



ASPIRES EVIDENCE BRIEF SERIES: INDIVIDUAL SAVINGS 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 and produced an evidence brief series highlighting how different household economic strengthening (HES) interventions may affect HIV prevention, testing and linkage to care, retention in care, and antiretroviral therapy (ART) adherence.

This brief focuses on individual savings interventions, which include formal or informal individual savings accounts in which participants save their own money, as well as individual matched savings interventions. Matched savings interventions incentivize participants to save by contributing an additional amount of money to their savings account once participants deposit their own money. Group savings interventions, in which small groups of individuals save together and make loans to group members through pooled savings, are discussed in another brief in this series.

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	

What do we know?

HIV PREVENTION AND RISK REDUCTION

ASPIRES found four papers from two studies in our evidence review which aimed to assess how interventions that included individual savings affected HIV risk reduction. Witte et al. conducted a high-quality¹ group randomized controlled trial (RCT) in Mongolia with adult female sex workers (FSW). Researchers looked at sexual risk outcomes comparing those participating in HIV sexual risk reduction sessions (HIVSRR) alone to those receiving HIVSRR plus HES support including a 2:1 matched savings account (match of up to USD 160 over four months), financial education, and business development and mentorship. After six months, both study arms reduced their number of sexual partners, but the difference was 22% greater for those receiving the package containing HES support including matched savings. Similarly, both groups had reductions in the number of unprotected vaginal sex acts with paying partners, and participants in the combined intervention were 3.7 times more likely to report not having

¹ For details on the quality ranking methodology see Swann, M (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 with paying partners in the past 90 days. This paper did not examine economic outcomes of the intervention (Witte et al. 2015).

An additional paper from this study was rated as high quality and examined how the intervention changed economic dependence on sex work. Women in the HIVSRR plus HES arm reduced the percentage of their income coming from sex work by 78.5 percentage points from baseline to six-month follow-up, which was a significantly greater reduction than those in the HIVSRR only arm. After six months, women in the HIVSRR plus HES arm also had 3.5 times higher odds of reporting that sex work was not their main source of income and 2.5 times higher odds of reporting no income from sex work compared to women in the HIVSRR only arm. There was no effect of the intervention on overall household income or women's total monthly income indicating that women were able to substitute sex work income with other types of income without incurring financial losses (Tsai et al. 2018).

A third analysis from this study was rated as medium-high quality examined violence from paying partners. Researchers found that over the course of the intervention, both study arms experienced significant reductions in violence from paying partners in the last 90 days, from 43.9% of participants at baseline to 11.8% after six months. The proportion of participants reporting physical violence declined from 39.5% to 10.8% and the proportion reporting sexual violence declined from 25.2% to 7.5%. However, there were no significant differences between study arms in any of these outcomes, indicating that participation in the additional HES program components did not increase the impact on FSWs' risk of experiencing paying partner violence as compared with receiving HIVSRR alone (Tsai et al. 2016).

In Uganda, Austrian and Muthengi conducted a quasi-experimental pilot evaluation with adolescent girls age 10-19 rated as medium-high quality. The study compared two treatment arms to a comparison arm. The "Savings Only" intervention was comprised of individual savings accounts, and the "Savings Plus" intervention also included financial education, weekly safe spaces/meeting, and reproductive health training. After one year, Savings Only girls had 3.15 times the odds of reporting indecent touching compared to the control arm, which increased during the study period from 9% to 15%. No significant differences or changes were observed in indecent touching for Savings Plus arm. No other HIV-related risk behaviors were examined in this paper. In terms of economic outcomes of the intervention, girls in the two intervention arms had at least two times higher odds of reporting having a budget and at least 1.7 times higher odds of reporting saving money over the last six months compared to girls in the comparison arm (Austrian and Muthengi 2014).

HIV TESTING (HTS) AND LINKAGE TO CARE

Only one study examined the link between individual savings and HTS outcomes. The Austrian and Muthengi article cited above also examined HTS outcomes among the study's adolescent female population. After one year, the researchers found no significant difference in odds of reporting HTS uptake between either intervention group and the control group. As described above, participants in both intervention arms reported improvements in budgeting and saving (Austrian and Muthengi 2014). No studies examined the effects of individual savings on linkage to care.

RETENTION IN HIV CARE AND ADHERENCE TO ART

ASPIRES found two studies that examined the relationship between individual savings and adherence to ART. In Uganda, Bermudez et al. conducted a high-quality cluster randomized trial which assessed viral load suppression, a clinical marker of ART adherence, among PLHIV adolescents who receive adherence counseling alone (control) compared to those who received adherence counseling plus a 1:1 matched savings account and financial education. At both 12- and 24-month follow-ups, the arm 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. This study did not measure economic outcomes resulting from the intervention (Bermudez et al. 2018).

A medium quality pre- and post-test study by Masa examined ART adherence among economically poor adult PLHIV enrolled in treatment in Zambia. One study group only received adherence counseling, while another received adherence counseling plus access to individual savings, cash to purchase an income-generating asset, business training, financial education and health training. After one year, controlling for baseline adherence, there was no statistically significant difference in self-reported adherence between study arms. However, participants in the comprehensive intervention including individual savings reported significantly greater reductions in food insecurity than those who received counselling only (Masa 2016).

What does this Mean?

Most of the studies described in this brief compared a study arm receiving only HIV-related services (the control) to a study arm receiving that support plus an additional package of HES-focused support, including individual savings. Since individual savings was usually part of a broader intervention with several HES and/or social components, our ability to determine the role individual savings played in achieving any positive results is limited. Further limiting our understanding, only some of the studies assessed intermediate economic outcomes, and the measures used were not always well-aligned to the savings component of the intervention. Nonetheless, there is evidence that participants who received these interventions were better able to budget, save, and/or meet their food needs and, in the case of FSW, to maintain income levels while reducing their reliance on sex work. Since access to savings accounts provides individuals with a secure location to build savings, individual savings support may be a desirable component of combination interventions that attempt to address economic factors driving HIV risk and lack of adherence. The harassment of adolescent girls receiving only savings accounts that Austrian and Muthungi documented points to the need to carefully assess, monitor for, and make plans to mitigate risks that highly vulnerable individuals may face as a result of increased economic activity.

This evidence base has a sparse number of studies, which rely mainly on combined interventions, and there is limited exploration of mediating mechanisms. All of this points to a need for additional research on the effectiveness of individual savings interventions for HIV outcomes. Promising areas for further exploration include the role individual savings can play in reducing HIV risk for FSW. Practitioners designing HIV prevention support for FSW should consider including individual savings as part of a comprehensive package of support to reduce reliance on sex work income and decrease work-related sexual risks. Incorporating individual

savings into ART adherence-focused interventions may be beneficial for adolescents, with appropriate monitoring for unintended exposure to risk. The studies of matched savings interventions revealed positive effects on both HIV prevention and adherence outcomes. Unmatched savings interventions were associated with improved economic outcomes but not with improved HIV outcomes. This may indicate that matched savings interventions are more effective for achieving HIV-related outcomes, but given the limitations of the evidence base, there is considerable room for further research on this point.

For more information on the studies included in this brief, reference the ASPIRES systematic review on HES interventions to address HIV outcomes (Swann 2018a, b, c).

Sources

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