BRIEF COUNSELING FOR LINKAGE TO CARE
Evidence-Based for Linkage to HIV Care

INTERVENTION DESCRIPTION

Goal of Intervention
- Improve linkage in HIV care
- Decrease time between HIV diagnosis and linkage to HIV care

Target Population
- Newly HIV diagnosed adults
- Previously HIV diagnosed adults

Brief Description

Brief Counseling is an intervention to increase linkage to care in Uganda. Counselors conduct standard HIV counseling and testing in participants' homes and provide counseling when participants receive an HIV diagnosis. Counseling sessions address the acceptance of an HIV diagnosis, importance of HIV status disclosure, and availability of psychosocial support for linkage to care. Counselors also provide information about available care services, antiretroviral drugs, and the rationale for early linkage to care. Counselors use a client-centered approach that is tailored to the participant's needs and circumstances, such as allowing married or cohabitating individuals to test together.

Intervention Duration
- Counseling sessions are conducted in participants' homes one and two months after home-based HIV counseling and testing (HBHCT); each lasts approximately 45 minutes.

Intervention Setting
- Residential setting

Structural Components
There are no structural components reported for this study.

Deliverer
- Counselor who received four weeks of training

INTERVENTION PACKAGE INFORMATION

An intervention package is not available at this time. Please contact **Eugene Ruzagira**, MRC/UVRI Uganda Research Unit on AIDS, Entebbe, Uganda.

Email: eugene.ruzagira@lshtm.ac.uk for details on intervention materials.

EVALUATION STUDY AND RESULTS

Study Location Information
The original evaluation was conducted in three rural counties of Masaka, Uganda, between 2015 and 2016.

Recruitment Settings
Rural counties in southwestern Uganda

Eligibility Criteria
Newly and previously identified persons with HIV were eligible to participate if they were able to consent, not previously or currently in care, available for follow-up, and not participating in other health-related research.

Study Sample
The baseline sample of 302 participants is characterized by the following:
- *55% female; 45% male*
- *27.6% 18-24 years old, 42.3% 25-34 years old, 26.9% 35-44 years old, 25.0% 45+ years*
- *Median age of 30 years (interquartile interval, 25.0–39.0)*
- *80% previously tested, 52% tested in last 12 months, 88% were unaware of their HIV-positive status*

Comparison
The comparison group received HBHCT and a referral to HIV care (i.e., standard of care), but no counseling on linkage to care.

Assignment Method
Twenty-eight communities (clusters) were randomly allocated: 14 clusters (N = 302) were randomly assigned to one of two groups: HBHCT, referral and linkage counseling (intervention arm) (N = 149) or HBHCT and referral only (comparison arm) (N = 153).

Relevant Outcomes Measured
- Linkage to care was defined as clinic-verified registration in HIV care, determined six months after HIV diagnosis and time to linkage.

Significant Findings on Relevant Outcomes
- A significantly higher percentage of participants were linked to care in the intervention arm vs. the comparison arm (51.0% vs. 33.3%, OR = 2.18, 95% CI = 1.26-3.78, p = 0.008). The intervention effect was similar after adjusting for age, sex, community, and travel time to the clinic (adjusted OR = 2.14, 95% CI = 1.24-3.70 p = 0.009).
- The overall probability of linkage to care was higher in the intervention group than the control group (overall HR = 1.65, 95% CI = 1.11-2.44) and was similar after adjusting for age, sex, and travel time to the HIV clinic (adjusted HR = 1.62, 95% CI = 1.12-2.33). There was evidence of an interaction effect between study arm and time (p = 0.009).
  - The effect for 0-2 months interval was not significant (p = 0.20).
  - In the > 2 months interval, 19 (20.7%) participants linked in the intervention arm versus 5 (4.7%) in the control arm (HR = 4.87, 95% CI = 1.79–13.27; aHR = 4.78, 95% CI = 1.77–12.89).

Considerations

- A significantly higher percentage of participants obtained CD4 counts in the intervention arm versus the comparison arm (45.0% vs. 26.1%, HR = 1.91, 95% CI = 1.25-2.93, p= 0.005). The intervention effect was similar after adjusting for age, sex, community, and travel time (aHR = 1.86, 95% CI =1.23-2.80, p = 0.007). There was some evidence of an interaction effect between study arm and time (p = 0.05).
    - In the > 2 months interval, 27 (24.8%) participants obtained CD4 counts versus 10 (8.1%) in the comparison arm (HR = 3.35, 95% CI = 1.59 – 7.04; aHR =3.27, 95% CI = 1.57-6.81, p = 0.002).
    - The effect for the 0-2 month interval was not significant (p = 0.17).
- A higher percentage of participants initiated ART in the intervention arm versus the comparison arm, but it was not significant (33.6% vs. 26.1%, HR = 1.31, 95% CI = 0.85 – 2.04, p = 0.22). The intervention effect was similar after adjusting for age, sex, community, and travel time (aHR = 1.33, 95% CI = 0.85 – 2.06, p = 0.21). There was strong evidence of an intervention effect between study arm and time (p = 0.0007).
    - In the > 2 months interval, 25 (20.2%) participants initiated ART in the intervention arm versus 7 (5.8%) in the comparison arm (HR = 3.90, 95% CI = 1.67-9.11; aHR = 3.96, 95% CI = 1.69-9.26, p = 0.002).
    - The effect for the 0-2 month interval was not significant (p = 0.38).
- A significantly higher percentage of participants reported adherence to co-trimoxazole (CTXp) in the intervention arm versus the comparison arm (44.3% vs. 28.1%; OR = 2.15, 95% CI = 1.16 – 3.98, p = 0.02). The intervention effect was similar after adjusting for age, sex, community, and travel time (aOR = 2.17, 95% CI = 1.20 – 3.93, p = 0.01).

Funding

REFERENCES AND CONTACT INFORMATION

Ruzagira, E., Grosskurth, H., Kamali, A., & Baisley, K. (2017). Brief counselling after home-based HIV counselling and testing strongly increases linkage to care: a cluster-randomized trial in Uganda. *Journal of the International AIDS Society, 20*(2), e25014.

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