


DRUG & ALCOHOL FINDINGS *Research analysis*

This entry is our analysis of a study added to the Effectiveness Bank. The original study was not published by Findings; click [Title](#) to order a copy. Free reprints may be available from the authors – click [prepared e-mail](#). [Links](#) to other documents. [Hover over](#) for notes. [Click to highlight](#) passage referred to. [Unfold extra text](#)  The Summary conveys the findings and views expressed in the study. Below is a commentary from Drug and Alcohol Findings.

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▶ **Effectiveness of training family physicians to deliver a brief intervention to address excessive substance use among young patients: a cluster randomized controlled trial.**



Haller D.M., Meynard A., Lefebvre D. et al.

Canadian Medical Association Journal: 2014, 186(8), p. 263–272.

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Can a brief intervention delivered by trained GPs impact on young patients' excessive drinking and cannabis use? Set in French-speaking Switzerland, this study examines outcomes over a 12-month period.

SUMMARY Around 30–50% of young people in Europe and the United States are estimated to drink excessively, and 10% to use cannabis excessively. These “health-compromising behaviours” can begin in adolescence, and lead to adverse outcomes that extend into adulthood, or increase the risk of adverse outcomes later in life.

The featured study, set in French-speaking Switzerland, investigated whether training doctors to deliver a brief substance use intervention could be effective in reducing binge drinking and excessive cannabis use among young people.

A letter was sent to general practitioners (also known as family doctors or family physicians) who were subscribed to mailing lists for continuing education at the University of Geneva and the University of Lausanne, as well as all **paediatricians** in private practice in the area of Geneva. This reached around 1,200 doctors serving a population of approximately 1.2 million people. Of the first 35 who expressed an interest in the study, 33 (including 5 paediatricians) from as many practices consented and were randomly allocated either to the intervention group (17) (brief intervention plus usual care) or the **control group** (16) (usual care only).



Key points

From summary and commentary

The effectiveness of training doctors in Switzerland to deliver a brief substance use intervention was tested among young patients aged 15–24.

No significant difference was found in rates of binge drinking and excessive cannabis use between the intervention and control groups at three, six, and 12 months after the consultation.

There was a reduction a year later in the number of patients reporting excessive substance use, but no difference between intervention and control groups.

The brief intervention

The intervention incorporated aspects of motivational interviewing and ‘the 5As’ framework (assess, advise, agree, assist, and arrange) to facilitate discussions about behaviour change. Doctors were guided to go through some or all of ‘the 5As’ depending on their assessment of the patient’s needs and motivation to change. They used a checklist to guide the intervention, and record which steps they had performed for each patient.

The methods were informed by a [pilot study](#) involving the present study’s researchers and an advisory group of 10 doctors. An observed reduction (during the pilot study) in the proportion of excessive substance users one month after the brief intervention provided support for the validity of the approach, and “a solid base on which to build a randomised trial of a brief intervention addressing cannabis use in young people consulting in family practice”.

Doctors were trained in a small-group format (a trainer, a young person who assumed the role of the patient, and four participating doctors) allowing for direct observation, feedback, and suggestions by other participants to monitor and improve adherence to the brief intervention. They were advised to practise at least twice, before and after receiving feedback, to maximise their skills.

Because a checklist was to be used to prompt and monitor physicians' adherence to the brief intervention during the trial, particular emphasis was placed on the correct use of the form. To screen for substance use, physicians were advised to ask about frequency and type of use in a non-judgmental way. They were not given a screening tool to use – existing tools were either too long to be used for opportunistic screening or had not been validated for use in French. The physicians received continuing medical education credits but no financial incentive for participating in the training sessions.

Patients in intervention practices who were identified by their doctor as being in need of an intervention were also (and first) offered usual care. In both groups, physicians were free to plan follow-up consultations to further discuss substance use with the patient.

Recruitment of patients

Young people aged 15–24 years attending participating practices for a consultation with their doctor about “any health problem” between February 2009 and November 2010 were asked to take part. The exceptions were patients with an acute illness requiring immediate attention, severe mental health issues, or any other disorder affecting their ability to consent, patients with substance use problems requiring immediate attention or a history of previous treatment for dependence, and patients unable to read and understand French.

Before the consultation, patients were invited to complete a survey evaluating their general health, substance use, psychosocial, and demographic characteristics. Questions about substance use were taken from a validated French-language screening instrument that asked about frequency of use and psychosocial consequences related to drinking and cannabis use. The information from this was for research purposes only, and not made available to the doctors to help them identify patients at risk.

Patient outcomes were measured by research assistants through telephone interviews at 3, 6 and 12 months after the consultation. The primary outcome was self-reported excessive substance use – one or more episodes of ‘binge drinking’, or one or more joints of cannabis per week, or both – in the previous 30 days. The secondary outcomes were abstinence from alcohol and cannabis, and psychosocial consequences of alcohol and cannabis use listed in the [Detection of Alcohol and Drug Problems in Adolescents \(DEP-ADO\)](#) questionnaire.

Doctors were aware of whether they had been randomly allocated to the intervention or control group. Patients on the other hand were told only that they were participating in a study of their health and substance use.

Main findings

The study found no significant difference in rates of binge drinking and excessive cannabis use between the intervention and control groups at three, six, and 12 months after the consultation.

Of 594 participating patients, in the initial research assessment 279 (47%) identified themselves as binge drinkers and/or excessive cannabis users. 12 months later 28% of these patients were no longer using excessively. There was no difference between patients whose doctors were in the intervention group and those whose doctors were in the control group at any of the follow-up points.

The authors' conclusions

Training doctors to use a brief intervention to address excessive substance use among young people was, in this study, not effective in reducing binge drinking and excessive cannabis use.

Formal training in using the brief intervention may only have had a modest impact on the ability of experienced and interested doctors to adapt their communication style with young people.

Improved outcomes in both groups could have been prompted by the initial survey. Completing this could have encouraged patients to identify a personal need for change.

FINDINGS COMMENTARY The researchers' [earlier prediction](#) that the “intervention [would] lead to a 15% reduction in the prevalence of at-risk alcohol and/or cannabis use” didn't come to fruition. Instead, they concluded from the featured study that “training family physicians to

deliver a brief intervention to address excessive substance use among youth and young adults was not effective in reducing binge drinking and excessive cannabis use in this patient population”.

The glint of hope in the reported findings was the 28% reduction in the number of patients who reported excessive substance use at 12 months. This related to the 279 patients who, prior to any consultation with their doctor, reported excessive use, and was an additional analysis **not specified** when the trial was registered. While there was a sizeable reduction, the results did not favour the brief intervention group; even among patients who were using cannabis or drinking to excess as defined by the study, training their doctors to recognise and respond to this made no difference.

One factor that could have influenced the overall findings was the level of training doctors received, outside of that provided for the brief intervention. While “most of the [doctors] had **moderate to extensive training** in adolescent health and alcohol-related problems before the study”, this was not distributed equally across the intervention and control groups. With the exception of motivational interviewing, the control group had a higher proportion of doctors with moderate to extensive training in every domain:

- Adolescent health (75% vs. 35%)
- Alcohol problems (69% vs. 59%)
- Cannabis problems (38% vs. 29%)
- Communication (50% vs. 29%)
- Motivational interviewing (44% vs. 54%)

Although sometimes the margin was extremely small (for example a difference of one doctor), within such a small group of doctors, and a small sample of patients, it could have still potentially had a bearing on the doctors’ interest and ability to work with young people, understand issues affecting young people, and address substance use – and consequently in their abilities to bring about change in their interactions with their patients. The most marked difference was for training in adolescent health, where 12 out of 16 control group doctors reported moderate to extensive training, compared with only six out of 17 intervention doctors.

Commenting on the study, Dr. Sharon Levy, Assistant Professor of Pediatrics at Harvard Medical School, **highlighted** some other reasons why the study may not have registered a benefit of the brief intervention over usual care:

- Doctors were not given a screening tool to use, instead, relying on their own clinical impressions to identify excessive substance use. This meant they may have missed opportunities to initiate a brief intervention. According to the researchers’ data, 59% of patients who self-reported excessive cannabis use in the confidential survey were subsequently identified by doctors, and for binge drinking, only 34%. This factor “would be expected to move the experimental and control groups closer together”.
- Brief motivational interventions, such as this one, encourage patients to work toward goals that they set for themselves. Therefore, “Even reductions that are clinically meaningful (eg, from eight drinks per night to five drinks per night, or from smoking daily to smoking every other day) could be missed.”

Embedding brief interventions in general practice

The featured study was informed by a **pilot study** that developed and tested the **feasibility** of a brief intervention targeting excessive cannabis use, to address what the researchers identified was a gap in available evidence on the benefits of brief cannabis interventions for young people, when delivered by **GPs**. While both cannabis use and drinking were assessed (before the consultation and one month later), the researchers could not pronounce on the effectiveness of the intervention in these domains.

Examined in much more detail in an Effectiveness Bank **hot topic**, brief interventions offer a relatively inexpensive strategy for tackling problematic substance use, and a way to reach a large proportion of people – not just those at the high-risk end, but also the far greater number running lower risks from their substance use. GP primary care practices have been the prime target for embedding screening and brief interventions in everyday practice, having the greatest reach of all medical services.

Not so long ago virtually universal screening of adult primary care patients was seen as the prime way to start to reduce the burden of alcohol-related harm through screening and intervention. Now the ambition in England and in Scotland has **been scaled back** to screening new patients and/or those thought in advance to possibly be at risk (so-called ‘targeted’ screening), diluting the hoped-for public health benefits of a mass programme.

The route from screening nearly everyone to today's less ambitious plans was punctuated by heated arguments over whether it was appropriate or feasible to ask [GPs](#) to question patients about their drinking, when this was not why they came to see the doctor and there was no apparent reason to raise the issue. Controversy peaked when in 2003 a [review](#) in the *British Medical Journal* concluded that on average 1000 patients have to be screened to gain just two or three no longer drinking to excess. It was not necessarily that brief advice was ineffective, but that so few patients got to the point of receiving it. Critics hit back, but British studies (referred to in this [Effectiveness Bank analysis](#) and detailed in these [background notes](#)) confirmed that very low rates of screening and intervention were the norm.

Even among patients who *do* receive brief advice, it remains unclear whether impacts found in research projects will be replicated in normal practice. An [attempt](#) to address this issue divided primary care trials in to those which more versus less approximated how brief interventions would be conducted in practice. Finding no difference between the two sets of trials in the impact of the interventions, the analysts argued that the combined results of all the trials would be applicable to routine practice. A [later synthesis](#) was based on eight of the same primary care trials plus two others, and again found brief intervention created statistically significant drinking reductions compared usually to screening only. But a close look at each of the reviewed trials, including the screening phase essential to testing the brief intervention, reveals that few if any of those categorised as relatively real-world can be considered to have been conducted in truly real-world conditions ([1](#) [2](#)). There have been trials which more closely approximated what can be expected to be routine practice, but it seems these [have foundered](#) due to non-implementation of the interventions and/or did not find significant effects.

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