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Lost in translation: the perils of implementing alcohol brief intervention when there are gaps in evidence and its interpretation

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McCambridge & Rollnick remind us how little we know about alcohol brief interventions (BI) in primary care despite half a century of study: they have modest efficacy for reducing consumption [1]. Limited evidence and simulations suggest effects on harder outcomes, which has led some to conclude it is among the most effective preventive services [2,3]. It is tempting to believe that we can address unhealthy alcohol use with a seemingly simple solution. Governments and health systems have tried [4,5].

But BI implementation studies (effectiveness studies)[6–8] find BI is often not done and, if it is, doesn't affect drinking, unlike BI in trials in which researchers have substantial control over implementation (efficacy studies). This finding may be due to lack of fidelity, or to failure to implement interventions supported by the best evidence—e.g. *multiple* (not single) interventions [2]. Since BI effect sizes are small (e.g. 3 drinks per week), even small decrements when translating BI to practice threaten loss of efficacy. And efficacy depends on selecting patients who drink enough but not too much (studies exclude risky drinkers who drink very heavily [9]). Two trials with discordant efficacy results differed in the narrowness of entry criteria [10,11]) which is problematic for a purportedly universal preventive intervention.

Other areas of medicine have addressed the loss of efficacy in translation from research to practice . Anticoagulation for atrial fibrillation can reduce the risk for stroke. But if the dose is too high or too low, efficacy is lost. Specialized clinics maximize efficacy by getting the dose right. In the alcohol BI field, evidence on lack of efficacy and loss in translation has been ignored (presumably to avoid any threat to dissemination efforts) at the cost of missed opportunities to improve effectiveness, and wasted efforts [5,6].

McCambridge & Rollnick [1] suggest brief models of motivational interviewing (MI) and pharmacotherapy could have efficacy for more severe problems in primary care. We should test these hypotheses. We should not assume evidence for BI in contexts where preventive care is not being sought or patients are seeking help for drinking will translate to screening and BI and primary care.

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The application of at least two conceptual frameworks can confuse interpretation of the research—1) BI as a preventive service and 2) BI as a treatment. These two circumstances are very different and require different evidence. The former should be tested by comparing screening and BI to no screening but this trial has never been done). The evidence for efficacy of BI in a context where patients are aware of the connection between their drinking and health (trauma centers, general hospitals, and emergency departments) is decidedly mixed [5]. Lack of efficacy may indicate that a `teachable moment' is less important than a `*learnable moment*'. Change as a result of a health consequence the patient recognizes as caused by their drinking (*without help of a BI*) may be a much more powerful and likely cause of change than a single BI by a counselor with no ongoing relationship. Context matters.

McCambridge & Rollnick [1] advocate studies of the content of BI 1) to discover more efficacious interventions, and 2) to understand the essential elements that practitioners must learn. Some work suggests that adaptations of MI don't work like we think they do [12] which has implications for what is taught and implemented. It may be that BI may not be able to be delivered widely while retaining efficacy. Skill acquisition and retention requires substantial and ongoing training [13] of the sort that is not easily done in primary care, and perhaps some practitioners can't learn it.

We should still try to discover efficacious approaches and disseminate them. But dissemination to date has proceeded without sufficient understanding of the elements necessary for the efficacy of BI and how to retain them in practice. Just as we would not abandon heart surgery as too difficult, we should not disseminate if we do not know which techniques are most efficacious, or if it were ineffective unless delivered by expert practitioners. Alcohol screening and BI deserves similar study so that its practice can reflect beliefs about its promise.

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