



ASPIRES EVIDENCE BRIEF SERIES: VOCATIONAL TRAINING 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.

Vocational training helps poor individuals build their economic capacity by developing technical skills required to enter specific trades. Many studies have been conducted looking at the effect of combined health and economic strengthening interventions containing vocational training as one component on HIV prevention and risk reduction, but barely any on HIV testing and linkage to care, or retention in care and adherence to ART. Results indicate that integrated interventions with vocational training components may support HIV prevention and risk reduction, as well as HTS and linkage to care.

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/RISK REDUCTION

ASPIRES found eight studies in our evidence review which aimed to assess how interventions that included vocational training affected HIV prevention/risk reduction. The studies varied in terms of design quality and analytical rigor with three medium-high, three medium and three low.¹

In Capetown, South Africa, Rotheram-Borus et al [1] used a medium-high quality pre- and post-intervention survey design to assess the feasibility of engaging unemployed men age 18-25 in HIV testing and reducing substance use. The intervention included access to a soccer program, random rapid diagnostic tests (RDT) for alcohol and drug use, and an opportunity to enter a vocational training program. Job training was provided as an incentive to the participants with the most on-time arrivals at practice, drug-free RDT, and no red cards for violence. The percentage of participants agreeing to complete RDT at soccer increased significantly over time

¹ 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

and RDTs with evidence of alcohol and drug use decreased over time. There was an increased rate of employment among participants from none holding jobs at recruitment to 28.9% employed after 6 months in the intervention, leading to a significant increase in income among employed participants. There was little change observed in health outcomes: HIV testing rates, health care contacts, sexual behaviors, HIV knowledge, condom use and attitudes towards women were similar over time.

Dunbar et al [2] conducted a medium-high quality individual randomized controlled trial (RCT) to compare the effects of the Shaping the Health of Adolescents in Zimbabwe (SHAZ!) intervention on structural factors and sexual risk behaviors of 315 HIV- female, out of school orphans age 16–19. SHAZ! combined HIV and sexual and reproductive health services, life skills-based HIV education, financial literacy education paired with vocational training and a microgrant, and integrated social support in the form of guidance counseling and adult mentorship. Control group participants received the health services and life skills-based HIV education only. The intervention group's food security and likelihood of having their own income increased significantly over the course of the intervention. The intervention group demonstrated statistically significant reductions in transactional sex and increases in condom use with current partners after two years, but this was not significantly different from the control group. Sexual debut also did not differ between groups, and unintended pregnancy was marginally lower in the intervention group, but is a notable result since the study was not powered for biological outcomes.

In Chennai, India, Sherman et al [3] conducted a medium-high quality block RCT to assess how HIV prevention education and 100 hours of canvas bag tailoring training may be associated with sexual risk behaviors. One hundred female sex workers (FSW) age 18+ were included in the study. The intervention group received both components, while control received HIV prevention education only. At 6-month follow-up, intervention participants reported a significantly higher average monthly income (USD 105.30 to USD 78.60) and significantly lower monthly earnings from sex work (USD 33.90 to USD 54.30), significantly lower average number of sex partners compared to controls (5 to 11.9) and a lower number of paying customers compared to controls (3.1 to 5.1). There was no significant difference between groups in condom use at last sex.

In rural Kenya, Goodman et al [4] conducted a medium-quality stratified-random, cross-sectional survey with individuals from 707 OVC-headed households (aged 13 to 25) to assess differences among three intervention cohorts (those involved for 4 months, over 1 year, and over 2 years) in a range of outcomes, including sexual practices. The intervention included vocational training and IGA support and business startup kits, combined with health, hygiene and agriculture training. Some participants also received cash transfers. Participants saw significant increases in income and ability to save over time, although the rate of participants reporting having saved money in the past year was highest in the 1-year cohort. Females had fewer sex partners and greater condom use at last sexual encounter, while there was no significant difference in either outcome among males.

Adoho et al [5] conducted a medium-quality RCT comparing economic, empowerment, and health outcomes of females age 16-27 who were not in school. The intervention group received 6 months of livelihoods and life skills training (in either a job skills or business development services track) and 6 months of follow-up support to facilitate self or wage employment. Results indicate the year-long intervention did not reduce number of sexual partners or increase condom use, and there was also no difference in outcomes between the two study groups.

However, the intervention increased employment by 47% and earnings by 80% versus the control, increase in savings, and evidence of improved household food security among participants was observed.

In Uganda, Bandiera et al [6] conducted a medium-quality cluster RCT to evaluate the effects of the Empowerment and Livelihoods for Adolescents (ELA) program on 4,800 adolescent girls. ELA provided life skills to reduce risk behaviors and vocational skills training to start small income-generating activities. After two years, girls participating in the intervention were 35% more likely to be engaged in income-generating activities, primarily self-employment. Among those participants who were sexually active, routine condom use increased by 25% and the number of girls reporting having sex unwillingly dropped from 21% at baseline to under 4%.

In Siem Reap, Cambodia, Lee et al [7] conducted low-quality participatory action research with 30 female beer sellers age 19-31 to assess the effects of an intervention combining a 24-month hotel mentoring internship with a guaranteed living wage (USD 110/month), Khmer literacy, English, health education and life/social skills support on health knowledge, self-efficacy, and sexual risk behaviors. There were no significant differences in condom use at last encounter, condom suggestion, or successful condom negotiation from baseline throughout program implementation. However, at follow-up nine months post-intervention, none of the participants reported that they reengaged in beer selling or indirect sex work.

In Kampala, Uganda, Rotheram-Borus et al [8] used a low-quality pre- and post-intervention assessment design to understand HIV risk behaviors of 100 youth age 13-23. The intervention group received HIV education plus vocational training and was compared to a control group receiving HIV education alone. Four months after the end of the intervention there were no significant differences between groups in average number of sexual partners, abstinence or 100% condom use. After 24 months, however, the combined intervention groups showed decreases from baseline in the average number of sex partners (2.12 to 1.12) and increases in abstinence or 100% condom use (45% to 71%). Employment increased dramatically over the two years of the intervention, with 86% of participants employed.

HIV TESTING AND LINKAGE TO CARE

ASPIRES found three articles in our evidence review examining the potential of an intervention including vocational training to affect HTS and linkage to care. In rural, central Malawi, Weinhardt et al [9 and 10] and Galvao et al [11] each published articles (10 high quality; 9 and 11 are abstracts and not able to be assessed for study quality) as part of a longitudinal, nonequivalent control group study (SAGE4Health) meant to evaluate the effects of an integrated farmer field school,² group savings, and HIV and gender education intervention on HTS. Compared to the control group which did not receive the integrated program, intervention participants demonstrated increased HIV testing and HIV case finding, lower food insecurity, increased nutritional diversity, and improved economic resilience to shocks. Most effects were sustained over a 3-year period.

² Since farmer field schools teach skills to improve the productivity of agricultural activities, this approach is considered vocational training for purposes of this review.

RETENTION IN HIV CARE AND ADHERENCE TO ART

ASPIRES did not find any studies looking at how interventions with a vocational training component, as defined in this brief as a training in technical skills to enter a specific trade, may affect retention in HIV care and ART adherence.

What does this Mean?

It is important to note that the studies identified and summarized here compared a control group which often received only HIV-related services to a group receiving that support plus an additional package of ES-focused support that included vocational training. The studies were not set up to differentiate attribution by program component, pointing to a need for additional related research to determine if vocational training has greater or lesser effects on HIV outcomes than other ES interventions.

With that limitation in mind, several of the studies highlight positive trends in HIV prevention and risk reduction on key topics such as condom use and number of sexual partners, especially for female participants. Several studies of varying quality looking at HIV prevention and risk reduction seem to demonstrate that positive results may grow over time, illustrating an important reality that the potential health benefits of economic support could require longer time horizons to be observed and captured. This may be particularly relevant to interventions involving vocational training, where time beyond the period of training may be needed in order for participants to obtain employment.

The positive results around HTS and HIV case finding, while limited to one study, are interesting to note. Testing and linkage to care is a shorter duration stage of the HIV cascade, and the economic barriers to it are therefore frequently addressed through short-term transfers or incentives. Vocational training (and the group savings paired with it in the study) are longer-term economic interventions that would not necessarily be expected to affect HIV testing and case finding. It is possible, if not likely, that the economic strengthening interventions had little effect on the HIV outcomes, and that they are an effect of the HIV education component. The economic interventions' role in this case may be drawing people into the program, since many people have a strong interest in improving their economic status. As seen across studies in this brief, vocational training in combined interventions is associated with positive economic outcomes, which could serve as a strong incentive for people to enroll and remain in a program aiming to address HIV outcomes, and sustained economic effects over time can also help them sustain HIV prevention and risk-reduction behaviors.

For more information on the studies included in this brief, reference the ASPIRES systematic review on ES interventions to address HIV outcomes [12-14].

Sources

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This brief was produced under United States Agency for International Development (USAID) Cooperative Agreement No. AID-OAA-LA-13-00001 and was made possible by the generous support of the American people through USAID and the United States President's Emergency Plan for AIDS Relief. The contents are the responsibility of FHI 360 and do not necessarily reflect the views of USAID or the United States Government.