

Pilot Study of smart phone application for unhealthy alcohol use

Summary

Background: Unhealthy alcohol use is a leading cause of morbidity and mortality. Face-to-face brief interventions targeting alcohol use are considered effective in primary care settings, but young individuals tend to have limited contacts with the health care system and are therefore unlikely to receive any intervention. Internet based brief interventions targeting alcohol use have been shown effective among students but also in the general population, and the use of new technologies of information appear promising to target health related behaviors. As such, smartphone interventions represent a potentially valuable option to address unhealthy alcohol use. They can offer repeated opportunities to auto-assess and evaluate one's own behavior at the user's convenience and without geographic limitations. In fact, mobile phones have become one of the few items that people will carry with them almost all the time. Therefore we developed an iPhone application in parallel to a website (www.alcooquizz.ch) providing personalized feedback. Smartphone applications are readily available at any time for its user, providing immediate response to a question or need for assessment, and can also serve as a self-monitoring device.

Specific aims: We will evaluate the feasibility and acceptability of a proactive smartphone application (alcooquizz) providing personalized feedback and information on alcohol use and its consequences as well as a self-monitoring module. The application also offers a tool to prevent drunk driving. Impact on drinking outcomes and drunk driving will be evaluated.

Methods: A total of 108 individuals with unhealthy alcohol use will be assigned to receive electronic personalized feedback and various auto-evaluation and informative tools through a smartphone application (alcooquizz). Participants will be recruited through social media and Internet forums in Lausanne, Switzerland (n=54), and Toronto, Canada (n=54). Participants will be followed at 3 months. Recruitment and follow-up procedures will be conducted online. Outcomes will be: user's satisfaction, use of the application, weekly alcohol consumption and monthly frequency of risky single occasion drinking episodes, defined as 6 or more drinks per occasion.

Expected value: This study will assess the feasibility and acceptability of a secondary prevention intervention for unhealthy alcohol use delivered through a smartphone application, a strategy that has not been studied yet and that represent a potential tool to deliver secondary prevention interventions. If proven acceptable and feasible, this will lead to the development of a randomized controlled trial.

KEYWORDS: unhealthy alcohol use, smartphone application, pilot study International collaboration: This project will be done in collaboration with J. Cunningham from the Center for Addiction and Mental Health in Toronto, Canada. He will finance the English version of the iPhone application and the research assistant's costs in Canada.