Mobile technology use among persons living with HIV who consume alcohol

Objective: (1) To investigate mobile technology use among persons living with HIV (PLWH) by drinking status. (2) To compare interest in a hypothetical cell phone application (app) to manage alcohol behavior.

Background: Alcohol consumption is prevalent among PLWH and is associated with poor health outcomes. With widespread use of mobile technology in the United States, studies have found that PLWH have positive perceptions regarding using technology to help manage their HIV care and health outcomes. The current status of PLWH's mobile technology use and interest in potential technologies is not known.

Methods: In 2014-2016, 494 PLWH recruited into the Florida Cohort completed a cross-sectional questionnaire examining demographics, substance use, mobile technology use, and other health behaviors. We compared socio-demographic characteristics and mobile technology use based on status of alcohol consumption (heavy drinker or non-heavy drinker), which was self-reported using the AUDIT-C test. Heavy drinking is defined as consuming >7 drinks per week for women and >14 drinks per week for men. Multivariable logistic regression identified socio-demographic factors significantly associated with interest in a cell phone app to manage alcohol use.

Results: Nearly 10% (n=45) of the sample self-reported as heavy drinkers (average age 47 years; 56% African American; 60% male; 44% had less than a high school education; 27% homeless in the past 12 months). 30% of heavy drinkers owned a smartphone compared to 51% of non-heavy drinkers. 42% of heavy drinkers had at least one cell phone app, whereas 67% of non-heavy drinkers had at least one cell phone app. Approximately half (51%) of heavy drinkers were interested in a cell phone app to manage their alcohol use in comparison to 30% of non-heavy drinkers. Regression analysis indicated that gender (Female: AOR 0.52; CI: 0.33,0.81), drinking status (Non-heavy drinker: AOR 0.37; CI: 0.19,0.72), and education level (>High school: AOR 1.80; CI: 1.07-3.05) were significantly associated with having interest in a cell phone app to manage alcohol behavior.

Conclusions: Heavy drinkers with HIV demonstrated less mobile technology use than non-heavy drinkers but were fairly interested in a cell phone app to manage alcohol use.

> **Remember: Total word count** for the *full* abstract is **no more than 350 words**.

In addition to your abstract, please include a **brief summary about the relevance of your abstract to the field/theme of the conference** (please be *succinct*): This research is essential in order to identify the most appropriate avenues for technology-based health interventions for persons living with HIV who have heavy drinking patterns.