Your selected document

▶ The effectiveness of brief alcohol interventions in primary care settings: a systematic review.

Kaner E.F.S., Dickinson H.O., Beyer F. et al. Request reprint

Drug and Alcohol Review: 2009, 28, p. 301–323.

Combining findings from randomised trials confirmed that brief advice to risky drinking primary care patients can reduce drinking; now the issue is whether in normal practice those benefits will be realised on a grand enough scale to create public health gains.

Abstract The featured report is based on a Cochrane Collaboration systematic review. The account draws on both the featured report and the original review, focusing on general practice rather than the accident and emergency department studies also included in the review. See an earlier Findings analysis for accident and emergency department studies.

Many studies have reported that brief interventions delivered in primary care reduce excessive drinking, but much of this work has been criticised for not being relevant to normal clinical practice. This review aimed to assess the effectiveness of brief interventions in primary care and to determine if outcomes differed between the more tightly controlled 'efficacy' trials, and the more real-world tests characterised as 'effectiveness' trials. To find the trials, all relevant electronic databases were searched up to 2006 and reference lists of key articles and reviews were hand-searched. The analysis included randomised controlled trials involving patients in primary care who though not seeking treatment for alcohol problems, received a brief intervention intended to reduce drinking or alcohol-related problems. Generally, patients had been selected because of screening results or other indications of risky drinking falling short of dependence on alcohol. On average they drank 310g of alcohol a week, nearly 39 UK units, well above safer drinking limits. Most trials compared outcomes for these patients after brief intervention against a control group which was only assessed, treated as usual, and/or provided written information.

The primary meta-analysis combined alcohol consumption outcomes from 22 trials and over 5800 patients. One year later, patients who had received a brief intervention drank

significantly less than controls, amounting on average to an extra 38g of alcohol less a week, nearly five UK units. The analysts established that there was a less than 1 in 20 chance that the real reduction was outside the range from 23g to 54g. However, significant reductions were confined to male patients. All but two trials reported a reduction after brief intervention compared with controls, but estimates varied substantially, indicating that impacts depended on the features of each trial. Extended intervention was associated with a greater reduction in alcohol consumption compared with brief intervention, but the difference was not statistically significant. There was no significant difference in effect sizes for efficacy and effectiveness trials. Though their results could not be combined, all nine trials which assessed heavy drinking as an outcome found a significant decrease in brief intervention groups relative to control groups.

The authors concluded that brief interventions can reduce alcohol consumption in men, with benefits evident a year after intervention; they are unproven in women, for whom there is insufficient data. Since extended treatment had little extra benefit, primary care intervention for alcohol risk-reduction can be both brief and effective. The studies tended to include patients, clinicians and practices representative of primary care, and there was no significant difference in effectiveness between less and more real-world trials. This suggests that their combined results are applicable to routine clinical practice. Given these findings, the authors recommended that brief interventions should be delivered to hazardous and harmful drinkers in general practices and emergency departments.

FINDINGS The analysis carefully and convincingly showed that in this set of trials, brief intervention led to greater reductions in drinking among risky drinkers than just asking about drinking, or usual clinical care. It differed from other similar analyses in the attempt to answer a crucial question − whether such benefits emerge only in the unrealistic context of a tightly controlled research study with expert, well trained staff, selected participants, and relatively complete implementation, or whether they will survive transplantation to the less controlled context of routine primary care. The verdict that the research *would* generalise to routine practice rests largely on the finding that impacts in the more real-world trials did not significantly differ from those of the more tightly controlled trials. Certainly an advance in terms of assessing applicability to routine practice, still for several reasons this verdict may be too optimistic. Arguably there remains considerable doubt over whether the average drinking reduction seen in the trials will be replicated if intervention is 'scaled up' to practices in general, and applied by the general run of doctors to the general run of patients.

Prime among these concerns (more on all these issues in the background notes) is that the 'real-worldness' tested by the analysis applied *only to the brief intervention phase* of the trial. Before this came the selection of sites and of patients at those sites willing to participate in the trial, and the crucial screening process without which the brief interventions could not have targeted appropriate patients, which often supplied data for use in the interventions, and which was typically done by research staff. Putting the whole procedure in to the frame, few if any of those categorised as relatively real-world general practice trials can be considered to have been conducted in truly real-world conditions. For example, the most real-world trial recruited only a quarter of the practices it approached (many said they had no time) and just over 1 in 10 contributed data to the analysis. The results cannot be assumed to be representative of what would happen in a

normal practice less motivated or less well placed to get involved in, and complete, a brief intervention trial.

Once patients were in the trials, further whittling usually did or may have happened, further reducing confidence in the applicability of the findings to patients overall. Additionally, there was substantial variation between the outcomes of the trials, and, due to the differences between them, the analytic strategy was forced to treat each as having its own characteristic impact rather than one which merely reflected chance variation from the general impact of brief interventions. Given that this was how the findings were generated, it cannot be assumed that any implementation of brief intervention will achieve similar results; each programme will have to demonstrate this for itself.

A related issue is that the studies and the featured analysis started at the point where patients were randomised to a brief intervention. However, the great majority of patients who might benefit never reach this point. In turn this means that even if brief intervention *does* work, it is unlikely to make the hoped-for health difference at the level of the population as a whole, the public health rationale behind the programmes. The most important reason is that in the studies to date, most practices refuse screening or fail to implement it, and when they do, it is rarely applied to more than a small minority of patients. To a degree this is due to the research context; without this added burden and set of restrictions, more practices would participate and more patients might get screened.

The concerns apply no less to Britain (more in background notes), where the two positive trials demonstrated brief intervention's potential, but not necessarily that it *would* work in typical practices which themselves identified patients for intervention, and with patients not subject to the multiple selection gateways applied by the studies. Other British studies were either not reflective of primary care or inconclusive about the benefits of intervention, and some have documented the inability or unwillingness of practices to implement widespread systematic screening and intervention.

The degree to which screening and brief intervention are systematically implemented depends on the requirements and incentives applied to primary care practices. Where these are strong, screening can be very widely implemented. Typically, the studies included in the featured report indiscriminately screened all attending adults. An alternative and possibly more feasible model now being implemented in the UK involves targeted/selective screening using AUDIT or shorter screens as part of overall health checks, or when the patient's complaint might be related to or aggravated by heavy drinking (either individually or routinely at clinics dealing with such complaints), and then offering brief advice to risky drinkers. For a low base, Britain is moving towards setting up the systems and training the staff needed to underpin systematic application of these strategies, but in England current plans requiring screening of all new primary care patients will bypass most of the general practice caseload, while Scotland's more robust plans still seem to lack ambition; more in background notes.

Thanks for their comments on this entry in draft to Eileen Kaner of Newcastle University. Commentators bear no responsibility for the text including the interpretations and any remaining errors.

Last revised 21 June 2009

▶ Background notes

▶ Comment on this entry • ▶ Give us your feedback on the site (one-minute survey)

Top 10 most closely related documents on this site. For more try a **subject** or **free text** search

Universal screening for alcohol problems in primary care fails in Denmark and no longer on UK agenda NUGGET 2008

Controversy over screening primary care patients for risky drinking OFFCUT 2004

Injury rate cut in heavy drinking accident and emergency patients NUGGET 2003

Systematic review and meta-analyses of strategies targeting alcohol problems in emergency departments: interventions reduce alcohol-related injuries REVIEW ABSTRACT 2008

The impact of screening, brief intervention, and referral for treatment on emergency department patients' alcohol use ABSTRACT 2007

Screening, brief interventions, referral to treatment (SBIRT) for illicit drug and alcohol use at multiple healthcare sites: comparison at intake and 6 months later ABSTRACT 2008

Investing in alcohol treatment: brief interventions THEMATIC REVIEW 2002

Family doctors' alcohol advice plus follow up cuts long-term medical and social costs NUGGET 2003

Primary care intervention to reduce alcohol misuse: ranking its health impact and cost effectiveness ABSTRACT 2008

Evaluation of a telephone-based stepped care intervention for alcohol-related disorders: a randomized controlled trial ABSTRACT 2008