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▶ The role of demographic characteristics and readiness to change in 12-month outcome from two distinct brief interventions for impaired drivers.

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Journal of Substance Abuse Treatment: 2012, 42, p. 383–391.

Can repeat drink-driving offenders be swayed by just 30 minutes with a therapist, and would those minutes best be spent in motivational interviewing or providing information on alcohol? This Canadian study hints that 'Yes' is the answer to both questions – but only hints.

Summary The featured report was based on a study which tested the effectiveness of a brief face-to-face counselling intervention based on motivational interviewing offered to drink-driving offenders living near Montreal in Canada. It aimed to test whether certain types of drink-drivers had responded best to the intervention. This account also includes findings from an earlier report from the same study evaluating whether motivational interviewing improved outcomes overall.

Participants were recruited via adverts and via letters from the province's licensing authority asking recipients to help clarify how best to convey information on the risks of alcohol misuse. 184 people joined the study and provided baseline and follow-up data. They were selected to be adults convicted of at least two offences of driving while impaired by alcohol or drugs in the past 15 years and whom the AUDIT questionnaire administered by the researchers showed had in the past six months still been drinking at problem levels. They were also selected to currently not be engaged with any other intervention targeted at drink-driving. Typically they were single men in their 40s. Around half currently met criteria for being dependent on alcohol and two thirds scored

on a standard questionnaire as feeling some degree of ambivalence about the need to change their drinking.

Participants were randomly allocated to one of two half-hour interventions delivered face to face by the same therapists, who were trained and monitored to ensure they stuck to the respective manuals and approaches. The motivational interviewing approach involved an empathic interviewing style attempting to resolve client ambivalence to facilitate the desired behaviour change without arguing with the client or confronting resistance. Though manualised for the study, the therapists could adapt the content to suit the client. The comparison intervention lacked motivational interviewing's specific therapeutic; therapists simply delivered a prepared script covering the risks of excessive drinking and drink-driving, non-specific advice about alcohol misuse, and substance use treatment options.

Main findings

Six and 12 months after the interventions researchers repeated their baseline assessments of the participants. A key measure was the percentage of days over the past six months when their alcohol intake would have placed them at greater risk of accidents, set at 42g or more for men and 28g for women. According to their own accounts, on this measure at both six and 12 months the offenders were less often at risk than before the interventions (risky drinking days down from nearly 50 to 39 and 37), but the trends did not significantly differ between the two intervention groups. Nor did the groups significantly differ in the risk levels they ended up with.

However, there was a significant difference in trends *between* the two follow-ups. Twelve months after intervention those counselled using a motivational interviewing style had continued to reduce their risk (drinking at risky levels on 25% fewer days than at baseline) while those given the information script had fallen back somewhat. It meant that by 12 months what had been a greater risk reduction in the information group had reversed and become greater among the motivational interviewing group, though neither difference was statistically significant.

Blood tests suggested that at six months (but not at 12 months) heavy drinking might have receded more after motivational interviewing than after the information session, a suggestion reinforced by a similar result on an alcoholism questionnaire particularly predictive of drink-driving.

A questionnaire assessing readiness to change to less risky drinking revealed no significant difference in trends and there was none either in the time the two groups spent in treatment for substance use over the follow-up year. The two groups were equally satisfied with their interventions, though those who experienced the motivational approach were significantly more likely (96% vs. 76%) to agree it had helped them deal with their problems.

These findings from the first report were extended by the featured report, which drew on the same data to assess whether the relative impact of the two interventions differed for offenders of different ages, sex, education level, number of drink-driving offences, severity of substance use problems, and readiness to address their risky drinking. Generally this was not the case, meaning that the relative impact of the interventions was not dependent on the type of offender.

An exception was a blood test for the consequences of heavy drinking, the same one which (▶ above) had fallen most steeply at six months after motivational interviewing. On this measure at six months, the advantage of motivational interviewing was significantly greater among offenders not thinking of changing their drinking, though just two fell in this category. On the same measure, these types of offenders also responded best, whatever the intervention.

Among the other findings from this analysis was that (regardless of intervention) participants with more severe drinking problems made the greatest reductions in their risky drinking days, and younger participants responded best to the interventions as assessed by two blood tests indicative of heavy drinking.

The authors' conclusions

Findings add weight to the contention that brief motivational interviewing interventions can reduce the negative health consequences of risky drinking in drink-driving offenders, and warrant further applied study of their feasibility and impact in venues where these offenders may be targeted, such as at court following a charge or in frontline health settings, particularly when the offenders will not be subject to a formal drink-driving intervention programme.

Various measures suggest the brief motivational interviewing session led to a significantly greater and longer lasting reduction in risky drinking. Only this intervention resulted in continued reduction in risky drinking days (ie, when the amount of alcohol consumed could pose a danger if coupled with driving) between the six- to 12-month follow-ups, consistent with significantly greater reductions in a blood test for heavy drinking and scores on a questionnaire reflecting problem drinking and the likelihood of recidivism.

There was no evidence that motivational interviewing gained its advantage by bolstering readiness to change drinking or use of treatment services. However, more participants said it had helped them cope with problems than said this of the information sessions, hinting at the possibility that the motivational approach had improved self-efficacy.

Expectations of greater responsiveness to motivational interviewing in certain types of patients were not convincingly supported. However, both types of brief intervention seemed to work best among recidivist offenders with greater ambivalence regarding the need to alter risky drinking, who were relatively young, had experienced more negative consequences of their drinking, and among men, suggesting that these interventions can reduce risky drinking among high-risk male offenders.

FINDINGS While there were hints that motivational interviewing led to greater remission in drinking and drink problems than the information session, statistically significant results were confined to two out of the 12 tests which gave the approach a chance to demonstrate its advantage. One was a single blood test result, which the authors say would carry more weight had it been confirmed by at least one other blood test. The other rested on a problem drinking questionnaire which does not mention drinking but attempts to tap personality and attitudinal characteristics which commonly distinguish individuals with such problems from those without. This 'covert' measure might have been critical had the desire to cover up one's drinking been greater among the motivational interviewing patients, but according to the study's measures, it was not.

In these circumstances, and given that they were talking to researchers who presumably assured them of confidentiality, perhaps more weight can be placed on the explicit accounts from the offenders of how much they actually did drink. On this measure there were no significant differences between motivational interviewing and information session patients in the degree to which they cut back their risky drinking, only in the trends between the two follow-up points. The decision to test this inter-follow-up trend was made *post hoc*, that is, after the results of the study were known, rendering them at best suggestive because the findings are vulnerable to researchers choosing which outcomes to report depending on what happens.

That a minority of recipients felt the motivational approach was helpful when the other approach was not was a clear difference, suggesting the encounter with the therapist – when they were permitted to act like a therapist – offered something participants valued, even if it did not lead to significantly fewer risky drinking days. This finding is relevant to the feasibility of engaging people who have not sought therapy for their drinking. Even if in controlled studies motivational approaches are no more effective than straightforward didactic approaches, they might in routine practice be more feasible to implement because they are more acceptable to the recipients than approaches which assume they have a problem and/or which lecture or confront them.

What the participants meant when they said the motivational approach helped could be that it helped curtail their drink-driving if not their drinking as such, an issue to be addressed by later reports on the study. If this was the case, it would be in line with the findings published in 1999 of an attempt to garner all the available evidence from studies of interventions which assessed impacts on alcohol-related injuries. It came to the tentative conclusion that interventions with problem drinkers can reduce injuries and deaths even when this is not the aim and when drinking itself seems unaffected. This was also the case specifically in respect of traffic accidents.

No clear superiority of a motivational versus an alternative well structured approach was also found in two recent syntheses of research (1 2) on brief and longer therapies and across treatment-seeking and non-treatment seeking caseloads. Both analyses however found motivational approaches preferable to doing nothing. Whether this was the case in the featured study cannot be established. Without a no-intervention group, it is not possible to say whether any the improvements noted would have happened anyway, even without brief intervention.

Thanks for their comments on this entry in draft to Thomas G. Brown of McGill University in Canada. Commentators bear no responsibility for the text including the interpretations and any remaining errors.

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