

# ASPIRES EVIDENCE BRIEF SERIES: FINANCIAL EDUCATION AND HIV OUTCOMES

# Introduction

Economic factors are linked to HIV risk behaviors, as well as outcomes, at every stage of the HIV care and treatment cascade. The ASPIRES project conducted an extensive review of the literature on these linkages to produce an evidence brief series highlighting how different household economic strengthening (HES) interventions may affect HIV prevention, testing, links to care, retention in care, and antiretroviral therapy (ART) adherence.

Financial education involves building people's skills around budgeting, saving, borrowing and using formal financial services. Financial education builds individuals' capacity to manage their money better and therefore can help them improve their economic

Briefs in the Series:	
Unconditional cash transfers	Conditional cash transfers
Individual savings	Group savings
Financial education	Income generation
Vocational/ technical training	Business skills & entrepreneurship
Employment support	

situation. When combined with other health and/or economic strengthening interventions, financial education may improve HIV prevention and adherence to anti-retroviral therapy (ART).

## What do we know?

#### HIV PREVENTION/RISK REDUCTION

ASPIRES found five studies in our evidence review which aimed to assess how interventions that included financial education affected HIV prevention and risk reduction. No studies assessed the effects of financial education independent of other interventions. The studies varied in terms of design quality and analytical rigor with two ranking high, two medium-high and the last low.<sup>1</sup>

Witte et al [1] conducted a high-quality randomized controlled trial (RCT) in Ulaanbaatar, Mongolia, with 107 female sex workers (FSW) aged 18+. Researchers looked at sexual risk outcomes for a group participating in HIV sexual risk reduction sessions (HIVSRR) alone and a group receiving HIVSRR plus financial education, a 2:1 matched savings account and business development and mentorship. After six months of implementation, both study groups reduced their number of sexual partners, but the difference was 22% greater for those receiving the package containing financial education. In addition, both groups reduced their number of

<sup>&</sup>lt;sup>1</sup> For details, see quality ranking methodology in: Mandy Swann (2018) Economic strengthening for HIV prevention and risk reduction: a review of the evidence, AIDS Care, 30:sup3, 37-84, DOI: 10.1080/09540121.2018.1479029

unprotected sex acts, but again the difference was greater for the plus package group as they were 3.72 times more likely to report not having unprotected sex with paying partners the prior 90 days. The paper did not report the economic outcomes of the intervention.

Tsai et al [2] built upon Witte et al data from Mongolia with a medium-high quality analysis investigating violence (physical and/or sexual) from FSW paying clients in the past 90 days between the HIVSRR and HIVSRR+ groups. No significant differences between groups were found for any violence from paying clients, and this paper also did not report on economic outcomes. Tsai et al [3] then conducted a high-quality feasibility study testing the efficacy of HIVSRR+ in reducing the sexual risk of women engaged in sex work. Results indicated that HIVSRR+ recipients were significantly more likely to report no income from sex work as the HIVSRR group. Therefore, it is unsurprising that HIVSRR+ FSW were also significantly less likely to report sex work as their main income source. The magnitude of these differences was a 2.5 times likelihood of reporting no income from sex work and a 3.5 times likelihood of reporting household income or participants' total monthly income, indicating that participants did not lose income in moving away from sex work.

In Chitungwiza, Zimbabwe, Dunbar et al [4] conducted a medium-high-quality RCT following 315 HIV- out of school female orphans aged 16-19. Participants were split into two groups. One received reproductive health services and life skills, gender and HIV education (control participants). The other received these same components plus financial education, vocational training, social support and adult mentoring (intervention participants). After two years of implementation, intervention participants were significantly less likely to be food insecure and significantly more likely to have their own income. Unintended pregnancy was marginally lower for intervention participants, and other statistically significant results for participants was reduced likelihood of engaging in transactional sex, and increased likelihood of condom use with their current partner. Sexual debut was similar between the two groups. The study was not powered to detect biological outcomes, so the reduction in unintended pregnancy, even at marginal significance, is somewhat surprising, while lack of difference in HIV and HSV-2 incidence is not.

Hallman and Roca [5] conducted a low-quality cluster randomized program evaluation in KwaZulu-Natal, South Africa, comparing effects of a standard life skills curriculum (control) for male and female adolescents in the 10<sup>th</sup> and 11<sup>th</sup> grades with one of two interventions: health and social capabilities support alone or offered as a package with financial education. After 18 months, all intervention participants were more likely to know social grant requirements and criteria, have improved budgeting and planning skills, and to have attempted to open a bank account. Boys in both intervention groups were more likely to remain sexually abstinent, and those who were sexually active reported fewer partners, compared to control group males. Girls who received the intervention with financial education were more likely to have a obtained a national birth certificate, and boys receiving that arm of the intervention were more likely to have engaged in an income-generating activity.

#### HIV TESTING (HTS) AND LINKAGE TO CARE

ASPIRES found only one article (medium-high-quality) examining the potential of an intervention including financial education to affect HIV testing and linkage to care. Austrian and Muthengi [6] conducted an evaluation in Kampala, Uganda comparing HTS and sexual

harassment outcomes between two groups of girls aged 10-19 (1,062 total) who either received individual savings accounts alone, or a savings account plus financial education, weekly safe spaces sessions and reproductive health training. After one year, the researchers found that both groups increased their financial assets, but there was no significant difference in odds of HTS uptake between groups.

#### RETENTION IN HIV CARE AND ADHERENCE TO ART

ASPIRES found two articles examining the potential for financial education to effect retention in HIV care and adherence to ART. Masa [7] conducted a medium-quality pre- and post-test quasiexperimental study examining food security and ART adherence among 101 economically poor adult PLHIV enrolled in treatment in Lundazi District, Eastern Province, Zambia. One group received adherence counseling only, while another received adherence counseling plus cash to purchase an income-generating asset, business training, access to individual savings, financial education and health training. After one year, controlling for baseline adherence, those participants receiving only counseling were less likely to report optimal ART adherence than those benefiting from the wider package that included financial education. The participants receiving the package including economic support experienced greater reduction in food insecurity, but the study did not examine economic outcomes of the intervention.

In Rakai, Masaka, Kalungu, and Lwengo Districts of southern Uganda, Bermudez et al [8] conducted a high-quality longitudinal cluster randomized trial (baseline, 12- and 24-months post intervention start) assessing viral load suppression, a clinical marker of ART adherence, among adolescents living with HIV who receive adherence counseling alone (control) compared to those receiving counseling plus a 1:1 matched savings account and financial education. After both 12 and 24-month follow-ups, the group receiving savings and financial education in addition to counseling had significantly lower odds of a detectable viral load. After 24-months, the proportion of virally suppressed intervention group participants increased tenfold compared to the control group. Economic outcomes of the intervention were not reported.

### What does this Mean?

The current evidence base for financial education does not support attributing HIV outcomes to financial education. All studies focused on programs containing HIV-related components (HIVSRR, adherence counseling, etc.), and logically these may have been more directly responsible for the HIV outcomes observed. Financial education was also delivered as part of a package of economic strengthening interventions in all the studies, so economic outcomes cannot be attributed to financial education, either. Functionally, however, it makes a great deal of sense to deliver financial education with other economic strengthening interventions since it gives participants an opportunity to practice and reinforce the skills they learn and enables them to make better use of their financial assets. Financial education alone is unlikely to help highly vulnerable people improve their economic situation, but it can help maximize the effects of other economic strengthening interventions and address economic drivers of poor HIV outcomes. ASPIRES recommends that practitioners designing HIV prevention, retention and/or adherence programs with economic strengthening components strongly consider incorporating financial education to help improve participants' resilience.

For more information on the studies included in this brief, reference the ASPIRES systematic review on ES interventions to address HIV outcomes [9-11].

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