SMARTPHONE-DELIVERED MOBILE HIV RISK REDUCTION EDUCATION IN OPIOID DEPENDENT INDIVIDUALS

Abstract

BACKGROUND Computer-based HIV education has been shown effective and is preferred over counselor-delivered education. Previous studies have shown significant increases in risk-reduction behaviors after participation in a computerized HIV risk reduction (HIVRR) intervention. Whether delivery of mobile HIVRR (mHIVRR) education via smartphone is also effective at increasing knowledge and decreasing risk behavior has yet to be determined.

PURPOSE To develop and deploy an interactive mHIVRR software program to deliver HIV/STD education on smartphones and determine whether it reduces HIV/STD-related risk via increased HIV/STD knowledge.

METHODS We developed mHIVRR modules using video components of pre-existing evidence-based programs. Each module consists of a 5-10-minute video component followed by an 11-item usability/acceptability questionnaire and a 3-item knowledge questionnaire. New modules were downloaded onto smartphones weekly. Participants completed questionnaires after each viewing of ≥75% of the video component. Prior week modules were moved to the “Library” and available for repeated viewing. Acceptability of mHIVRR modules was defined as a median score of ≤2.5 (1-very easy/effective to 5-very hard/not at all effective) for each usability/acceptability question. Effectiveness was defined as ≥80% of participants scoring >65% on the knowledge questions.

RESULTS 78% of video modules attempted were completed. Average usability/acceptability questionnaire responses were all ≤2.5 (range 1.3 to 2.1). Video module length was “just right” according to 72% of participants. Only 16% thought the mHIVRR module information would have been better suited for printed material and 28% for computer-based delivery. 25% of participants would have preferred a text-based smartphone module compared to the video-based smartphone module. 100% of participants scored >65% on the knowledge questions, with an average overall knowledge score of 82%.

CONCLUSIONS Video-based mHIVRR education delivered via smartphone appears to be acceptable, and may increase HIV/STD risk reduction knowledge. Future studies, with pre-intervention assessments of knowledge, are needed to confirm these findings.