

Chapter 1 Effectiveness of brief alcohol interventions in primary care populations¹

Review question: Do brief interventions, delivered in general practice or based in primary care, reduce alcohol consumption in hazardous drinking?

What is known of this topic: Excessive drinking contributes significantly to social problems, physical and psychological illness, injury and death. Hidden effects include increased levels of violence, accidents and suicide.

One way to reduce consumption levels in a community may be to offer a brief intervention in primary care provided by healthcare workers such as general physicians, nurses or psychologists. The intervention offered includes providing feedback on alcohol use and harms, identifying high-risk situations for drinking and coping strategies, increasing motivation and facilitating the development of a personal plan to reduce drinking. It takes place within the time frame of a standard consultation, 5–15 minutes for a general physician, longer for a nurse.

Summary: Brief interventions appear to lower alcohol consumption generally in men. The lack of evidence of any difference in outcomes between efficacy and effectiveness trials suggests that the current literature is relevant to routine primary care. Future trials should focus on women and on delineating the most effective components of interventions.

Last assessment date: 14 February 2007

Objectives: To assess the effectiveness of brief intervention, general practice and emergency care-based primary care, to reduce alcohol consumption. To assess whether outcomes differ between trials in research settings and those in routine clinical settings. *Primary outcomes:* Self- or other reports of drinking (quantity and frequency), levels of laboratory markers and alcohol-related harm to the drinkers or to affected others. *Other outcomes:* Patient satisfaction measures and health-related quality of life.

Study population: Patients who are routinely presenting to primary care for a range of health problems and whose alcohol consumption is identified as being excessive or who have experienced harm as a result of their drinking behaviour.

Alcohol and Drug Misuse: A Cochrane Handbook, First Edition. Iosief Abraha and Cristina Cusi.

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Search strategy: The Cochrane Drug and Alcohol Group's Specialised Register, MEDLINE, EMBASE, CINAHL, PsycINFO, Science Citation Index, Social Science Citation Index (February 2006), Alcohol and Alcohol Problems Science Database (1972–2003) and reference lists of articles.

Results: Twenty-two randomised trials with 7619 participants were included.

After follow-up of 1 year or longer, brief intervention had lower alcohol consumption than the control group (weight mean difference: –38 grams/week (95% CI: –54 to –23); heterogeneity between trials: $I^2 = 57\%$).

Subgroup analysis (eight studies with 2307 participants) confirmed the benefit of brief intervention in men (mean difference: –57 grams/week (95% CI: –89 to –25), $I^2 = 56\%$), but not in women (mean difference: –10 grams/week (95% CI: –48 to 29). $I^2 = 45\%$). Meta-regression showed little evidence of a greater reduction in alcohol consumption with longer treatment exposure or among trials which were less clinically representative.

Extended intervention was associated with a non-significantly greater reduction in alcohol consumption than brief intervention (mean difference: –28, 95% CI: –62 to 6 grams/week, $I^2 = 0\%$).

What this review adds to the current knowledge: Pooled analyses from a significant number of studies document that brief alcohol intervention in primary care contexts results in significant reductions in weekly consumption for men, with an average drop of about six standard drinks per week in patients compared to controls. The review showed no significant reduction in alcohol consumption for women; although this may be partly due to low statistical power (as trials reporting outcomes from women enrolled only 499 participants), brief interventions for women are not yet justified.

Main limitations: A moderate level of heterogeneity. Another most likely source of bias is loss to follow-up, which was about 27% overall and significantly higher in the brief intervention arm than in the control arm (difference in rates of 3%, 95% CI: 1% to 6%).

The future: There is a clear need for more evaluative research on brief interventions with women, younger people and those from cultural minority groups. However, given the large number of trials of brief alcohol intervention showing a positive impact in men, there is no need for more of the same before such interventions are delivered in primary care. Longer treatment appeared to have little effect in significantly improving outcomes. Moreover, there is some suggestion that screening alone may result in alcohol consumption reduction, and this should be investigated further. Finally, future research directions should focus on implementation issues including a more precise specification of brief intervention components.

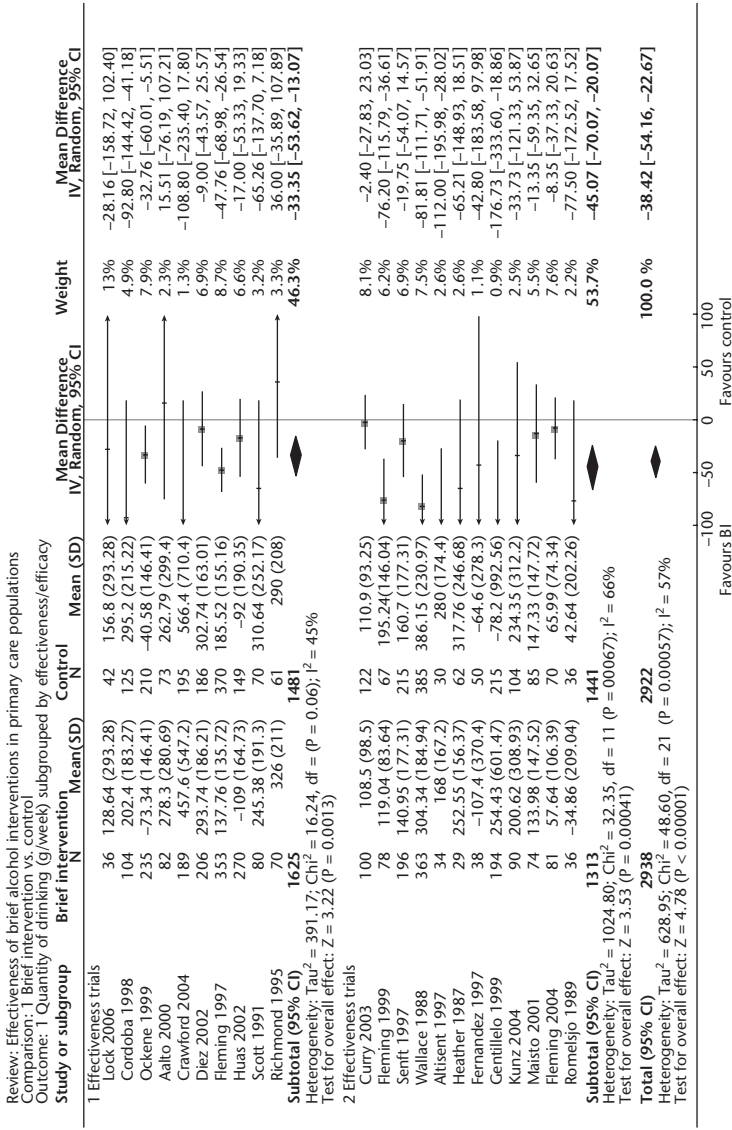


Figure 1.1 Brief intervention versus control, outcome: quantity of drinking (g/week) subgrouped by effectiveness and efficacy. Reproduced from Kaner EF, Beyer F, Dickinson HO, et al. Effectiveness of brief alcohol interventions in primary care populations. Cochrane Database Syst Rev. 2007(2):CD000418, with permission from John Wiley & Sons Ltd. Copyright © 2007 The Cochrane Collaboration.

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Reference

- 1 Kaner EF, Beyer F, Dickinson HO, *et al.* Effectiveness of brief alcohol interventions in primary care populations. Cochrane Database Syst Rev. 2007(2):CD004148. Epub 2007/04/20.