DIRECT PROVISION OF FREE HIV SELF-TESTS AMONG FEMALE SEX WORKERS IN UGANDA

Evidence-Based Structural Intervention

INTERVENTION DESCRIPTION

Goals of Intervention
- Increase HIV testing
- Increase linkage to care
- Increase antiretroviral (ART) initiation

Target Population
- Female sex workers (FSWs)

Brief Description

Direct Provision of Free HIV Self-Tests among Female Sex Workers in Uganda is designed to increase HIV self-testing among female sex workers (FSWs). Select FSWs are first trained as peer educators to instruct study participants to use the oral HIV self-test, interpret test results, and encourage linkage to HIV treatment and prevention services. These peer educators meet with study participants 4 times during the four-month duration of the study. At each study visit, peer educators distribute condoms, refer participants to standard of care HIV testing services, and screen for potential adverse events. During the first study visit, 8 FSWs meet as a group with the peer educator to receive 1 free oral fluid rapid HIV self-test, training on HIV-self testing procedures and linkage to care. Peer educators meet with each participant individually during the remaining 3 study visits and provide a 2nd free HIV self-test at the last study visit. Peer educators also encourage participants to test for HIV again after 3 months of testing HIV negative, or to instruct participants to go to a healthcare facility for confirmatory testing if they test HIV positive.

Theoretical Basis

None reported

Intervention Duration
- Four educational sessions conducted by trained peers, including 1 group session and 3 individual sessions conducted at 2 weeks, 1.5 months and 3 months

Intervention Settings
- Location of participant's choosing (e.g., guest house, brothel, local bar)

Deliverer
- Female sex workers trained as peer educators

Delivery Methods
- Discussion
- Printed materials

Structural Components
- Access
  - Increased access to condoms, HIV testing through direct provision of coupons for free HIV self-tests, and linkage to care
- Capacity Building – Provider/supervisor training
  - Trained FSWs to serve as peer educators, and instruct participants on HIV self-testing procedures and linkage to HIV treatment and prevention services
  - Trained individuals working at the hotline on HIV self-testing

INTERVENTION PACKAGE INFORMATION

An intervention package is not available at this time. Please contact **Katrina Ortblad,** Department of Global Health, University of Washington, Seattle, WA 98195.

Email: **katort@uw.edu** for details on intervention materials.

EVALUATION STUDY AND RESULTS

Study Location Information
The original evaluation study was conducted in Kampala, Uganda between October 2016 and April 2017.

Key Intervention Effects
- Increased HIV testing

Recruitment Settings
- Non-governmental organizations or Most At-Risk Populations Initiative (MARPI) clinics used to recruit FSWs as peer educators
- Bars, brothels/guest homes to recruit FSWs as study participants

Eligibility Criteria
Participants were eligible if they were 18 years or older; reported the exchange of any vaginal, anal, or oral sex for money, goods or other items of value; reported never testing for HIV or self-reported negative HIV status without a recent HIV test (in the past 3 months); had never used an oral HIV test; and had been working as FSWs in Kampala for at least 1 month prior to enrollment and planned on continuing to work as FSWs for at least the next 4 months.

Study Sample
The baseline study sample 960 FSWs is characterized by the following:
- *Median age of 28 years*
- *59.2% had primary partner*

- *36.6% received the last HIV test within 3-6 months*
- *40.8% had inconsistent condom use with clients*
- *47.5% experienced any intimate partner violence in the past 3 months, with 36.4% experiencing physical violence and 30.1% experiencing sexual violence*

Assignment Method

FSW peer educator groups (k=12 peer educator groups; n=960 participants) were assigned using block randomization, stratified by Kampala's 5 divisions (i.e., Kampala Central, Kawempe, Lubaga, Makindye, and Nakawa), to 1 of 3 study arms: direct provision of an HIV self-test (i.e., Direct Provision, k=37, n=296), a coupon for collecting a free HIV self-test from a healthcare facility (i.e., Facility Collection, k=42, n=336), or standard of care HIV testing (k=41, n=328).

Comparison

The Direct Provision intervention was compared to the Facility Collection arm and the Standard of Care arm.

Participants in the Facility Collection arm received 2 coupons for free HIV self-tests at 1 of 10 private healthcare facilities (1 coupon received at the 1st visit, and 1 coupon received at the last study visit). Participants in the Standard of Care arm were referred to standard of care HIV testing and treatment services, including all public and private HIV testing facilities.

Relevant Outcomes Measured

- HIV testing was measured as the participant's self-reported last test for HIV at 1- and 4-months post-intervention
    - HIV testing was measured as a report of an HIV self-test or report of an HIV test at a facility
- Frequent HIV testing was measured as self-reported testing twice for HIV at 1- and 4-months post-intervention
- Linkage to HIV care was measured as self-reported seeking of medical care for HIV
- ART initiation was measured at 1- and 4-months post-intervention as participants' self-reported initiation of ART

Participant Retention

Because participant retention is not a criterion for the Structural Interventions chapter, the Prevention Research Synthesis project does not evaluate that information.

Significant Findings on Relevant Outcomes

Direct Provision vs Facility Collection:

- Direct Provision participants were significantly more likely to have tested for HIV at 1-month post-intervention compared to Facility Collection participants (80.4% vs 71.5%; RR=1.18; 95% CI= 1.07—1.31; p=0.001).
- Direct Provision participants were significantly more likely to have tested for HIV at 4 months post-intervention than Facility Collection participants (99.6% vs 97.0%; RR=1.03; 95% CI= 1.01—1.05; p=0.02).
- Direct Provision participants were significantly more likely to have tested for HIV twice at 4 months post-intervention compared to Facility Collection participants (87.0% vs 71.4%; RR=1.22; 95% CI= 1.08—1.37; p=0.001).

Direct Provision vs Standard of Care:

- Direct Provision participants were significantly more likely to have tested for HIV at 1-month post-intervention compared to standard of care participants (95.2% vs 71.5%; RR=1.33; 95% CI= 1.17—1.51; p<0.001).
- Direct Provision participants were significantly more likely to have tested for HIV at 4 months post-intervention than standard of care participants (99.6% vs 87.1%; RR=1.14; 95% CI= 1.07—1.22; p<0.001).
- Direct Provision participants were significantly more likely to have tested for HIV twice at 4 months post-intervention compared to standard of care participants (87.0% vs 57.6%; RR=1.51; 95% CI= 1.29—1.77; p<0.001).

Strengths

- None identified

Considerations

- The Facility Collection intervention that involves issuing coupons for collecting free HIV-self tests at healthcare facilities is an Evidence-based SI. The info sheet is included in the SI chapter.

Implementation activities

- Research assistants called peer educators before and after each scheduled study visit to ensure that visits happened and happened on time.
- All peer educators completed 4 peer educator visits over the duration of the study, adhering to study protocols.
- At 4 months post-intervention, 88.9% (233/262) of Direct Provision participants reported receipt of 2 HIV self-tests, and 89.9% (267/297) of Facility Collection participants reported receipt of 2 coupons for free HIV self-tests from peer educators.
    - Four participants (2 in the Direct Provision arm, and 2 in the Facility Collection arm) reported that they did not receive HIV self-tests or coupons from peer educators.
- Majority (75.3%, 648/861) of all participants reported receipt of condoms at every peer educator visit and there were no statistically significant differences in receipt of condoms across all study arms (Direct Provision: 76.0%, 199/262; Facility Collection: 73.1%, 217/297; Standard of care: 76.8%, 232/302).

Reported Adverse Events

- Four adverse events were reported over the duration of the study:
    - Two events were related to HIV self-testing:
        - Interpersonal violence (verbal abuse from boyfriend, reported by a participant in the Facility Collection arm)
        - Mental distress following a positive HIV self-test result (reported by a participant in the Direct Provision arm, and who later tested HIV negative at a healthcare facility)
    - Two events were related to FSW status disclosure:
        - Interpersonal violence

Non-significant findings on relevant outcomes

- There were no significant intervention effects at 1- and 4-months post-intervention on linkage to care or ART initiation.

Other related findings

- Direct Provision participants were significantly less likely to have received HIV testing at a facility at 1 month post-intervention (9.3% vs 66.8%; RR=0.14; 95% CI= 0.09—0.22; p<0.001) and 4 months post-intervention (21.4% vs 85.8%; RR=0.25; 95% CI=0.18—0.34, p<0.001) compared to standard of care participants.

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REFERENCES AND CONTACT INFORMATION

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