ART Adherence and Social Network Structure and Function among HIV-Infected Women in Cape Town, South Africa

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Background

- Suboptimal adherence to antiretroviral therapy (ART) is widespread¹
- Non-adherence leads to increased morbidity, mortality, and forward transmission of HIV²³
- Social networks likely influence adherence to ART⁴
- Few studies have examined these factors among people living with HIV
- Traditional methods of collecting social network data are burdensome⁵
- We customized and pilot-tested a novel tablet-based network data capture instrument (Network Canvas⁶) to collect social network data among Xhosa-speaking women living with HIV in South Africa

Purpose

- The purpose of this study was to:
  1. Examine the structure and function of participants’ social networks
  2. Explore associations between network characteristics and participants’ ART adherence
  3. Evaluate the feasibility and acceptability of collecting this type of data

Methods

- We enrolled a convenience sample (n=21) from a cohort of HIV-infected women (n=64) from an ongoing trial in a peri-urban setting in Cape Town, South Africa
- ART adherence (>90%) was measured in the parent trial during medical record abstraction of pharmacy visits and refill data
- Sub-study participants:
  - Enumerated their social networks
  - Described their networks’ functionality
  - Provided feedback on their experience with the tool
- Data were analyzed in R and SPSS

Results

- Two-thirds (66.7%) of participants were adherent over the 6-month study period.
- Adherent participants reported being given a place to stay and receiving help getting to a medical appointment from a greater proportion of their social networks compared to non-adherent participants (30.2% vs. 8.8%; p=0.04; 43.8% vs. 17.2%; p=0.007, respectively).
- Structural network characteristics were not significantly associated with ART adherence.

Conclusions

- We found preliminary evidence that functional social network characteristics may be associated with ART adherence among people living with HIV
- Functional social network characteristics should be further examined so as to expand our understanding of the factors shaping ART adherence
- Social networks could be possible point of leverage for future interventions
- We found evidence that participants support the idea of using technology to engage with their social networks, particularly about medical needs and problems

Literature Cited


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 Acknowledgments: This research was supported by Duke Bass Connections and by the National Institute of Mental Health under Award Number K34MH102001. Additionally, M. Mulawa is supported by the National Institute of Allergy and Infectious Disease under Award Number T32AI007392. M. Mulawa also received support from the National Institute of Child Health and Human Development under Award Number R25HD079352.