HIV Empathy, Education & Empowerment (HIVE^3): Feasibility and Acceptability of Mobile-App Based Peer Support for HIV Positive Men who have Sex with Men

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BACKGROUND

- HIV prevalence of MSM in Ghana is high [1]
  - Accra = 33%; Kumasi=19%
- There is a high prevalence of HIV stigma in Ghana[2]
- In prior study of MSM (*N*=127) in Ghana, the majority of the sample felt that most people in their community:
  - Attribute shame, disgust and dishonor to HIV
  - Believe that MSM with HIV deserved it
- These stigmas intersect and can lead to social isolation.
- Peer support interventions have shown promise for reducing social isolation. [3-4]
- Social risk of being identified as MSM or HIV+ is a barrier to engaging in group-support and HIV care [5].

PURPOSE

The purpose of this study was to assess the feasibility and acceptability of peer-support for HIV-positive MSM delivered via a smartphone based mobile application

INTERVENTION

- Client Centered Community Care Coordination (C5)
  - Self-Determination Theory based
  - Secure web-based platform
  - Optimized for use on all Android and iOS operating systems
  - Client can be directly linked to care with a network of service providers via the app

HIV Empowerment, Education and Empathy (HIVE^3)

- Peer support component of C5 mobile app intervention
- Grounded in Dennis Peer-Support Model [6], which identifies three types of support
  - Informational Support: Facts first!
  - Emotional Support: I'm here and I care!
  - Affirmational Support: Your life matters!
- HIVE^3 delivered by peer-mentors identified through local community agency in Accra
- Peer mentors provided with standardized training by research staff and local NGO staff
- The peers self-selected avatars. Peer mentors did not know the identity their assigned peer.

METHODS

Study Design and Setting

- Non-randomized, longitudinal pilot feasibility trial
- Based in Accra (study sites in Tesano and Osu)

Participants and Recruitment (*N*=61)

- Adult MSM (*N*=61)
- Recruitment by trained research staff at non-governmental organization
- Confirmed HIV seropositive using rapid point-of-care screening test
- Each person issued one smartphone pre-programmed with HIVE^3 app

Duration

- February 2017-December 2017
- Each participant enrolled in pilot trial for 60 days

Measures

- ***Feasibility*** assessed by frequency of chats (>1)initiated with peer mentors
- ***Acceptability*** assessed by peer support evaluation inventory (PSEI) [7]

Ethical Clearance

- Kwame Nkrumah University of Science & Technology
- University of Rochester Medical Center

FINDINGS

Mean Age: 27.85 years

- 43% were 25 years old or younger

Feasibility: 85% (*n*=52) used app ≧ 1 time. 42% (*n*=26) used app ≧20 times
Acceptability: Four (4) Peer Support Evaluation Inventory Subscales

1. Supportive Interactions = 83.9 (on 100 point scale)
2. Relationship Qualities = 73.6 out of 100
3. Perceived Benefits = 74.9 out of 100
4. Satisfaction with Support = 78.7 out of 100



DISCUSSION

- Participants valued built-in security protocols protecting identities from being revealed to mentors
- Participants appreciated that mentors had access to a registered nurse
  - Allowed mentors to relay inquiries and return with evidence-based information
  - Allowed mentors to make direct referrals for clinical care, when indicated

CONCLUSION

- HIV positive MSM are willing to use mobile-app based peer support
- Peer mentors should be knowledgeable about MSM-friendly services so that MSM can be referred for professional care and services
- HIVE^3 can be implemented in partnership with NGOs and health clinics to support care linkage and retention

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