties.
- » Girls' ideal age of marriage and childbirth.

<sup>1</sup> See World Bank Country Brief at <http://data.worldbank.org/country/tajikistan>.

workers.<sup>2</sup> The economic landscape in country is also bleak for women, where nearly twice as many men earn wages as compared to women, primarily because of women's lower levels of education, training and work experience, as well as cultural barriers that limit professional opportunities available to them.

One result of these political, social and economic transitions is an increase in early marriage. The past decade has witnessed increased rates of early marriage for girls. One study shows that nearly 15% of all women aged 20 to 49 married before age 18, yet among *younger* women aged 25 to 29 years, 23% married before age 18.<sup>3</sup> Moreover, a 2009 UN Human Rights Council report acknowledged evidence that girls are being married at increasingly younger age and often against their will.<sup>4</sup> These figures, though alarming, may in fact be underestimates of early marriage, since they may not include unregistered marriages, which have also been on the rise since independence. Data suggests that as many as half of all marriages in Tajikistan may be unregistered, in part to circumvent marriage laws, such as the legal prohibition of polygamy and the Family Code marital age requirement of 18 years.<sup>5</sup>

Early marriage is associated with health risks that disproportionately affect girls—particularly pregnancy. Pregnancy and childbirth are the second leading cause of death globally for girls between the ages of 15 and 19.<sup>6</sup> In Tajikistan, girls face the additional risk of contracting HIV, particularly those who are married to migrant workers. About half of all registered HIV cases in Tajikistan have been among labor migrants who are more likely to have unprotected contact with sex workers. According to UNAIDS, the percentage of newly registered HIV cases among women increased from 8.5% in 2005 to 23.3% in 2009, with 60% of HIV+ women infected through unprotected heterosexual intercourse.<sup>7</sup>

In sum, girls are at a critical disadvantage as they become more vulnerable to early marriage and their access to information becomes more controlled. To create healthier, safer and more prosperous futures, Mercy Corps believes that girls need more knowledge and skills on how to save money and create more secure futures, and how to protect themselves from the physical risks associated with early marriage, unprotected sex and early childbirth.

In depth analysis is lacking on the effectiveness of interventions aimed at empowering adolescent girls in Tajikistan to take more control over their financial behaviors and sexual and reproductive health. Mercy Corps undertook programming and commissioned research to help fill this evidence gap.

## Empowering Girls through Aflateen+

In response to the needs of adolescent girls in Tajikistan, Mercy Corps adapted Aflateen—a school-based curriculum that brings social and financial education to teenagers—to the local context and included an extended focus on reproductive health, family planning and HIV. The result is Aflateen+. The program targeted girls aged 14 to 18 in secondary schools across two districts, Mastchoh and Hisor, and consisted of 10 peer-to-peer training sessions delivered over eight weeks (40 hours total), with a refreshment training conducted in 2013 for reinforcement. The Aflateen+ curriculum consists of seven core elements:

---

2 Thorne, C. et al. Central Asia: hotspot in the worldwide HIV epidemic. *Lancet Infect Dis* 2010; 10: 479–88.

3 State Committee on Statistics of the Republic of Tajikistan. 2007. *Tajikistan Multiple Indicator Cluster Survey 2005, Final Report*. Dushanbe, Tajikistan: State Committee on Statistics of the Republic of Tajikistan.

4 Ertürk, Y. Promotion and protection of all human rights, civil, political, economic, social and cultural rights, including the right to development. Report of the Special Rapporteur on Violence Against Women, its causes and consequences. Addendum. Mission to Tajikistan. A/HRC/11/6/Add.2 UN General Assembly Human Rights Council, 11th Session, Agenda item 3. April 2009.

5 Kurbanova (2008); UN Human Rights Council (2009), p.16

6 Data according to the World Health Organization; see <http://www.who.int/mediacentre/factsheets/fs364/en/>

7 See [http://www.unaids.org/en/media/unaids/contentassets/dataimport/pub/report/2008/NASA\\_TAJIKISTAN\\_2008-2009\\_en.pdf](http://www.unaids.org/en/media/unaids/contentassets/dataimport/pub/report/2008/NASA_TAJIKISTAN_2008-2009_en.pdf)

- » **Personal Understanding and Exploration**, during which participants are taught to self-reflect and become more aware of themselves by exploring their own skills, interests and talents.
- » **Rights and Responsibilities**, during which participants learn about their rights as derived from the United Nations Convention on the Rights of the Child (UNCRC).
- » **Saving and Spending**, during which participants learn to value and appropriately use limited resources. The focus is on creating an attitude to save money and differentiate between needs and wants. Girls also participate in a savings system.
- » **Planning and Budgeting**, during which participants learn how to budget to ensure resources last, how to set personal and financial goals, and how to make concrete plans to realize these goals.
- » **Social and Financial Enterprise**, during which participants learn to identify needs, budget resources, and plan businesses to address needs.
- » **Education on Reproductive Health**, during which participants develop an understanding for how women become pregnant, different options for family planning, and how to prevent sexually transmitted diseases. Girls also learn about the physical, socio-economical and emotional dangers associated with early childbearing.
- » **Education on HIV and AIDS**, during which participants learn about ways that HIV can be prevented and transmitted, and that treatment does not mean cure.

Girls from participating schools formed an **Aflateen club** through which the core elements of Aflateen+ were taught and practiced. While supported by teachers and other adults, girls were the primary drivers of activities.

On average, participants were 16.67 years old, with 34.1% aged between 16 and 17. For 44.2% of girls, the highest grade completed was ninth grade. Over 99.1% of girls reported living with parents and 99% of girls self-identified or spoke Tajik. Only one in 50 girls reported their mothers having high education and for 70.4% girls, their mother's education stopped at the level of primary school. In comparison, one in five girls reported their fathers having high education.

## Study Purpose and Methodology

This study evaluated the impacts of Aflateen+ on increasing girls' knowledge of reproductive health and HIV; their attitudes and behaviors towards savings; their sense of self-efficacy or agency; the strength of their social networks; and their plans for the future regarding schooling, marriage, and childbirth. The study tested the program's theory of change that: **Increasing adolescent girls' financial literacy and reproductive and productive knowledge and skills will enhance their agency and status in society, thus enabling them to delay marriage and motherhood, ultimately yielding better health outcomes for the mother and her children.** In addition, the research sought to identify the characteristics of girls for whom the program was most effective to inform future decisions on scaling and targeting the intervention.

## Theory of Change for Aflateen+ Program

### IMPLEMENT AFLATEEN+ IN SCHOOLS



**Increase girls' financial literacy and reproductive and productive knowledge and skills**



**Increase girls' agency and status in society**



**Delayed marriage and motherhood**



**Better health outcomes for mother and children**

To test the efficacy of Aflateen+, a cluster randomized control trial with secondary schools as the cluster units was conducted in Mastchoh and Hisor. A total of 2,030 girls from 30 randomly-selected schools received the Aflateen+ intervention in addition to the standard school curriculum. Another 2,280 girls in 30 schools were randomized into the control group and followed the standard school curriculum.<sup>8</sup> The intervention was given to all girls in the treatment schools who met the inclusion criteria.<sup>9</sup> At baseline in May, 2013, a total of 1,221 girls were interviewed and all but 13 of those girls were interviewed again at the endline in January 2014.

Data was collected through an interviewer-administered survey. Questions regarding savings attitudes were identified from the Aflateen Survey Version 3, provided by Aflatoun, and socioeconomic status and gender attitudes were measured using standard questions from the Tajikistan Demographic Health Survey. Other established constructs used included Levenson's multidimensional locus of control scale, Bandura's general self-efficacy scale, and Rosenberg's self-esteem scale.

## Key Findings

The Aflateen+ program, targeting adolescent girls aged 14 to 18 in Tajikistan, demonstrated significant positive impact on girls' knowledge of HIV/AIDS; on their support for more equitable gender norms; on their frequency of saving, and on their propensity towards entrepreneurship and plans for pursuing a career. The evaluation did not find attributable effects of the program on girls' health and nutrition knowledge, their strength of social networks, the actual amount of money saved, or on girls' expected or ideal age of marriage or childbirth.

<sup>8</sup> Generalized Linear Models were estimated for each of the outcomes of interest to adjust for clustering while controlling for significant variables such as respondents' socio-economic status.

<sup>9</sup> Inclusion criteria included girls who were enrolled in school in September, 2012, and had a birth date between 21/5/1994 and 19/11/1998.



## What worked and for whom?

### Increased Knowledge of HIV/AIDS

Girls who participated in the Aflateen+ program showed more knowledge around issues related to HIV/AIDS, as compared to girls in the control group. In the control group, 72.5% of girls reported they don't know any family planning method that also protects against HIV/AIDS, as compared to 44.4% of girls in the treatment group. Further, nine in ten girls in the treatment group reported they know a place to get tested for HIV, a higher number than in the control group. It should be noted that the program impacts on HIV knowledge were highest among girls who were older, had higher levels of education, higher values of household assets, had fathers with higher education and mothers with secondary education.

The intervention had no overall effect on girls' knowledge related to pregnancy; however, when controlling for education level, girls with higher levels of education were more likely to have heard about a method in which a woman can avoid becoming pregnant.



### More Support for Equality Between Men and Women

Comparison between the treatment and control group participants revealed that more girls in the treatment group were supportive of women sharing their opinions and supportive of men and women sharing family decisions. Girls in the treatment group were also less likely to say that a wife should tolerate being beaten by her husband.

However, on average, over 51% of participants either agreed (35.8%) or somewhat agreed (16.1%) with the statement that decisions in family should be made *only* by men. On the other hand, more than five out of eight girls agreed that married women should be allowed to work outside home, and, almost three out of five girls agreed that if a wife works outside home, her husband should help. Also, more than six out of seven participants disagreed with the statement that it is better to send son to school than to send a daughter. Close to 70% of participants either agreed (51.5%) or somewhat agreed (18.4%) with the statement that wife has a right to express her opinion. Similarly, over 96% of participants either agreed (54.7%) or somewhat agreed (38.9%) with the statement that women have the same rights as men.

### Improved Frequency of Saving

Compared with the control group, more girls who participated in the Aflateen+ program reported that saving for the future is very important and that they save more often than control group participants. No significant differences were found between the treatment and control group participants with regard to whether or not they save, where they save, how much they save or whether they have ever engaged in paid activity.

Results show that, on average, 33.2% of girls reported saving money, and they saved on average 176.15 somoni. Over 98% of girls saved at home. Further, on average, 42.7% of girls reported being engaged in paid activity at some point, and 25.8% of them reported being engaged in paid activity at the moment of survey.

## Greater Propensity Toward Entrepreneurship

The survey included a set of questions on plans for the future. Girls who saw themselves as staying in school longer and beyond high school, perusing a career, getting married and having children later were considered to have better future plans than girls who saw themselves as not completing high school and having children at an earlier age. The Aflateen+ program was associated with significantly higher scores on the measure of future plans, when analyzed as a whole. The detailed results showed that, compare to the control group, program participants were more likely to have plans to start a business and pursue a career. However, participation in the program did not influence girls' ideas about the ideal age to marry or have a child.

## What did not work?

### Girls' Knowledge on Reproductive Health and Basic Health and Nutrition

Overall, the findings are inconclusive on whether or not Aflateen+ improved girls' knowledge on reproductive health topics. The findings detected no significant difference between the treatment and control group girls in terms their knowledge on different methods of birth control. However, more girls in the Aflateen+ program reported that they had heard of a method in which a woman can avoid becoming pregnant (this difference was no longer significant when running multiple regression analysis) and reported having heard about condoms. Second, girls' knowledge of reproductive health was assessed through series of statements, such as *traditional methods of birth control are effective; children born to adolescent girls are likely to be weaker; washing after sex reduces the likelihood of pregnancy; and teenage pregnancy carries risk to the mother.* While fewer girls in the treatment group gave an *I don't know* response to all four statements, the responses were not always correct. In particular, more girls in the treatment group agreed with the statement that *traditional methods of birth control are effective* and that *washing after sex reduces the likelihood of pregnancy.*

### Girls' Social Ties

Girls who participated in Aflateen+ did not report significantly stronger social networks compared to girls in the control group. However, girls in Aflateen+ were more likely to say they belong in a group, including school-related groups, social groups, girl scouts or religious groups. They were also more likely to have talked with a friend about sexual matters. These impacts were most pronounced for girls who were younger, and consequently in lower grades, and who had mothers with some secondary education.

### Girls' Perceived Ideal Age for Marriage and Childbirth

The length of the study did not allow for evaluating the program's impacts on actual age of marriage, pregnancy and subsequent outcomes for the mother and child. Relying on the questions regarding respondents' future plans, the analysis found no discernable program effects on participating girls' ideal or expected age for getting married or having their first child, or their expected level of educational attainment. Girls in both groups reported that they *expect* to be married around 20 years and have their first child by 22 years old.

# Conclusion and Implications

Overall, the data show that Aflateen+ has the potential to enable teenage girls to gain critical life-skills needed to improve their futures. Building girls' knowledge around HIV/AIDS, more equitable gender norms and saving money can positively affect their self-confidence and motivate them toward starting a business and other entrepreneurial pursuits. This holds promise for improving women's financial contributions to their families and communities, which has been shown to help decrease maternal and infant mortality rates and, ultimately, poverty.

At the same time, the results show that the program did not consistently deliver the intended knowledge, such as on reproductive health, to many girls in the intervention group. Thus, quality of program implementation should be investigated. Data also show that Aflateen+ did not influence girls' perception of the ideal age for marriage or for having their first child, arguably the most important intended outcomes. While the program and research was not implemented long enough to analyze impacts on actual age of marriage and first birth, previous research on fertility highlights the need to change women's plans for the number of children they desire as a necessary precondition to changing their actual practices. In this regard, the Aflateen+ curriculum appears to need improvements in order to enable adolescent girls' to take more responsibility for and control over their lives, their bodies, and their futures.

## Recommendations

### For the Future Implementation of Aflateen+

- » Ensure consistent quality of implementation of Aflateen+ so that all participating girls have access to the same content and program process.
- » Conduct a panel study to follow a smaller cohort of girls who participated in the intervention and those in the control group over five years. This could provide evidence on whether or not Aflateen+ has impact on age of marriage and first birth.
- » Engage boys so they can learn to be advocates for girls and then women.
- » Engage gatekeepers (i.e., parents and religious leaders) in understanding the Aflateen+ curriculum and the value of keeping girls in school and delaying marriage and first birth.

### For the Tajikistan Government

- » Ministries in Tajikistan should engage with Aflateen+ to further influence girls' ability to create better livelihoods for themselves and their future families. Enabling girls to access viable livelihoods is more than an issue of gender; it also includes inequality for girls in the realms of education, economics, finance and health.
- » Cross-sectorial planning and incorporating Aflateen+ into annual workplans by all levels of government can further support follow-through of the program.
- » Strengthening policy and governance around Aflateen+ can secure infrastructure, equipment and financing from the government with multi-sectorial funding streams.

## For Local Organizations

- » There is opportunity to collaborate and leverage the work of other organizations in the region to scale-up Aflateen+ and strengthen its sustainability. As a first step, Mercy Corps can present results of this study to key stakeholders within the Tajikistan Government, local organizations and donor partners.

## CONTACT

GARRETT HUBBARD  
Country Director | Tajikistan  
[ghubbard@kg.mercycorps.org](mailto:ghubbard@kg.mercycorps.org)

### About Mercy Corps

Mercy Corps is a leading global organization powered by the belief that a better world is possible. In disaster, in hardship, in more than 40 countries around the world, we partner to put bold solutions into action — helping people triumph over adversity and build stronger communities from within. Now, and for the future.



45 SW Ankeny Street  
Portland, Oregon 97204  
888.842.0842  
[mercycorps.org](http://mercycorps.org)