EDITORIAL

Large evidence base, small effects: motivational interviewing for alcohol misuse in young adults

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Motivational interviewing (MI) was initially described by Miller in 1983, developed from his experience in the treatment of problem drinkers, and subsequently introduced by Miller and Rollnick in clinical practice to treat other psychological disorders.[1][2] MI is a counselling technique based on a collaborative conversation and represents a "person-centered form of guiding to elicit and strengthen motivation for change" by exploring and resolving ambivalence.[3] MI is also evocative and seeks to call forth the person's own motivation and commitment.

A recent Cochrane Review by Foxcroft and colleagues summarises the current state of knowledge regarding the use of MI for alcohol misuse in adults up to 25 years old.[4] This review aims to answer the challenging question, expressed by Moyers in 2011, of "what results we might expect when selecting a treatment with the explicit goal of enhancing and enlarging ambivalence for young adults often showing very little ambivalence about their abusing problems".[5]

The Cochrane Review includes 66 randomised trials with 17,901 participants.[4] The main findings show that at four months or more follow-up, MI leads to statistically significant reductions in the quantity of alcohol consumed (reduction from an average of 13.7 drinks/week to 12.2 drinks/week), frequency of alcohol consumption (reduction in the number of days in the week alcohol was consumed from 2.7 days to 2.6 days), and peak blood alcohol concentration (a decrease in peak levels from 0.14% to 0.13%). For all these comparisons the quality of evidence was judged as moderate, due to selection and detection bias in the studies and high heterogeneity showing variability across studies. A marginal statistically significant effect was found for alcohol problems (a reduction in an alcohol problems scale score from 8.91 to 8.18), with low quality of evidence due to selection, detection and attrition bias, and again high heterogeneity. There was low-to-moderate quality evidence that MI has very little impact on binge drinking, average blood alcohol concentration, drink-driving, or other alcohol-related risky behaviour.

Based on these results, the authors conclude that "there is no substantive, meaningful benefit of MI for alcohol misuse by young adults".[4]

The review clearly shows the importance of seeing results not in terms of conventional thresholds of statistical significance, but more crucially in terms of clinical relevance of the effect sizes on key outcome measures.[6] The authors justify their conclusions noting: "Although some significant effects were found, we interpret the effect sizes as being too small, given the measurement scales used in the studies included in the review, to be of relevance to policy or practice. Moreover, the statistically significant effects are not consistent for all misuse measures, heterogeneity was a problem in some analyses, and bias cannot be discounted as a potential cause of these findings." The implications of this review are very relevant from a clinical point of view, due to the growing use of MI, but there is probably room for discussion. One of the external referees who commented on the review underlined that although the limitations noted by the authors were relevant, some clinicians might consider them to be overstated. MI is by its nature patient-centred, and goals are determined by the patients themselves rather than the counsellors and, as a result, are quite variable. Unfortunately this consideration might apply to different psychosocial interventions, challenging the conduct of systematic reviews on these topics. How far should we trust an estimate of the population average when treatment is individualised?

We should keep in mind that the primary purpose of Cochrane Reviews is to provide a comprehensive assessment of the available evidence and its quality, while the formulation of clinical recommendations needs to consider both the available evidence on the balance between desirable and undesirable outcomes and also other relevant factors such as values for patients and caregivers.[7] On top of that we should underline that the review focuses on young adults, and the results may not be generalisable beyond this specific population. The review does not shy away from shedding light on which kind of primary research should be necessary to increase our knowledge in such a relevant area. We support the authors call for studies on the optimal content of MI interventions and treatment exposure in this particular population, as well as the need for better-quality study design, analysis, and reporting, in line with accepted guidance.[8]

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Declarations of interest

The authors have completed the Unified Competing Interest form at www.icmje.org/coi_disclosure.pdf (available upon request) and declare no conflicts of interest.

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