DRUG & ALCOHOL FINDINGS *Review analysis*

This entry is our analysis of a review or synthesis of research findings considered particularly relevant to improving outcomes from drug or alcohol interventions in the UK. The original review 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 review. Below is a commentary from Drug and Alcohol Findings.

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▶ Behavioral counseling after screening for alcohol misuse in primary care: a systematic review and meta-analysis for the U.S. Preventive Services Task Force.

Jonas D.E., Garbutt J.C., Amick H.R. et al.

Annals of Internal Medicine: 2012, 157(9), p. 645–654.

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Amalgamated findings from studies of risky drinkers identified and counselled in primary care settings indicate that compared to screening and assessment only, brief counselling lead to greater reductions in drinking, gains reflected less strongly in some indicators of health. However, it is unclear whether the generally small impacts would be sustained in routine practice.

SUMMARY The featured review and meta-analysis of the effectiveness of screening for alcohol misuse followed by behavioural counselling in primary care settings was conducted for the Effective Health Care Program of the US government's Agency for Healthcare Research and Quality, and to help the US Preventive Services Task Force update its recommendations.

'Behavioural counselling' interventions include the range of personal counselling and related behaviour-change interventions used to help patients change health-related behaviours. 'Counselling' denotes a cooperative method of work that demands active participation from both patient and clinician and aims to facilitate the patient's independent initiative. In respect of problem or risky drinking, the aim is to eliminate risky drinking practices (for example, by encouraging fewer drinks per occasion or not drinking before driving) rather than to achieve abstinence.

The featured report focused on the benefits and harms (if any) of behavioural interventions, based on a review of studies reported in the English language of risky drinkers identified through screening while for other reasons attending primary care settings. Patients identified as risky or problem drinkers had to have been randomly allocated to a behavioural counselling intervention versus an alternative or no intervention and followed up for at least six months.

Key points
From summary and commentary

Amalgamated findings from studies of risky drinkers identified and counselled in primary care settings indicate that when added to screening and assessment, brief interventions (especially those offered over several sessions) led to greater reductions in drinking.

There was less evidence that health was improved and it is unclear whether the generally small impacts would be sustained without the extra support available for the interventions in the randomised trials assessed by the review.

However, overall improvement after *both* screening/assessment and intervention would be greater.

In all 38 articles were found reporting on 23 eligible trials, of which 11 were conducted solely in the United States. Typically the interventionist was a primary care doctor, either alone or with a health educator or nurse. Most trials tested brief interventions consisting of a single session or of several sessions ('multi-contact') lasting up to 15 minutes. Generally the comparator was a control group who underwent the screening/assessment applied to all patients, but followed by usual care or handing the patient a general health pamphlet rather than counselling.

Main findings

The review was unable to assess the impacts of being screened for risky drinking because no studies had randomly allocated participants to be screened versus not screened.

Overall there was evidence that behavioural counselling helped reduce drinking in adults, older adults, and young adults or college students. Compared to controls, 12 months later adult patients were averaging around 50g alcohol less a week or about 6 UK units, 12% fewer reported heavy drinking episodes, and 11% more were now drinking at or below recommended maximum drinking levels. Compared to controls, 12 months later young adults or college students offered counselling were averaging about 24g alcohol less and 0.9 fewer heavy drinking days per month, though these figures derived from just three trials each. In two trials, older adults also were found to have reduced drinking by on average about 24g alcohol and 9% more were now drinking at or below recommended maximum drinking levels. Evidence was insufficient to assess impacts among adolescents and pregnant women.

Evidence of reduced drinking was strongest for brief multi-contact interventions. For example, 12 months later and compared to controls, patients offered these programmes were averaging around 62g alcohol less per week. The corresponding figure for brief, single-session interventions was about 51g alcohol and for extended (sessions lasting more than 15 minutes) multi-contact interventions, around 36g. In general, among adults very brief and brief single-contact interventions were ineffective for some outcomes and less effective than brief multi-contact interventions for others.

Generally too, health outcomes were better among patients offered counselling, but perhaps partly because fewer trials assessed these outcomes than assessed drinking, the results were usually not statistically significant or of low reliability, so may have been due to chance fluctuations. Across six trials and all age groups, patients offered counselling were 12 months later about half as likely to have died than control patients, but this difference was not statistically significant. Among adults there was a low-reliability finding of significantly fewer days spent in hospital, but no significant differences for alcohol-related accidents or primary care or emergency department visits. Over a four

no significant differences for alcohol-related accidents or primary care or emergency department visits. Over a four-year follow-up period and compared to controls, young adults and college students offered counselling suffered significantly fewer motor vehicle crashes causing non-fatal injuries and significantly fewer adverse motor vehicle incidents overall, and over 12 months, significantly fewer emergency department visits, but all these results were considered of low reliability. Considered of moderate reliability was a finding that among these same groups counselling helped avoid problems in their academic performance. Among both adults and young people, counselling significantly reduced drink/drug driving offences, evidence considered of low reliability. No significant effects were found on the number of primary care visits or quality of life.

The authors' conclusions

Among risky- or hazardous-drinking adults, alcohol counselling in primary care settings reduces drinking and may reduce the number days patients subsequently spend in hospital. However, for most health outcomes, the available evidence did not amalgamate to a statistically significant difference (eg, mortality), or was insufficient to draw conclusions about effectiveness (eg, alcohol-related accidents and quality of life). Two studies found patients allocated to counselling were still drinking less four years later, but at this point the difference was no longer statistically significant.

Among adults, evidence was strongest for brief, multi-contact interventions consisting of at least two sessions lasting up to 15 minutes. Impacts on drinking were greater than those for other types of interventions, were in a few studies found to have been sustained for several years, and there was some evidence of reduced health care use or costs. In all the studies which contributed to these findings, the interventions had been delivered by primary care doctors. There was no evidence that extending sessions to over 15 minutes improved outcomes.

Eligibility criteria for joining the trials mean the findings derived largely from risky or hazardous drinkers. It is unclear whether the results would generalise to more severe drinking already likely to be causing harm or which meets diagnostic criteria for alcohol abuse or dependence.

All the interventions required support systems over and above normal primary care resources to provide screening, screening-related assessments, and in some cases, prompts for primary care staff, and most studies required staff training. Such support is probably required for effective screening and intervention.

It is important to remember that the findings related to *extra* improvements relative to screening and assessment. Since improvements were generally found after just these procedures, the overall improvement after both screening/assessment and intervention would be greater than the figures reported here.

FINDINGS COMMENTARY Rather than fully fledged counselling, in the event the featured review turned out to reflect mainly the effects of various sorts of brief interventions among patients attending for medical care unrelated to their drinking. In everyday language, the implication of the findings is that being warned or advised by a GP that you are at risk from your drinking and should consider cutting down does slightly reduce drinking on average, even if many patients continue to drink to excess. However, this finding may not apply to routine brief intervention programmes mounted outside the context of a randomised trial. More below.

An Effectiveness Bank hot topic essay has queried whether such interventions can go beyond affecting some of the individuals they reach, to make the intended contribution to public health across a population of drinkers. A key limitation is generally poor implementation meaning few patients are screened and fewer still advised, raising questions over the feasibility of extending research interventions into routine practice and the applicability of the results to the general run of patients.

Another limitation of the research alluded to in the featured review is that 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 closely approximated how brief interventions would normally be conducted. Finding no difference in impacts between the two sets of trials, the analysts argued that their combined results would be applicable to routine practice, suggesting (as in the featured review) that brief interventions do reduce drinking. A later synthesis was based on eight of the same primary care trials plus two others, and again found brief interventions 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, revealed that few if any of those categorised as relatively real-world were conducted in truly real-world conditions (1 2). There have been trials closer to 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.

Not included in the featured review are the SIPS studies funded by the UK Department of Health in 2006 to evaluate different ways of identifying risky drinkers through routine screening and different forms of brief advice to prompt them to cut back. In primary care and in other settings (probation offices and emergency departments), a year later brief interventions were found no more effective than a simple warning that the patient or offender was drinking "above safe levels, which may be harmful to you", plus an instruction to read an alcohol information booklet. One of the brief intervention options would in the featured review's terminology have counted as an extended multi-contact variant, the second session being intended to last about 20 minutes.

The featured review's finding that multi-contact interventions (but not extended variants) seem to work best was largely or exclusively based on results from different sets of trials rather than studies which incorporated both options in the same trial. It means other factors may have affected the relative advantage which seemed to have been gained by offering further brief sessions. However, a similar finding emerged from a synthesis of results from four trials which had each compared multi-contact brief interventions with single-session or less extended variants. In this analysis, extra improvements on various drinking measures were not always statistically significant, bias was a possibility, and some measures were reported in only one or two trials. Nevertheless, the weight of the evidence supports offering follow-up sessions to check how patients have responded to the initial session and to reinforce its effects.

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STUDY 2010 Efficacy of physician-delivered brief counseling intervention for binge drinkers

STUDY 2010 Brief physician advice for heavy drinking college students: a randomized controlled trial in college health clinics

REVIEW 2010 Alcohol-use disorders: Preventing the development of hazardous and harmful drinking

STUDY 2011 12-month follow-up after brief interventions in primary care for family members affected by the substance misuse problem of a close relative

REVIEW 2015 Electronic interventions for alcohol misuse and alcohol use disorders: a systematic review

REVIEW 2009 The effectiveness of brief alcohol interventions in primary care settings: a systematic review

REVIEW 2010 Computer-delivered interventions for alcohol and tobacco use: a meta-analysis

STUDY 2014 The effectiveness of alcohol screening and brief intervention in emergency departments: a multicentre pragmatic cluster randomized controlled trial

STUDY 2010 The effectiveness of brief intervention among injured patients with alcohol dependence: who benefits from brief interventions?