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Preliminary Results from a Pragmatic Clinical trial of MyPEEPS Mobile to Improve HIV Prevention Behaviors in Young Men

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Abstract

Our study team developed the MyPEEPS Mobile App for improving HIV prevention behaviors in diverse young men. We conducted a randomized controlled trial and evaluated the preliminary outcomes in the first half (N=350) of our intended study sample. Higher self-efficacy for HIV prevention behaviors ($p=0.0042$) and more recent HIV tests in the past 3 months ($p=0.0156$) were reported by the intervention group compared to control. Numbers of condomless anal sex acts were lower among the intervention group for both insertive anal sex acts ($p=0.0283$) and receptive anal sex acts ($p=0.0001$). Preliminary results indicate that some sexual risk behaviors were reduced among the intervention group in the preliminary analytic sample.

Keywords

mHealth; digital personalized health; young men; HIV prevention

1. Introduction

Increased HIV incidence continues among young men who have sex with men (YMSM), with rates especially disproportionate among racial and ethnic minority YMSM in the US. Yet, there remains a dearth of evidence-based HIV prevention interventions for YMSM – and few that address racially- and ethnically-diverse YMSM. We employed a community-engaged research approach to design the MyPEEPS Mobile App targeting

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ethnically-diverse YMSM. MyPEEPS delivers information through 21 activities comprised of: didactic content, graphical reports, videos, and true/false and multiple-choice quizzes. [1] This ongoing randomized controlled trial is testing the efficacy of MyPEEPS, an evidence-based intervention for reducing reduce sexual risk behaviors (e.g., sex without condoms) and strengthen protective factors (e.g., increasing self-efficacy around safer sex) among racially and ethnically diverse YMSM across the US.

2. Methods

Young males (ages 13-18) who report same-sex attraction and have kissed another male or plan to have sexual activity with another male in the next year were recruited from across the US (Figure 1). Enrolled participants provide demographic, psychosocial, and sexual behavior data at baseline. The intervention group receives the MyPEEPS Mobile App at the baseline visit, with follow up assessments at 3-month, 6-month, and 9- month time points. The control (delayed intervention) group completes 3-month, 6-month, 9- month, and 12-month assessments. Regression analyses assessed data collected from a sub-sample of 350 baseline visits and 271 matched 3-month visits

3. Results

Higher self-efficacy for HIV prevention behaviors ($p=0.0042$) and more HIV testing in the past 3 months ($p=0.0156$) were reported by the intervention group compared to control. Numbers of condomless anal sex acts were lower among the intervention group than control for both insertive anal sex acts ($p=0.0283$) and receptive anal sex acts ($p=0.0001$). The intervention group reported fewer condomless insertive anal sex acts ($p=0.0061$) but more condomless receptive anal sex acts than the control group ($p=0.0001$) while under the influence of alcohol and drugs. There were no group differences in the other HIV prevention measures.

4. Conclusions

Preliminary results indicate that some sexual risk behaviors were reduced among the intervention group in the preliminary analytic sample. Further analysis after study completion will provide more conclusive results.

References

- [1]. Schnall R, Kuhns LM, Hidalgo MA, Powell D, Thai J, Hirshfield S, et al. Adaptation of a Group-Based HIV RISK Reduction Intervention to a Mobile App for Young Sexual Minority Men. *AIDS Education and Prevention*. 2018;30(6):449–62. [PubMed: 30966769]



Figure 1.
MyPEEPS Mobile social media recruitment banner