

DRUG ALCOHOL FINDINGS *Research analysis*

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▶ **Brief interventions to prevent recurrence and alcohol-related problems in young adults admitted to the emergency ward following an alcohol-related event: a systematic review.**

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Analysis of the only four randomised trials of brief alcohol interventions among 18–24-years-olds seen at emergency departments after getting drunk tentatively suggested that booster sessions or later advice are needed to reduce drinking.

SUMMARY Despite reduced drinking in many countries, the death toll from alcohol remains high partly due to a trend to weekend 'binge' drinking, especially among older teenagers and young adults, in turn due to easier access to alcohol and a delay in the assumption of family and occupational roles. The results can be injury, violence, accidents and unprotected sexual intercourse.

Young adults have similar health risks and developmental characteristics to adolescents, yet receive adult-oriented care in emergency departments, including in respect of their drinking. It is unclear whether in this age range brief interventions following alcohol intoxication are effective, as they are in adults in general, or ineffective, as among adolescents.

To fill this gap the featured review focused on emergency-department trials of brief interventions [typically these involve counselling or advising risky drinkers for from five minutes to half an hour] to reduce drinking and related problems among 18–24-year-old patients attending following acute alcohol intoxication. To reduce differences between the caseloads investigated, the review was limited to trials in which pre-admission intoxication was known or suspected, rather than those which identified risky drinking through screening tests whether or not the patient's current attendance was related to heavy drinking. It was also confined to studies which helped eliminate other factors as a cause of outcomes by randomly allocating patients to the tested intervention versus to a **control** group offered no special alcohol intervention or an alternative one.

Four such trials were found, identified throughout this account by the same numbers. All four tested brief interventions based on [motivational interviewing](#). One from the USA involved 18–19-year-olds (1), another US study 18–24-year-olds (2 3), one from Brazil 16–25-year-olds (4), and one from the UK young men aged 16 to 35 (5). Due to the variety of interventions and outcomes measured, it was decided not to pool their results.

Main findings

Two of the studies (2 3; 5) recorded significantly greater decreases in drinking among young people allocated to the brief intervention than comparison patients, an effect which appeared to last up to a year. Both these successful interventions involved a component delivered many days after emergency attendance. The remaining two studies found no significant reductions in drinking due to the interventions.

In three studies [but ▶ [below](#)] the interventions led to significant reductions in alcohol-related problems relative to **control** groups offered usual care or very brief feedback on an assessment of their drinking (1 2 5). One study (2) suggested a brief intervention encouraged patients to seek alcohol-related treatment. Finally, one study (5) recorded an improvement in **AUDIT** questionnaire screening scores indicative of risky drinking as well in one item measuring satisfaction with close relationships.

The authors' conclusions

The four reviewed studies assessed a variety of brief interventions and were methodologically very different. The small number of studies and their lack of comparability limit the implications that can be drawn. However, findings seem in line with another [similar review](#) but concerning adolescents and which included studies where risky drinking was identified through screening. This also found interventions which reduced drinking occurred several days after attendance or featured booster sessions after initial intervention.

Although caution is required in this interpretation, the findings suggest that an intervention delivered partly or entirely at a distance from the event may be more effective than one delivered only within the emergency service in the hours following admission. However, care in an emergency ward is usually not



Key points
From summary and commentary

Review found four studies of 18–24-year-old patients seen at emergency departments after getting drunk who were randomly allocated to brief alcohol advice versus alternative or normal care.

Interventions delivered partly or entirely at a distance from the event seemed more effective in reducing drinking than those delivered only in the emergency service in the hours following admission.

The review seems to have overestimated the number of studies which found reduced alcohol-related problems; reductions relative to control groups were found in just one study and from an intervention unlikely to be seen in normal practice.

emergency service in the hours following admission. However, care in an emergency ward is usually not supplemented by follow-up calls several months later, and how best to organise this in normal practice is unclear.

With or without booster sessions, in three of the four studies [but [▶ below](#)] face-to-face interventions based on the empathic and non-confrontational style of [motivational interviewing](#) appeared to sustainably reduce alcohol-related problems (1 2 5).

The extent to which the findings from this review can be generalised to other contexts is uncertain. In the two US studies a third of the patients declined participation. All the studies involved therapists specifically trained by the study to deliver the interventions. Whether their impacts will be duplicated when interventions are delivered routinely by emergency staff is unknown.

FINDINGS COMMENTARY The review's most promising finding was that in three of four studies alcohol-related problems were reduced by brief interventions, outcomes which are perhaps the prime target for emergency department interventions with young 'binge' drinkers. However, rather than three, just one of the four studies actually seems to have recorded problem reductions attributable to the brief interventions they tested, and this was after an intervention divorced from normal practice; details [▶ below](#). A Welsh study was most convincing in its finding of drinking reductions from a real-world intervention, but this was not conducted in an emergency department; details [▶ below](#).

Apart from questionable evidence of efficacy among young adults in conditions approximating normal practice, emergency department alcohol interventions are [difficult to implement](#) in the department, and appointments made for later intervention are [often not kept](#). Together these limitations raise doubts over whether emergency department brief interventions – though they *can* work – [actually will work](#) in normal practice and be implemented widely enough to appreciably improve public health.

A [similar review](#) but including patients aged 12 to 15 found evidence for impacts on drinking and related problems inconclusive, but stronger evidence of reduced drinking when booster calls or sessions followed the initial emergency department brief intervention.

Did three of the four studies find problems reduced?

One of the studies (2) cited as suggesting a brief intervention encouraged patients to seek alcohol-related treatment and reduced alcohol-related problems did not find either to be the case compared to a control group offered only brief feedback of assessment results. Treatment-seeking and reduced problems were seen in both groups, but without a no-intervention [control](#) group, there is no way of knowing whether they were due to intervention. Another study (5) said to have found reduced alcohol-related problems did not report such a finding in the account cited in the review. Again the problem scores of both intervention and control patients changed over the follow-up period, but there was no statistically significant difference between them; in this case the control group received usual care only.

That leaves a single US study (1) which did find significantly greater reductions in drink-related risks and problems, in this case over the six months following a brief motivational intervention and relative to just being given a handout on drink-driving plus a list of local alcohol treatment agencies. However, this finding emerged from procedures unlikely to be replicated in normal practice. Counsellors were the same research staff who immediately before the 35–40 minute intervention had conducted research assessments, feedback from which was used in the following session. Patients may have reacted to this as one continuous intervention extending beyond what is conventionally termed 'brief'. Counsellors were specially recruited, extensively trained, and supervised weekly. The control handout focused on drink-driving, so may have seemed irrelevant to the three-quarters of the sample not attending after a motor vehicle accident. In contrast, the focus for the motivational intervention was not tied down in advance, potentially giving it an advantage over and above any advantage gained by the motivational approach. When later the same lead author tested a brief motivational intervention against *individualised* assessment feedback, no differential effect was found on alcohol-related problems (2).

Welsh study most convincing and practice-relevant but not in emergency unit

Most convincing in its findings on drinking reductions and possible applicability to normal practice was a UK study conducted in Cardiff (5). However, the intervention was not implemented in an emergency department, but in a jaw and face clinic to which patients were referred from a local emergency department. The distinctive set of patients were mainly young men facially injured in assaults. The study seems to suggest that when the setting is relatively conducive (a clinic insulated from the disruptions of an emergency service and whose patients attend for lengthy periods) and the patients relatively receptive (recently reminded that drinking can result in serious injury, but not distracted by the immediate aftermath of that injury), intervention is not just effective but also practical, being in this study conducted by the clinic's own nurses after training and while they treated the patient's injuries.

As in the US study described [above](#), another US study (2 3) which found drinking reductions also deployed well trained and supervised research staff for the interventions, and intervention followed what seemed quite lengthy assessments for research purposes conducted by the same staff, procedures divorced from normal practice. In this study, of the 627 patients who might have joined it, just 198 ended up being allocated to the interventions and 161 completed the final follow-up assessment, raising doubts over the applicability of the results to the trauma centre's entire caseload of young people attending after having drunk alcohol. It may also be relevant that many if not most would have been below the legal drinking age in the USA, perhaps making the results less applicable to countries like the UK with a lower drinking age. In this study as in the Welsh study described [above](#), the intervention was not conducted in a normal emergency department but in the [more conducive environment](#) of a major trauma centre.

This draft entry is currently subject to consultation and correction by the study authors and other experts.

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

STUDY 2012 [Alcohol screening and brief intervention in emergency departments](#)

STUDY 2012 [Text-message-based drinking assessments and brief interventions for young adults discharged from the emergency department](#)

STUDY 2010 [Alcohol screening, brief intervention, and referral to treatment conducted by emergency nurses: an impact evaluation](#)

STUDY 2012 [Randomized controlled trial of mailed personalized feedback for problem drinkers in the emergency department: the short-term impact](#)

STUDY 2010 [The impact of screening, brief intervention and referral for treatment in emergency department patients' alcohol use: a 3-, 6- and 12-month follow-up](#)

STUDY 2013 [Effectiveness of screening and brief alcohol intervention in primary care \(SIPS trial\): pragmatic cluster randomised controlled trial](#)

STUDY 2012 [Alcohol screening and brief intervention in primary health care](#)

STUDY 2010 [Screening, Brief Intervention, and Referral to Treatment \(SBIRT\): 12-month outcomes of a randomized controlled clinical trial in a Polish emergency department](#)