Do general practice screening programmes effectively identify people with excessive alcohol use who could benefit from brief interventions?

**METHODS**

- **Design:** Systematic review with meta-analysis.
- **Data sources:** MEDLINE, Embase, PsycINFO, Cochrane, and ETOH databases; hand searches of reference lists and discussion with European experts.
- **Study selection and analysis:** Randomised controlled trials (RCTs) using screening to identify people with excessive alcohol use, but not a specific disease or alcohol dependency. RCTs comparing brief interventions (lasting <1 hour) in general practice with no intervention or a reduced intervention were selected. Only RCTs published in English and reporting the number of people screened, with at least one discrete outcome measure relating to a clinically significant change in alcohol consumption, were included. Results were pooled using the fixed-effect Mantel-Haenszel method.
- **Outcomes:** Prevalence of excessive drinking determined by screening; proportion qualifying for brief interventions; numbers needed to treat (NNT) and effect of screening.

**MAIN RESULTS**

Nineteen RCTs were included in the review; seven of these RCTs were included in the meta-analysis. Overall, 9% of people were positive for excessive alcohol use on initial screening. 2.5% qualified for brief interventions after further assessment. Brief interventions significantly reduced the likelihood of continued excessive drinking compared with no intervention (absolute risk reduction 10.5%, 95% CI 7.1% to 13.9%; NNT 10, 95% CI 7 to 14). After one year, two to three people per 1000 people screened would reduce their alcohol consumption to recommended levels (pooled screening effect size per 1000 people after one year, 2.6 people, 95% CI 1.7 to 3.4).

**CONCLUSIONS**

Brief interventions are effective for reducing excessive drinking. However, universal screening in general practice is an inefficient and labour intensive way of identifying people for these brief interventions.

**NOTES**

Included studies varied in their definitions of excessive drinking, treatment goals, and in their follow up times. Some studies set their

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**Commentary**

Up to 20% of patients seen in primary health care settings are excessive drinkers. Brief, valid screening tools are available to identify risky drinking and alcohol use disorders in primary care settings. Truly brief interventions that can be done in busy health care settings, are efficacious for reducing alcohol consumption and, in at least one study, mortality. Meta-analyses have confirmed the efficacy of brief intervention. Beich et al's systematic review extends this literature by defining its focus to general practice, and by aiming to draw conclusions regarding the whole process of screening followed by brief intervention. The main finding of the review was a significant absolute risk reduction of 10%: 10 excessive drinkers would need to receive the brief intervention to yield one patient drinking lower risk amounts. The authors also calculated the number of patients that would need to be screened (followed by brief intervention for those screening positive) to yield a patient drinking lower risk amounts: they concluded that 1000 patients would need to be screened to yield 2–3 such patients.

This latter finding (the “screening effect”) should not be considered applicable to clinical practice. It is not appropriate to draw conclusions regarding the yield of screening in clinical practice from screening in clinical trials that require informed consent and—in order to maximise validity—have restrictive entry criteria. The number needed to screen to benefit one patient is likely a substantial overestimate.

Nonetheless, the main finding of the meta-analysis—that brief intervention for excessive drinking in primary care settings is efficacious—should lead clinicians and researchers to continue to look for ways to facilitate implementation. Limited clinician time, the need for education regarding effective delivery of brief counselling interventions, and resources for assessment and referral are challenges that remain in translating brief intervention from research studies to practice settings.

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