Title registration for a review proposal: Effects of early, brief computerized interventions on risky alcohol and cannabis use among young people: a systematic review

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To start a Campbell review, a title must be registered and approved by the appropriate Campbell review group. For information about the title registration and protocol and review steps, visit the Campbell website: http://www.campbellcollaboration.org/systematic_reviews/index.php

Submitted to the Coordinating Group of:
___ Crime and Justice
___ Education
___ Social Welfare
___ Other

Plans to co-register:
___ No
___ Yes ___ Cochrane ___ Other
___ Maybe

Instruction: Briefly address each item below. Provide enough precise information to allow us the ability to evaluate the scope of the review and its appropriateness for the Campbell Collaboration. Note the review proposal should not overlap with existing Campbell and Cochrane published reviews or registered reviews in progress.

TITLE OF THE REVIEW

Effects of early, brief computerized interventions on risky alcohol and cannabis use among young people: a systematic review

BACKGROUND

Briefly describe and define the problem
Risky or hazardous use of recreational drugs like alcohol and cannabis is much more widely spread in the population than one could assume with regards to the smaller streams of cases that enter specialized alcohol and drug treatment services. The problems, however, tend to be more diffuse in the wider population than in those who enter these specialized services (Storbjørg and Room, 2008). In many countries substantial efforts have been made to improve early interventions including screening, assessment and brief interventions for alcohol and drug problems, also in primary health care services (Roche and Freeman, 2004). A report published by WHO (2010) argues for a public health approach taking into account a stronger need for providing help and counselling for socially integrated heavy drug and alcohol users who are less severely affected.

Alcohol is the most prevalent psychoactive substance in the World. Many WHO member states, among them Norway, have designated programs to reduce recreational drug use (e.g., the use of alcohol). Such programs are often funded by the state. Risky alcohol consumption is a particular problem amongst adolescents and young adults.

In the WHO Global Survey on Alcohol and Health (2008), the five year trend of drinking among 18-25 years olds indicated that in 80 per cent of 82 participating countries there was an increase in risky alcohol consumption (WHO 2008). Further, hazardous and harmful drinking patterns, such as binge drinking and drinking to intoxication in general appear to have increased over time among adolescents and young adults (e.g., WHO 2007, Lancet 2008). A possible reason mentioned by Kraus et al. (2010) is the use of alcoholic carbonate drinks (“alcopops”), which is related to more problematic drinking habits, such as more frequent drinking. High consumption of alcohol is clearly related to negative consequences in public health. WHO reports that each year 320,000 young people between the age of 15 and 29 die from alcohol-related causes, resulting in 9 per cent of all deaths in that age group.

Among illicit substances, cannabis is the most widely used substance in the world. The number of people who used cannabis at least once in 2008 is estimated between 129 and 191 million, or 2.9 percent to 4.3 percent of the world population between 15 and 64 years of age (UNONDC 2010). Unlike other drugs the use of inhalants, among them cannabis, is most common among younger adolescents and tends to decline with age. In the U.S. the prevalence for cannabis use has increased since 2007 among secondary students in grades 8, 10 and 12 even though it has not the very high level of 2002. Among 12th graders, e.g., in 2009 the prevalence of cannabis use was reported at 34.8 percent, compared to 31.7 percent in 2007. In 2002, this percentage was at its highest so far with 36.2 percent (Johnston et al. 2010).

In contrast to the general belief that cannabis might lead to little harm among users, an increasing number of people in the U.S. have entered treatment for problems related to the use of cannabis (World Drug Report 2011: 181) in recent years.

It is important to intervene early with young people who use cannabis and alcohol. The use of recreational drugs like cannabis and alcohol might have a number of negative long-lasting consequences for these young people, such as school truancy, health problems and general delinquent behaviour.
In an ongoing review Carney et al. (2011) are summarizing the effect of brief interventions for substance using high school students on alcohol and other drug use and other behavioural outcomes. In a randomized controlled study Bingham et al. (2010) have addressed the effect of a web-based brief motivational alcohol intervention. They found that the intervention was positively associated with a couple of outcomes e.g., advanced stage of change, lower tolerance of drinking and drink/driving. Computerized brief interventions (among them web-based brief interventions) might potentially reach large audiences in short time and to low costs and they might at the same time simulate in-person interventions by targeting recipients’ feedback. Furthermore, they might in particular suitably target young people, who have been growing up with the computer and new media.

To reduce risky alcohol use and the use of cannabis and thus prevent severe problems as a result of these (e.g., social exclusion, bad health), this project will focus on the effect of computerized early brief interventions to change alcohol and cannabis use among young people already engaged in risky use of these recreational drugs.

**Briefly describe and define the population**

Young people between 15 and 30 years of age, defined as high consumers of alcohol and users of cannabis, alcohol and cannabis being classified as recreational drugs. There are some limitations on age (15 – 30 years old), but no limitations on other participant characteristics. High consumption of alcohol and cannabis use will be operationalized, e.g. by self-report measurement (e.g., scales like Alcohol Use Disorder Identification Test (AUDIT), report by collaterals, urine analysis or blood samples.

**Briefly describe and define the intervention**

It is important to intervene early with risky alcohol and cannabis use in adolescents and young adults. The term ‘early intervention’ is usually used for an intervention at an early stage of a negative process of substance use, which probably might lead to addiction at a later stage. A ‘selective strategy’ with the aim to prevent substance abuse (e.g., alcohol and cannabis), thus, targets subsets of the total population deemed to be at risk for substance abuse by virtue of their membership to a particular population segment, for example young people with a risky use of alcohol and cannabis. Earlier reviews suggest that ‘brief intervention’ is one of several types of interventions empirically effective in reducing the burden of alcohol at an early point of time (Rehm et al., 2004).

Brief intervention is seen to have the singular focus of targeting problematic behavior in a certain systematic and specific manner (O’Leary & Monti, 2004). Brief intervention is defined as any preventive or therapeutic activity given by a health worker within a short time period. Brief intervention generally consists of maximum three structured therapy sessions of short duration, each session typically lasting between five and ten minutes, in total lasting maximum one hour (Babor, 1994). Brief interventions can consist of six elements, which can be represented by the acronym FRAMES: personalized Feedback or assessment results detailing the target behaviour and associated effects and consequences on the individual; emphasizing the individual’s personal Responsibility for change; giving Advice on how to change; providing a Menu of options for change; expressing Empathy trough behaviours conveying caring, understanding and warmth; and emphasizing Self-efficacy for
change and instilling hope that change is not only possible but also with reach (Miller & Sanchez, 1994).

Computerized interventions include web-based or internet interventions regardless of how they are downloaded e.g. computer, smart phone or i-pad.

**Outcomes: What are the intended effects of the intervention?**

Primary outcomes:
- Change of alcohol/cannabis use (measured by self-report, report by collaterals, urine analysis, or blood samples etc.)

Secondary outcomes:
- Self reported reasons to drink/to use cannabis
- Tolerance of others’ problematic drinking/use of cannabis
- Motivation for change, e.g. measured by the Readiness to Change Questionnaire (RCQ; Heather 1993)
- Psychosocial consequences (these may vary by age and include school truancy, dropout and/or problems retaining employment)
- Contact with law enforcement agencies as a result of problematic consumption (e.g. under-age drinking, driving offenses, public order offenses, possession of cannabis)
- Mental health problems (e.g. depression and anxiety)
- Interpersonal violence

Outcomes will typically be recorded as a post-test immediately after the interventions ended, short-term follow-ups until six months after the intervention ended, medium-term follow-ups of between six and 12 months, and long-term follow-ups of more than 12 months. The exact follow-up durations will be recorded for each study.

**OBJECTIVES**

To assess the effects of early brief computerized interventions on hazardous alcohol consumption and the use of cannabis among young people.

**METHODOLOGY**

**What types of studies designs are to be included and excluded?**

We include studies where units (persons, therapists, institutions) were allocated randomly or quasi-randomly to early intervention or other conditions. There is no limitation on year of publication. There is no limitation on length of study. Qualitative studies will not be included in this review.

**Your method of synthesis:**

We will use meta-analysis if data are such that it is appropriate and feasible.
SOURCES OF SUPPORT

Internal funding:
Norwegian Knowledge Centre

External funding:

DECLARATIONS OF INTEREST

None known

REQUEST SUPPORT

Do you need support in any of these areas (methodology, statistics, systematic searches, field expertise, review manager etc?)

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Include the complete name and address of reviewer(s) (can be changed later). This is the review team -- list the full names, affiliation and contact details of author’s to be cited on the final publication.

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PRELIMINARY TIMEFRAME

Approximate date for submission of Draft Protocol (please note this should be no longer than six months after title approval. If the protocol is not submitted by then, the review area may be opened up for other reviewers):

Title registration approval date: December 2012

Draft protocol submission: January 2013