Home-Based HIV Counseling and Testing Using Index Patients in Lesotho

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Background

Lesotho is a small country with about 2.2 million inhabitants and the second highest HIV prevalence globally. The Government of Lesotho is committed to confronting the HIV epidemic, and HIV testing coverage has expanded in recent years with the percent of persons aged 15-49 who have ever tested increasing from 2009 (39.3% of men; 68.6% of women) to 2014 (65.2% of men; 85.5% of women) (Lesotho Ministry of Health Demographic and Health Survey 2014). However, to achieve epidemic control, universal HIV testing and identification of all persons living with HIV (PLWH) in Lesotho, especially men, is needed.

To achieve this goal, novel approaches are needed. In this study, we assessed the use of patients recruited from two health centers in Lesotho on facilitation of access to others in their households for home-based HIV counseling and testing (HBCT).

Methods

- Index participants (IPs) were recruited from antenatal clinics (ANC) and TB clinics at two health centers in Mafeteng and Mohale's Hoek and asked to approach their household (HH) members regarding participation in HBCT.
- Home visits for IPs who consented were scheduled with the IPs and their HH members, and HBCT was offered to both IPs & HH members who did not self-report as HIV+. Rapid testing was performed in the home following the national HIV testing serial algorithm for rapid HIV testing that includes use of Determine HIV 1/2 and Double Check Gold (for confirmation).
- Demographic and acceptability measures were collected by in-person surveys.

Results

Index participants (Figure 1 & Table 1)

- A total of 192 IPs were recruited from the two health centers

Table 1: Index Participants

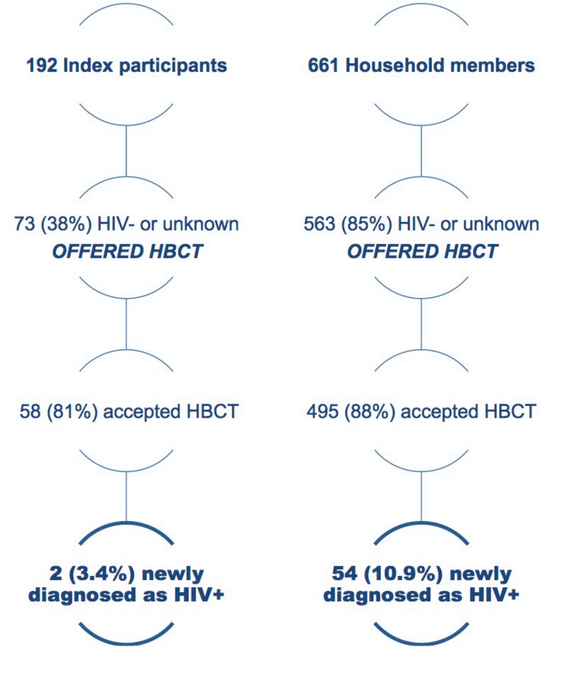
	Total	Female	Male
Total	192 (100%)	152 (79%)	40 (21%)
Age: *Median (range)*	28 (23-36)	27.5 (22-32)	42 (35-56)
Enrollment location			
• ANC	127 (66%)	126 (83%)	1 (2%)
• TB Clinic	65 (34%)	26 (17%)	39 (98%)
HIV+ (self-report)	119 (62%)	88 (58%)	31 (78%)

- 119 (62%) IPs self-reported as HIV+ (Table 1) and HBCT was offered to the remaining 73 (38%) IPs who self-reported as HIV- or status unknown
  - 58 of 73 (81%) IPs accepted HBCT
  - 2 IPs were newly diagnosed as HIV+ for a total of 121 IPs known to be HIV+

Household members (Figure 1)

- A total of 661 HH members were identified through IPs
- 98 of 661 (15%) HH members self-reported as HIV+ and HBCT was offered to the remaining 563 HH members who self-reported as HIV- or status unknown
  - 495 of 563 (88%) HH members accepted HBCT, including 317 of 352 (90%) women and 178 of 211 (84%) men
  - 54 (10.9%) HH members were newly diagnosed HIV+ via HBCT for total of 152 HH known to be HIV+.

Figure 1: Newly-diagnosed PLWH



Results *(continued)*

Overall Testing Outcomes

- 56 (10%) of 553 tested IPs and HH members were newly-diagnosed as HIV+
- 70% of newly-diagnosed individuals were women
- HIV+ IPs (both self-reported and newly-diagnosed) yielded a significantly higher percent of new HIV diagnoses among HH members than HIV- or status unknown IPs (13% vs. 7% p=0.04)
- Of 123 couples with at least one partner tested by HBCT, 57 serodiscordant couples were identified:
  - 51 couples included a partner who was diagnosed as HIV+ prior to this study and for whom one HIV- partner was identified via HBCT
  - 6 couples included a partner who was newly identified as HIV+ via HBCT
- Nearly all tested persons (99%) were "very satisfied" with HBCT and 97% said they would recommend HBCT to family and friends
- In terms of HIV risk perception, about half of all participants indicated that they felt they were at no or low risk for HIV (Table 2)
- Among those newly diagnosed as HIV+ through HBCT, about 40% indicated intention to disclose (higher among women than men)
- Less than half of those newly-diagnosed as HIV+ through HBCT reported intention to seek HIV care and treatment (Table 2)

Table 2: HBCT Participants (IP and HH) eligible and tested

	Total (n=553)	Female (n=367)	Male (n=186)
Age (range)	33 (18-88)	33 (18-88)	34 (18-86)
Ever tested for HIV	451 (82%)	313 (86%)	138 (74%)
Self-reported risk of HIV			
No risk	179 (32%)	112 (30%)	67 (36%)
Small risk	83 (15%)	54 (15%)	29 (16%)
Moderate risk	27 (5%)	15 (4%)	12 (6%)
Great risk	213 (39%)	149 (41%)	64 (34%)
Don't know	51 (9%)	37 (10%)	14 (8%)
Newly diagnosed HIV+	56 (10.1%)	39 (10.6%)	17 (9.1%)
Among newly diagnosed HIV+			
Will disclose	22 (39%)	17 (44%)	5 (29%)
To Primary Partner (of those planning to disclose)	*14 (64%)*	*10 (59%)*	*4 (80%)*
Will seek HIV care & treatment	25 (45%)	17 (44%)	8 (47%)*

All findings are either: N (column %) or median (range).

Conclusion

- The study findings demonstrated the feasibility of utilizing index participants to access household members and provide HBCT.
- Using HIV+ index participants to reach HH members with offer of HBCT may be an efficient approach to advance HIV prevention through identification of other HIV+ persons among HHs and identification of new discordant couples. HBCT was highly acceptable through this approach.
- HBCT must be accompanied by provision of support to assist in disclosure of HIV status and information regarding importance of HIV care and treatment for all HIV+ persons.
- More research is needed to identify effective and scalable approaches to enhancing linkage to care for HIV+ persons identified through household-based testing.

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