

Computerized brief interventions seem to reduce risky alcohol use among young people; no evidence of effect on cannabis consumption



Interventions significantly reduce alcohol consumption in the short-term compared to no intervention

What is the aim of this review?

This Campbell systematic review examines research on the effectiveness of early, computerized brief interventions on alcohol and cannabis use by young people who are high or risky consumers of either one or both of these substances. The review summarises findings from 60 studies from 10 countries. The participants were young people between the ages of 15 and 25, defined as risky consumers of alcohol or cannabis or both. The review included 33,316 participants.

Young people who abuse alcohol or cannabis are at risk of immediate and long-term health and legal consequences. There is some evidence of an impact on alcohol use. Findings are hampered by a lack of rigorous evidence, so further research is needed.

What did the review study?

Alcohol abuse and use of recreational drugs among young people are significant public health concerns. These should be addressed by effective interventions that provide assistance and counselling to drug and alcohol users.

A computerized brief intervention is any preventive or therapeutic activity delivered through online or offline electronic devices, such as a mobile phone, and administered within an hour or less, even a few minutes, of the substance abuse. Such interventions aim to reduce alcohol abuse or drug abuse in general. This review assesses research on the effectiveness of early, computerized brief interventions on alcohol and cannabis use by young people who abuse either one or both of these substances.

What studies are included?

The included studies employed randomized controlled trials and reported on any computerized brief intervention used as a standalone treatment aimed at reducing alcohol and cannabis consumption. The secondary outcome measured was reported adverse outcomes.

The studies were conducted in the United States, New Zealand, The Netherlands, Sweden, Australia, Germany, Switzerland and Brazil, with one study conducted in several countries (Sweden, Belgium, the Czech Republic and Germany).



How up-to-date is this review?

The review authors searched for studies published until April 2016. This Campbell Systematic Review was published in April 2017.

What is the Campbell Collaboration?

The Campbell Collaboration is an international, voluntary, non-profit research network that publishes systematic reviews. We summarise and evaluate the quality of evidence about programmes in the social and behavioural sciences. Our aim is to help people make better choices and better policy decisions.

About this summary

This summary was prepared by Ada Chukwudozie (Campbell Collaboration) based on the Campbell Systematic Review 2017:06 Effects of Early, Computerized Brief Interventions on Risky Alcohol Use and Risky Cannabis Use Among Young People by Geir Smedslund, Sabine Wollscheid, Lin Fang, Wendy Nilsen, Asbjørn Steiro and Lillebeth Larun (DOI 10.4073/csr.2017.6). The summary was redesigned and produced by Tanya Kristiansen. Financial support from the American Institutes for Research for the production of this summary is gratefully acknowledged.



The participants were consumers of alcohol or cannabis or both, and aged 15 to 25 years. A total of 60 studies with a sample size of 33,316 participants were included in the review.

What are the main results in this review?

The interventions significantly reduce alcohol consumption in the short-term compared to no intervention, but the effect size is small, and there is no significant effect in the long-term. There are also shortcomings in the quality of the evidence.

Interventions which provide an assessment of alcohol use with feedback may have a larger effect than those which do not, but again, the evidence is weak.

The few studies on cannabis did not show significant effects in the reduction of cannabis consumption.

There was no evidence of adverse effects.

What do the findings in this review mean?

Generally, the alcohol interventions seem to work. However, all the studies included in the review had methodological shortcomings. Given the lack of rigorous evidence, this conclusion should be read with caution.

Only a few studies focused on cannabis, thus hampering any firm conclusion as to the intervention effectiveness.

While there is doubt as to the validity of the findings, computerized brief interventions should not be completely ruled out as they are easy to administer, low cost and have no adverse effects.

There is a need to conduct more high quality research, especially with regard to studies focused on cannabis use.