EHEALTH INTERVENTIONS FOR SUBSTANCE USE

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Aim of Abstract: eHealth interventions have the potential to provide large numbers of substance users with access to free 24/7 standardized substance use treatment in their natural environment. Many practitioners are still not aware of what Health resources are currently available to target substance use or how to use them as an adjunct to routine treatment. While there is increasing evidence for eHealth interventions targeting licit substances, only a limited number of programs targeting illicit drugs are available. Little research has focused on how to improve the engagement and retention potential of eHealth interventions.

This symposium will present three eHealth interventions – Ray's Night Out, and iPhone app targeting risky alcohol use in young people, breakingtheice a web-based program targeting amphetamine type stimulants users and Functional Imagery Training, a new technology-assisted approach to building and maintaining motivation. The results of research on the feasibility, quality, usability, uptake and evidence base for these eHealth interventions will be presented and discussed.

Nature of interactive element: The symposium will include demonstrations of the key features of eHealth interventions. Following the presentations, the chair will facilitate a panel discussion.

Presentation 1 – Ray's Night Out: A new iPhone app for reducing risky alcohol use in young people

Introduction and Aims: Up to 30% of young people drink at risky levels at least weekly. Yet, many do not view their alcohol use as problematic and focus only on its enjoyment and socialization benefits. Innovative, youth-friendly and highly accessible ways of delivering preventative health messages are required. Ray's Night Out, is a new iPhone app designed to promote harm minimization and controlled drinking strategies in young people. This presentation reports the results of a randomized controlled trial aimed at testing the effectiveness of the app.

Methods / Approach: 199 young people aged between 16 and 25 were randomized to immediate versus delayed (1 month) access to the app. The impact of the app on alcohol-related knowledge, use of harm minimization strategies and alcohol use and related problems was assessed at 1, 2, 3 and 6 months follow up. App quality was also assessed on the Mobile App Rating Scale (MARS).

Key Findings: Young people had a very positive response to the Ray animated character and rated the app highly on the MARS engagement, functionality, information quality and visual aesthetics subscales. Ray's Night Out was associated with between group improvements in alcohol knowledge, greater awareness of alcohol use limits, increased use of harm minimization strategies and reductions in alcohol-related problems over time.

Discussion and Conclusions: The Ray app provides an innovative, youth friendly, high quality and effective way of promoting harm minimization and controlled drinking strategies in young people.

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Presentation 2 – Engagement and Retention of Illicit Drug Users in eHealth Interventions

Introduction and Aims: It is often difficult to engage users of illicit drugs with services and retain them in treatment or research programs. eHealth interventions also frequently incur significant attrition. This presentation will examine engagement and retention, and approaches to improve these measures.

Design and Methods: Data are reported from a randomized control trial of a self-guided online intervention for users of amphetamine type stimulants plus a synthesis of outcomes identified from a rapid review of randomized trials published since 2011 (Moore 2011 et al J Substance Abuse Treat, 40 215-223).

Results: At 6-months post-recruitment 79 of 160 (49%) participants were retained. Of 81 randomized to the intervention only 48% completed all three modules (mean=1.7, SD=1.4). Nevertheless, the intervention improved intended (*d*=0.32) and actual help-seeking (*d*=0.45) plus days out of role (*d*=0.12). There were 15 eligible papers (14 studies) identified via Medline and Google Scholar. Retention ranged from 7% to 91% at 6 months. Engagement was often not reported but few studies report more than 50% of modules completed.

Discussion: eHealth interventions with illicit drug users range from self-guided programs through to adjuvants to pharmacotherapy. Little research has focused on improving retention and engagement and hence the 'therapeutic dose' of eHealth interventions.

Conclusions: The provision of services for substance users across Australia is a key challenge for health authorities. Access to the internet is spreading to even the most remote parts of Australia. Effective interventions are available for licit drugs (e.g. alcohol) but data on illicit drugs are fragmented.

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Presentation 3 – Functional Imagery Training: A technology-assisted approach to building and maintaining motivation

Introduction and Aims: Mental imagery has strong links to affective reactions, including desires for both functional and dysfunctional goals. Elaboration of desire imagery competes with concurrent visuospatial tasks for capacity-limited working memory. These findings provide opportunities to build functional desires through imagery and use that imagery to

interfere with dysfunctional desires. Functional Imagery Training (FIT) assists participants to use episodic imagery about incentives for behaviour change and about effective strategies, to elicit and enhance motivation and guide functional behaviour. This paper describes results from two uncontrolled trials applying FIT to Alcohol Use Disorder.

Design and Methods: Study 1 gave 2 face-to-face FIT sessions and 4 phone sessions totalling 4 hours over 6 months; Study 2 had 7 phone sessions totalling 3.5 hours, plus 25 automated SMSs. Study 1 used an iPhone app to cue imagery, while Study 2 cued imagery practice using standard phone features.

Results: There were no differences in effects between the studies. Weekly drinks fell by 56% (1.18 Baseline SD units) to a mean of 20.5 ($p < .001$). Of 32 people with post-baseline data, 26 (81%) showed a reduction at all available assessments.

Discussion and Conclusions: While a large randomised controlled trial is needed to test FIT against existing brief treatments, these data suggest that strong effects will be obtained on alcohol use.

Implications for Practice or Policy: Given that FIT can be delivered by phone and may have effects with only around 4 hours of total contact, it may offer opportunities for powerful, remotely delivered services at low cost.

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Discussion Section: The symposium will include demonstrations of the key features of eHealth interventions. Following the presentations, the chair will facilitate a panel discussion, addressing issues concerning the merits, challenges and future development of eHealth prevention and interventions for substance use. The audience will be encouraged to engage with and ask questions of the panel in relation to their findings and application of eHealth technology to substance use.

The symposium aims to increase attendees knowledge of the potential of eHealth interventions, they types, quality and efficacy of eHealth interventions currently available as well as some of the pitfalls eHealth interventions can fall into.

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