POLICY BRIEF

MARCH 2013

MRC SOUTH AFRICA

LINKAGE TO CARE FOLLOWING HOME-BASED HIV COUNSELING AND TESTING

Background

Timely linkage to care and treatment by HIV-positive individuals can lead to significant decreases in morbidity and mortality as well as increases in life expectancy and quality of life.[1, 2] Further, there are significant prevention benefits as early initiation on antiretroviral treatment (ART) can significantly reduce HIV transmission to uninfected partners.[3, 4] Modeling exercises also suggest that universal HIV testing coupled with immediate treatment could decrease HIV incidence and virtually eliminate the HIV/AIDS pandemic. To achieve this, the rate of linkage to care must be 100%.[5] This underscores the importance of understanding and addressing barriers to linkage. Little is known about such barriers, particularly for newer community-based models of testing such as home-based HIV counseling and testing (HBHCT). Current evidence suggests that HBHCT is acceptable and effective in raising HIV awareness.[6, 7] Thus the mandate for scale up is strong, and the next step is to ensure that appropriate measures are put in place to maximize the benefits of timely linkage.

Study Methods

This study employed a mixed methods approach to: 1) determine rates of linkage from HBHCT to the first point of contact with the health system – defined as obtaining a CD4 count; and 2) identify predisposing and other factors that may hinder or facilitate timely linkage. The study was conducted in the Umzimkhulu municipality, a poor rural area in Kwazulu-Natal, South Africa. It comprised a predominantly female sample of 492 HIV-positive HBHCT clients.

Key Findings

Linkage to care

- 62.1% of HBHCT clients linked to care within 3 months, which is a rate comparable to what is found in facility-based settings[8]
- The median CD4 count for those who linked to care was 340.5 cells/mm^3, indicating that over half were immediately eligible for treatment

Factors influencing linkage

Client experiences following HBHCT are complex and barriers to linkage occur at all levels: individual, relationships, community, and health system (Figure 1). Delayed care seeking is more likely when clients respond poorly to the diagnosis; have difficulty with disclosure and limited social support; lack time, opportunity, and financial resources; and have internalized negative experiences with the health system. For example:

- Clients who did not believe their results had a 52% lower incidence of linkage
- Clients who reported that finding time to seek health is a problem had a 60% lower incidence of linkage
- Clients who believed that drugs/supplies are generally available at the local clinic had a 78% greater incidence of linkage

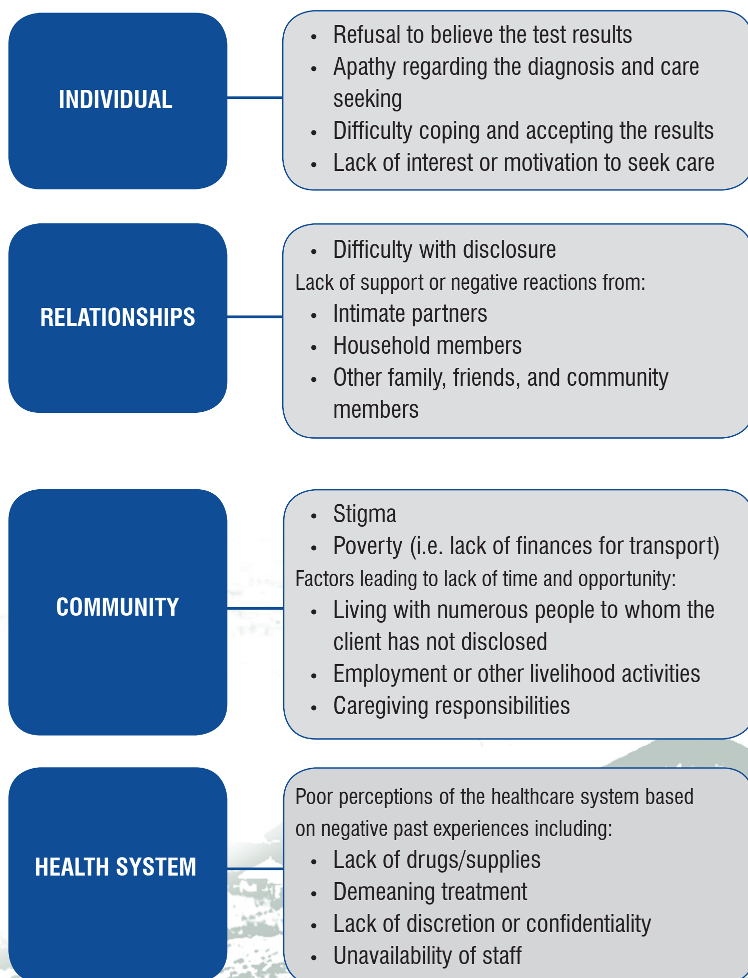
The qualitative analysis offered deeper insight about the interrelatedness of these findings and the mechanisms through which they may affect the linkage to care. In particular, the qualitative findings highlight the influential role of interpersonal relationships, psychosocial factors, and the subtle impact of stigma. Importantly, youth may be particularly vulnerable to each of these barriers and subsequent delays in care seeking. Clients aged 16-24 years had a 50% lower incidence of linkage to care compared to their older counterparts.

MRC SOUTH AFRICA | UNIVERSITY of the WESTERN CAPE | BU Boston University School of Public Health | health Department: Health PROVINCE OF KWAZULU-NATAL

Client Voices

- *What made me not to believe [my results]…is that…my husband passed away in 2004…and I have never had sex with any man…does it mean that I got it from my husband because this thing hides in one's blood? Does it mean that he was infected before he died? No sister, I don't believe it…where did I get it because I'm a widow and I don't go around taking other women's men. -* Female, 47 years, had not linked to care at the last point of contact (231 days)
- *I will indeed go [to the clinic] but I'm still waiting for my husband and we will go together… I won't say anything on the phone. Things like this you can't just say it anyhow….I will wait for him. I'm not saying I will not go but when the time is right and I feel it's time for me to move on with my life…my stand is we need to go together. For now I won't do anything, I'm waiting for him…* - Female, 32 years, had not linked to care at last point of contact (542 days)
- *…I've been staying with my grandmother the whole day….my mother gets off only on Saturdays, she works from Monday to Saturday. On Saturday she knocks off at 3pm and clinics don't operate on Sundays. That's the thing that has been making me not be able to go to the clinic.* – Female, 20 years, had not linked to care at last point of contact (146 days)
- *I haven't done anything with [the referral letter]…because staff at the local clinic don't have confidentiality…I've heard them talking about other people…I have to use money to go to the clinic that I like but then I don't have money yet.* – Female, 22 years, had not linked at last point of contact (192 days)

Figure 1. Socio-ecological factors influencing the linkage to care



Recommendations

To promote a supportive infrastructure for HBHCT and linkage:

- Add HBHCT and facilitation of linkage to CHW scope of work
- Engage communities to reduce stigma and normalize HIV/AIDS

To address psychosocial barriers to linkage:

- Encourage couples counseling and testing to facilitate partner support
- Conduct short-term intensive community-based support groups
- Implement a brief disclosure intervention
- Offer a repeat test when needed to quickly avert disbelief of results
- Offer tailored counseling to address common concerns

To overcome access barriers to linkage:

- Offer community-based point-of-care CD4 counts
- Pilot and evaluate community-based nurse-initiated treatment

To address the unique needs and concerns of youth:

- Partner with the school health team and youth-focused organizations

References

1. Nakagawa F, Lodwick RK, Smith CJ, Smith R, Cambiano V, Lundgren JD, et al. Projected life expectancy of people with HIV according to timing of diagnosis. AIDS. 2012; **26**(3): 335-43.
2. Beard J, Feeley F, Rosen S. Economic and quality of life outcomes of antiretroviral therapy for HIV/AIDS in developing countries: a systematic literature review. AIDS Care. 2009; **21**(11): 1343-56.
3. Donnell D, Baeten JM, Kiarie J, Thomas KK, Stevens W, Cohen CR, et al. Heterosexual HIV-1 transmission after initiation of antiretroviral therapy: a prospective cohort analysis. Lancet. 2010; 375(9731): 2092-**8.**
4. Cohen MS, Chen YQ, McCauley M, Gamble T, Hosseinipour MC, Kumarasamy N, et al. Prevention of HIV-1 infection with early antiretroviral therapy. N Engl J Med. 2011; **365**(6): 493-505.
5. Granich RM, Gilks CF, Dye C, De Cock KM, Williams BG. Universal voluntary HIV testing with immediate antiretroviral therapy as a strategy for elimination of HIV transmission: a mathematical model. Lancet. 2009; **373**(9657): 48-57.
6. Naik R, Tabana H, Doherty T, Zembe W, Jackson D. Client characteristics and acceptability of a home-based HIV counselling and testing intervention in rural South Africa. BMC Public Health. 2012; **12**(1): 824.
7. Sabapathy K, Van den Bergh R, Fidler S, Hayes R, Ford N. Uptake of Home-Based Voluntary HIV Testing in Sub-Saharan Africa: A Systematic Review and Meta-Analysis. PLoS Med. 2012; **9**(12): e1001351.
8. Rosen S, Fox MP. Retention in HIV care between testing and treatment in sub-Saharan Africa: a systematic review. PLoS Med. 2011; **8**(7): e1001056.

MRC South Africa · University of the Western Cape · BU Boston University School of Public Health · health Department: Health Province of KwaZulu-Natal

For more information about this study, please contact Dr. Reshma Naik at reshnaik@gmail.com.