

The Preliminary Efficacy of a Technology-Based HIV and Drug Abuse Preventive Intervention in a Youth-Centered Community Health Clinic: Opportunities for Incorporating Biomarkers of Exposure and Genetic Susceptibility

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HIV and drug abuse remain significant public health concerns in the United States, and youth are disproportionately affected. Few efficacious interventions aimed at improving uptake of HIV testing, and reducing HIV and drug use behaviors among youth exist. To fill this gap, we developed Storytelling 4 Empowerment (S4E), a technology-based HIV and drug abuse preventive application (app) for delivery in clinical settings. The purpose of this study was to examine the preliminary efficacy of S4E, relative to control condition, in improving uptake of HIV testing and reducing sexual risk and drug use behaviors among youth. Fifty youth were recruited from a youth-centered community health clinic in Michigan, randomized to the S4E or Control group, and assessed at baseline and at 30-day follow-up. Youth completed measures assessing HIV testing, and past 30-day sexual risk and drug use behaviors. Youth in the S4E group participated in an app aimed at improving clinician-youth HIV communication and self-efficacy. We conducted a descriptive statistics analyses, and computed paired t-test and binary proportions. Given the sample size and preliminary nature of our study, statistical significance testing was deemphasized. Participants were primarily female (81.6%; Mage = 18.86, SDage = 2.17), with a racial composition of 44.9% White, 42.9 % Black, and 12.2% Other. Findings indicate that, relative to the control group, participants in the S4E group reported an overall higher uptake of HIV testing (44% vs. 52%), and reductions in past 30-day condomless sex (4.8% vs. 20%) at 30-day follow-up. Furthermore, S4E participants reported a decrease (12%) in past 30-day illicit drug use, while participants in the control group reported an increase (8%). Findings indicate that S4E demonstrates preliminary efficacy. Opportunities for enhancing the effects of interventions by incorporating feedback about biomarkers of exposure and genetic susceptibility to risk behaviors into HIV and drug abuse prevention exist.