# Rethinking brief interventions for alcohol in general practice

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Rethinking brief interventions for alcohol in general practice

Standfirst: Brief alcohol interventions are thought to be efficacious for prevention in general practice, though effectiveness has not been demonstrated, and a more comprehensive approach to consideration of how evidence may guide policy and practice in this setting is required.

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General practice has been promoted for decades as the key setting internationally for the delivery of brief individual advice and counselling interventions to reduce heavy alcohol consumption, largely for prevention purposes. Practitioners have been sceptical about embracing this work, however, and implementation has been slow. This analysis piece examines the evidence base, and how it may be interpreted, identifying challenging issues for policy, practice and research.

The logic of prevention is compelling. For the NHS and other large health systems under long term cost pressures, demand continues to rise. Tackling unhealthy lifestyles including alcohol requires a "radical upgrade in prevention and public health" (1). In such a context, “brief interventions” offer promise of efficiency, and an accumulated evidence base suggests effectiveness (2). This is a charismatic idea, one which is likely to appeal to policy makers (3), in an era of resource constraint. It has also been suggested, however, that developing the wider evidence-base around trials has been neglected (4). General practitioners have been ambivalent (5), and proof of concept has been called into question in a recent UK community pharmacy trial where patients did not see why they should be intervened with when they did not see their drinking as problematic (6).

The clinical justification for addressing unhealthy alcohol use and its contribution to presenting health issues is based on the needs of the individual patient, and is quite different from the public health justification (7). After more than three decades of study in primary care, it now seems highly unlikely that brief interventions alone may confer any population-level benefit, and their ultimate public health significance will derive from working in concert with other effective alcohol policy measures (7). Treatment initiation for those with unhealthy alcohol use has recently been proposed as the central element of a new paradigm for primary care (8). Attempts to apply screening and brief
intervention to drugs have resulted in null trials in primary care and a conclusion that we need to go “back to the drawing board” (9).

The evidence is weaker than it first appears

The evidence-base is not as compelling as it first appears. This literature is plagued by a crucial ambiguity. Intervention effects are too easily described in terms of effectiveness, when efficacy may be more apt. Studies vary importantly in the extent to which they reflect what might be expected to occur in routine practice (10). A Cochrane review focused on brief interventions in primary care settings (11) identified an overall reduction in drinking approaching 5 UK units per week in a meta analysis of 22 trials. This review provides the only dedicated investigation of whether existing evidence should be interpreted in efficacy or effectiveness terms. This study used an unvalidated instrument and did not report inter-rater reliability, scoring only 6 studies lower than 8 on a scale of 12, finding no differences in effects between 12 ‘efficacy’ trials compared to 10 ‘effectiveness’ trials (11). There are construct validity and other grounds for concern about the performance of this instrument (12). Researchers tend to be heavily involved in these trials, and to characterise the primary care brief interventions literature as demonstrating effectiveness based on this sole finding appears an unsafe inference. The Cochrane review is also noteworthy in that the trials reporting the largest effects took place in settings other than general practice such as emergency departments (13), or are at high risk of bias (14, 15), or both (16, 17). There is no effect estimate presented for general practice studies only, or for those not at high risk of bias.

More recent large NHS general practice effectiveness trials have been convincingly negative, findings difficult to reconcile with an interpretation of the earlier evidence base as demonstrating effectiveness (18, 19). A systematic review of reviews of this literature (2), concluded that it
“supports the effectiveness of brief intervention at reducing alcohol-related problems” even though the study investigated self-reported consumption rather than ‘problems’ as outcomes, and did not evaluate the efficacy-effectiveness issue. The rated quality of reviews in this study was lower than in other fields using the same tool (20). Many unsystematic reviews discussing this literature refer to earlier reviews, which make similar claims of effectiveness. We suggest that effectiveness inferences are not secure, and consequently that, at best, efficacy is the more appropriate interpretation of this literature.

There is widespread recognition of the limitations of this evidence base, usually couched within a global interpretation of effectiveness. The content of advice and generic brief counselling that forms the bulk of the brief interventions in general practice evidence base are almost entirely unstudied (21). Study of brief interventions in other settings (where null findings are more common) has begun to yield valuable process studies, which as may be expected of behavioural interventions, demonstrate considerable complexities in providing strong evidence identifying mechanisms of effects, with challenging implications for intervention design (22). We do not know which skills practitioners should possess to discuss alcohol (23). We know little about variability in effects by age, gender, ethnicity, or impacts on health inequities (2). Similarly, we know little about cross-cultural variability or health system features conducive to effective intervention, nor how existing evidence may generalise to other healthcare settings (24). It should not be expected, however, that brief interventions exert any more than short term effects in any setting (25), though these are likely to be highly cost-effective (26), if effects can be reliably ascertained. Almost all identified effects are on self-reported alcohol consumption outcome data (27) and may require multiple sessions (28); effects on other outcomes are neither consistent nor convincing (28). Self-reported effects on alcohol consumption are vulnerable to social desirability bias since those in intervention groups are aware they have been advised to drink less, and are then asked to report whether they have done so.
**Implementation problems**

Effectiveness interpretations of this literature have largely been accepted and national programmes begun to be implemented (23). These target reduction in alcohol consumption rather than address health consequences or other problems directly. Further evidence weaknesses are apparent if one asks basic questions about implementation. There is no basis for deciding who gets which type of brief intervention, and although stepped care approaches have been influential (29), there is an absence of supporting evidence (30). In a recent UK general practice trial, fewer than 10% of alcohol screen positive patients did not also screen positive for diet, exercise or smoking (31). So, how, when or why should practitioners prioritise alcohol over other potential targets for prevention work if it is not possible to address them simultaneously because time is short?

When national programmes are implemented, what gets rolled out looks quite different from what has been studied. For example in the Swedish national programme, almost all brief interventions were delivered in less than 5 minutes (32), whereas the median delivery time in the Cochrane primary care review was 25 minutes (11). Similarly, the IBA (Identification and Brief Advice) model based on the SIPS trial with null findings (18) is recommended for delivery in 5-10 minutes in England (33), and there are widespread concerns about the evidence on such brief single session interventions (28). Dedicated large-scale efforts to address implementation problems and raise screening and brief intervention rates have been largely unsuccessful (34, 35).

General practitioners may be more concerned with identifying and addressing patients with existing problems (8). Efforts to stimulate attention to alcohol in general practice have been probably trying to do too many things at once, addressing a range of possibilities without making clear enough...
distinctions about what may be involved (4, 23). For example, there has been a lack of clarity about
prevention and treatment, mirroring the different public health and clinical rationales for addressing
alcohol (23). Alcohol is not unusual in this regard, and analogies are useful here. For other complex
conditions, such as depression, it has also been difficult to establish whether case finding should be
based upon screening, as clear evidence of benefit has been lacking (36, 37). Similarly, for intimate
partner violence it has been possible to demonstrate effects on referrals made (38), though health
benefits have been more challenging to identify (39). Evidence of successful referral to specialist
alcohol treatment services is weak (40), and treating alcohol more like hypertension or cholesterol in
general practice has been proposed (8).

What should be done?

Previous examinations of NHS performance (41), and other health systems (42), have identified
systemic issues bearing upon effectiveness. In the UK lack of national leadership and myriad
problems in local implementation are striking (41). Stronger evidence-informed scrutiny would be
useful, for example, in more realistic appraisals of the possible contribution of brief advice
unsupported by environmental and other policy interventions (7). Opportunity costs may include
limiting the scope for broader lifestyle screening, and have implications for the treatment of alcohol
problems. Such scrutiny could also provide helpful guidance to clinicians about exactly how and
when to explore alcohol’s possible relationship to presenting problems (23). Some presentations are
readily identifiable as being more likely to involve alcohol, and clinical practice involving safe
prescribing requires vigilance for interactions.

The limitations of the existing evidence make it particularly important that further investments in
prevention are accompanied by investments in research. Many of the issues discussed here also
apply to trials of psychosocial interventions and pharmacotherapies for alcohol disorders. Systematic
reviews identify few such studies at low risk of bias (43) and compliance with CONSORT reporting
guidance is weak (44). Implementation of national, regional and local alcohol programmes, where
adopted, clearly needs to be accompanied by evaluation given the uncertainties about their effects.
The complexities involved in doing these types of studies should be transparently managed to
generate confidence that the evidence is robust. The pace of development of this literature has been
disappointing, and it could be because it is written too much by public health minded alcohol
specialists (like the authors), and is not sufficiently clinician led or championed. We offer humbly
some suggestions, and invite consideration of a new agenda for future policy and practice oriented
research, in Box 1.

As the need to address alcohol (and other drugs) exists across healthcare settings and beyond, new
workforces have been drawn into this work, and the internet and mobile devices provide new
possibilities for standalone or facilitated interventions (45). The brief intervention field has made key
conceptual contributions in developing thinking about how population perspectives may be applied
to better understanding addiction problems, and how to help people avoid or reduce them (45).
Perhaps we should redefine “brief intervention” as a new guiding principle, so that interventions
should be as brief as is necessary to help someone avoid or reduce consequences, rather than being
defined by content, time, or number of sessions. The internet now allows extensive intervention
exposure, and more needs to be done to address the full spectrum of unhealthy drinking or other
drug use, specifically including people with severe conditions that may be revealed by screening and
in the context of patient-centred care (46).
It is not unusual that evidence is messy, or weaker than we might want it to be; we should find better ways to talk about this, and have more mature conversations with policy makers. We do not know whether brief interventions do work in routine practice, we do know that in certain circumstances they can make a difference, and we need to better understand how, when and why. We hope that this analysis paper stimulates discussions about ownership of responsibility for alcohol in general practice, and in health systems more broadly, among practitioners, managers, commissioners, and planners, and not only among researchers.
Contributors and sources

Both authors do research on alcohol and other addictive behaviours. The first author wrote the first draft, which was revised by the second author. The first author is the guarantor.

Conflicts of interest

We have read and understood the BMJ Group policy on declaration of interests and declare the following interests. Dr. Saitz is and has been principal investigator of grants awarded to Boston Medical Center and Boston University from the National Institutes of Health (including NIAAA and NIDA, and the Substance Abuse and Mental Health Services Administration) to study the management of unhealthy substance use, including to test the accuracy of screening and the efficacy of screening, brief intervention and referral to treatment. He has been paid to speak or had travel reimbursed to speak at numerous professional and scientific organizations, all non-profit organizations for over a decade, such as the American Society of Addiction Medicine (ASAM), the Research Society on Alcoholism, The BMJ, the Institute for Research and Training in the Addictions, the International Conference on Treatment of Addictive Behaviors, and the International Network on Brief Intervention for Alcohol and other drugs. He is an author and editor for Springer, UpToDate, the ASAM, the BMJ and the Massachusetts Medical Society (royalties and honoraria). Wolters Kluwer has supported conference travel to an editors’ meeting. He spoke at a National Press Foundation event on terminology of addiction and received no funding; the meeting was funded by ASAM, Open Society Foundations, Pew Charitable Trusts, Shatterproof, Hazelden Betty Ford Foundation and the Addiction Technology Transfer Center Network. He has been paid to serve as an expert witness in malpractice cases related to the management of alcohol and other drug disorders. He is employed by Boston University School of Public Health. The first author has no conflicts of interest to declare.

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Box 1: What alcohol research is needed for general practice?

1. What does the general public understand about unhealthy alcohol use, and what are the implications for receptivity to interventions?

2. What do clinicians see as their roles in relation to unhealthy alcohol use and prevention more broadly, and how can support for prevention roles be better designed?

3. How can the prevention and management of unhealthy alcohol use be delivered in the context of co-morbidities and multiple risk behaviours and conditions?

4. How much treatment of more severe alcohol use disorders should be delivered in general practice, and what are the roles of specialist services?

5. How much can the effectiveness of alcohol interventions be enhanced in comparison with existing care for patients?
Key Messages

- The limitations of the research literature on brief interventions for alcohol in general practice have received too little attention.
- Existing evidence is perhaps most appropriately interpreted as demonstrating efficacy rather than effectiveness for prevention, and there is a need to develop research attention to treatment.
- Implementation problems are profound, and there is a strong case for reconsidering the existing model influencing policy and practice globally.
- There is a need to more clearly define brief interventions, and reconsider health system approaches to the management of unhealthy alcohol use.
References


