A partner notification approach is effective and feasible in increasing HIV testing among partners of newly HIV-diagnosed persons in Tanzania

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Background

- An estimated 46% of people living with HIV infection do not know their status (WHO, 2015).
  - New or more effective approaches to HIV testing services (HTS) are necessary to reach the “first 90” of UNAIDS’s 90-90-90 strategy

“By 2020, 90% of all people living with HIV will know their HIV status”
Partner notification – a means of getting to the first “90”?

- Partner notification (sexual partners of HIV-diagnosed clients are contacted by their partner or a health care provider) highly utilized in US / Europe, but not widely used in Sub-Saharan Africa (SSA)

- Limited evidence available of efficacy of partner notification in identifying persons with undiagnosed HIV infection in SSA
  - A Malawi study (Brown et al) found 64% HIV infection rate among partners of index clients from STI clinics; in a Cameroon study (Henley et al) 50.1% of partners of index clients from ANC, VCT and inpatient wards were infected.
Methods of sexual partner notification and referral:

- **Passive referral**: index client notifies/refers partner(s) to HTS
- **Provider referral**: health care provider anonymously notifies/refers partner(s) to HTS
- **Contract referral**: index client attempts notification/referral of partner(s) to HTS with agreement that health care provider will contact partner if index is not able to bring in by an agreed-upon date
Objective

- To evaluate the **feasibility**, **acceptability** and **effectiveness** of a partner notification and referral approach to HIV testing services in the context of routine facility-based HTS in Tanzania.
- Conducted in Njombe, Tanzania’s highest HIV prevalence region (adult prevalence 14.8%)
- Index clients drawn from voluntary counseling and testing (VCT) and provider initiated testing and counseling (PITC)
Methods

Cross-sectional, mixed methods study conducted in 3 hospitals from June to September 2015

- Index clients were requested to list all partners within past 12/24 months and offered choice of referral approach
- Intimate partner violence (IPV) screening at two stages: initial interview with index; at partner listing
- Partners presenting to the facility offered HTS and referred into HIV care and treatment if found HIV positive.

Outcome measures:
- % partners successfully referred to HTS;
- % of HIV positive partners with undiagnosed HIV infection;
- % of partners and index clients enrolled in HIV care and treatment
Our index clients

Index clients were newly HIV-diagnosed men and women; diagnosed during VCT or PITC; offered choice of referral method (passive, provider or contract).

- Eligibility criteria:
  - 18 years of age
  - willing to list partners for referral
  - non-pregnant
Results: Index clients and reasons for non-enrollment

- **Index clients (n=390)**
  - 46.9% males, 53.1% females
  - Average age = 33 (range 18 – 71)
  - Enrolled from: VCT (55%), PITC (45%)

- **257 individuals (39.4%) were approached but did not enroll in the study. The leading reasons for non-enrollment:**
  - no sexual partner within the last 12 – 24 months (n=167); distraught or declined (n=34); under 18 years (n=30)
  - 6 potential index clients screened out for IPV
Results: Study overview

Index clients
390

Listed sexual partners
438

Partners who did not come in following referral
190 (43.4%)

Partners who came in following referral
248 (56.6%)

Partners tested for HIV
238 (95.9%)

Partners not tested for HIV
10 (4.1%)

Tested negative
91 (38.2%)

Tested positive
147 (61.8%)
Results: Types of sexual partners listed by index clients

Three quarters of partners listed (73.2%) were spouses
Results: Partners who came to the facility following referral (n=248)

<table>
<thead>
<tr>
<th>Method</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passive Referral</td>
<td>237</td>
<td>96.9%</td>
</tr>
<tr>
<td>Contact Referral</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>Provider Reversal</td>
<td>10</td>
<td>2.6%</td>
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HIV Testing among partners

- Of the 248 partners who came to the health facility, 238 (96%) were tested
  - 147 (61.8%) found to be HIV positive
    - All newly diagnosed
  - 53.5% of male partners
  - 67.9% of female partners
  - 36% of the partners were HIV negative (88 sero-discordant couples)
Conclusions

- This study demonstrated feasibility, acceptability and effectiveness of partner notification/referral in context of facility-based HTS in Tanzania.
  - Feasibility/Acceptability: 59.7% of newly diagnosed HIV positive individuals were eligible and agreed to become index clients/participate in partner notification
  - Effectiveness: 61.8% of partners tested HIV positive and 62% were linked to care
The study team was from Jhpiego, Ministry of Health, Community Development, Children, Elderly and Gender of Tanzania, USAID Tanzania and USAID Washington. Co-investigators included Alice Christensen, Vincent Wong, Charlene Brown, Kelly Curran, Werner Maokola, Erick Mlanga, Ruth Lemwayi, Mustafa Njozi, Mbaraka Amuri, and Eusebi Kessy. This study was conducted under Cooperative Agreement No. AID-OAA-A-11-00050, Technologies for Health/Accelovate, with support from the regional authorities of Njombe Region.