DRUG & ALCOHOL FINDINGS *Review analysis*

This entry is our analysis of a review or synthesis of research findings considered particularly relevant to improving outcomes from drug or alcohol interventions in the UK. The original review was not published by Findings; click Title to order a copy. Free reprints may be available from the authors – click prepared e-mail. The summary conveys the findings and views expressed in the review. Below is a commentary from Drug and Alcohol Findings.

Controlled drinking – non-abstinent versus abstinent treatment goals in alcohol use disorder: a systematic review, meta-analysis and meta-regression.

Henssler J., Müller M., Carreira H. et al.

Addiction: 2020, early view

Comprehensive review and amalgamation of findings from studies enabling a comparison of controlled drinking versus abstinence as treatment goals concludes that even among diagnosably dependent drinkers, neither has the advantage in promoting low-risk (non-)drinking.

SUMMARY The strong focus on abstinence in current treatment strategies contributes to the lack of successful treatment outcomes. Given the minority of patients who can or want to achieve abstinence, conceivably under an abstinence paradigm some patients and clinicians lose confidence in the effectiveness of treatments and are discouraged by the perception that abstinence is the only viable goal.

'Controlled drinking' is an alternative treatment goal, but also a controversial term. For the purposes of this review it is defined as aiming for a sustained pattern of drinking within rationally set limits for low-risk consumption, including not drinking at all, an aim which goes beyond moderation or reduced drinking. Rather than assuming that any alcohol treatment patient can sustain this pattern of drinking, interventions which embody this goal merely accept controlled drinking as a potential outcome and a valid goal alongside abstinence.

Key points
From summary and commentary

Aiming to drink within recommended limits (the featured review's definition of 'controlled drinking', one which includes non-drinking) could open up treatment to the many problem drinkers unwilling to countenance abstinence or who do not see their problems as severe enough to warrant treatment.

Studies comparing alcohol treatment in which patients are aiming for controlled drinking versus abstinence show neither has a clear advantage in actually achieving controlled drinking.

A controlled-drinking objective works best if accompanied by therapy supportive of that objective, and/or when patients aim to drink within recommended low-risk limits, rather than self-defining a reduction target.

Serious concerns about controlled-drinking approaches have repeatedly been put forward, and acceptability among clinicians remains low, especially when controlled drinking is posited as a final rather than intermediate goal, and patients are dependent as opposed to sub-dependent harmful drinkers. The fear is that allowing a controlled-drinking objective may be against the best interests of individuals with alcohol use disorder, risking self-deception and undermining abstinence-oriented treatments known to be associated with the least risk of harm for the patient. Yet at the same time, clinical trials have found that non-abstinent treatment strategies generate improvements and remission to low-risk drinking, and that drinking reductions short of abstinence reduce the risk of adverse medical consequences.

To date it is unclear how useful a controlled-drinking treatment goal is compared to approaches aiming for abstinence. Trials have yielded contradictory results, and specifying abstinence as the primary outcome favours abstinence-oriented treatments. The featured review is the most comprehensive attempt yet to amalgamate results from relevant research in order to estimate the comparative efficacy of controlled-drinking relative to abstinence paradigms, and uses controlled drinking itself as its primary outcome. It also assesses other alcohol consumption measures as well as harms related to drinking and social functioning, while accounting for possible influences on these outcomes, including the severity of the alcohol use disorder, whether the treatments are actually constructed to foster controlled drinking versus abstinence, and how non-abstinence goals are defined.

Included in the review were follow-up studies of adult patients with alcohol use disorders (including but not limited to dependence) which enabled a comparison of the efficacy of non-abstinent versus abstinent treatment regimens and/or goals. 'Controlled drinking' was operationalised as drinking within recommended limits down to and including abstinence. Where possible the analysis included all the patients allocated to

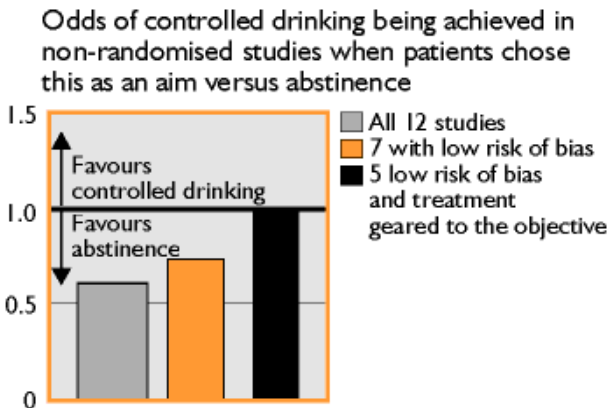
the compared regimens or who chose the compared goals, even if they did not start treatment or complete it or the study. Excluded were results arising from an abstinence goal being imposed on the patients. Results from individual studies were to be amalgamated using meta-analytic techniques, unless the differences between them meant that pooling their results did not make sense.

The reviewers found 22 such studies. They were published between 1973 and 2017 and included 4,204 patients, 1,953 of whom were aiming for controlled drinking. Though all the studies had an abstinence-oriented comparison group, in only five of the 22 had possible bias been most securely eliminated by allocating patients at random to this versus a controlled-drinking aim. All five of these randomised trials tested treatments not just aiming for controlled drinking versus abstinence, but actually geared to achieving these different objectives, as did nine of the 17 non-randomised studies. Patients could choose their goal in 16 of the 22 studies, half of which allowed them to switch during treatment. Most (15 of the 22) studies included non-dependent participants drinking at harmful levels as well as those who were dependent.

Main findings

Randomised trials generated no reliable advantage for either approach. On the primary outcome, results from two trials could be amalgamated, yielding an estimate that about a third more patients allocated to controlled drinking achieved this than did those allocated to an abstinence-oriented regimen, but the uncertainty in this non-statistically significant advantage was wide enough to mean that other or future trials might reverse it. Taken one by one, the remaining three randomised trials also found some evidence favouring controlled drinking in terms of the level of alcohol consumption and the proportion of patients who reduced this level, though none yielded a statistically significant advantage for either regimen. Across all five trials, controlled-drinking approaches were associated with a strong but still not statistically significant reduction in the proportion of patients who dropped out of treatment and/or the study. Across the three trials to measure this, the proportion of patients who substantially reduced drinking was about the same, as was the proportion still drinking heavily, while the proportion not drinking at all slightly favoured abstinence-oriented approaches. Across two trials, social functioning was slightly better after controlled-drinking than after abstinence-oriented approaches.

Twelve non-randomised studies evaluated goal choice and measured controlled-drinking rates. Across these, aiming for controlled drinking was 40% less likely to end in achieving this objective than was aiming for abstinence. This difference was statistically significant, meaning chance variation could be ruled out, though in the nature of such studies it was not possible to say that the chosen objective was responsible.



The outcome advantage associated with choosing an abstinence versus controlled-drinking goal virtually disappears in the best studies and with corresponding treatments

Eight of the non-randomised studies not only allocated patients to different treatment objectives, but also to treatment regimens geared to those objectives. Across these there was a lesser disadvantage of about 20% for controlled drinking, and the margin of uncertainty was such that further studies might reverse this tendency. When the analysis was limited to the seven non-randomised studies at the lowest risk of bias, results were similar but slightly more favourable for a controlled-drinking objective. When these seven were further narrowed down to the five studies whose treatments were actually geared to the competing objectives, there was practically nothing to choose between the two approaches ▸ chart.

On the assumption that patients not followed up had continued to drink to excess, results from the same studies can be expressed as the proportions of patients known to have achieved controlled drinking (including abstinence). Across 13 studies from which this data was available, 34% of patient aiming for controlled drinking succeeded in this objective compared to 44% aiming for abstinence. This gap was not large or consistent enough to rule out chance variation, and narrowed to just under 4% (about 36% v. 40%) in studies which also offered treatment geared to controlled drinking versus abstinence, and which set controlled-drinking patients a consumption level they should not exceed.

Next the analysts sought to account for the large variation in results across the studies. They found that the longer the follow-up period, the more the controlled-drinking outcomes tipped towards favouring controlled-drinking aims and treatments. At periods of over a year (in practice, 24–42 months in the four relevant studies) nearly 50% more patients allocated to controlled drinking actually achieved it compared to those allocated to abstinence. This greater long-term advantage after controlled-drinking aims/regimens was not accounted for by greater drop-out from longer term studies, and was no less apparent among studies with more severely drinking patients at entry to

the study.

Nor did severity of drinking significantly affect controlled-drinking results from the studies overall. One test of this separated out the five studies whose samples consisted solely of dependent drinkers, among whom aiming for controlled drinking was about 40% less likely to end in achieving this objective than aiming for abstinence, but with such variation between the studies that the advantage across all possible studies could be in the opposite direction. All five studies were non-randomised; for comparison, this difference was about the same as across non-randomised trials in general. Results were also not significantly affected by the sex breakdown of the samples.

Unless specified otherwise, the preceding results were all in respect of the primary outcome of controlled drinking. Among other measures, regardless of their allocation to or choice of controlled-drinking versus abstinence aims, almost identical proportions of patients achieved substantial drinking reductions (58–59%) and reported improved social functioning. More patients with an abstinence aim dropped out of the studies, but also more actually were abstinent at follow-up (21% v. 10%), a difference large and consistent enough to be unlikely to be due to chance, as was the difference in the proportion of days of non-drinking. There was, however, a non-significant tendency for abstinence-aiming patients to drink more on the days that they did drink.

Remission often took a different form to the patient's initial goal. Despite choosing or having been allocated to controlled-drinking goals, many switched their goals to abstinence and a third of the patients who maintained controlled drinking did so by not drinking at all. Conversely, while at least 44% of patients choosing or allocated to abstinence goals achieved controlled drinking, at most 21% did so by actually abstaining.

The authors' conclusions

Studies to date do not unequivocally favour abstinence-based approaches over controlled drinking. In fact, the few – dated and methodologically limited – randomised trials which allocated patients to the differing objectives and treatments suggest approaches aimed at controlled drinking are equally effective. Though overall, non-randomised trials in which patients choose their goals tended to favour abstinence as a basis for treatment, controlled-drinking approaches had better outcomes in the longer term (two years or more), when treatments were geared to that objective, or in the most rigorous studies. Equivalency implications based on controlled drinking as an outcome are reinforced by other outcomes, including drinking severity, relapse into heavy drinking, intensity of drinking when it happens, and social functioning. The implications are that even if they do not achieve their objectives, similar proportions of patients whose were initially aiming for abstinence or for controlled drinking will benefit from treatment in the form of reduced drinking.

However, results varied widely; a large randomised trial seems required to guide clinical decisions. For now, a controlled-drinking objective seems viable when the (often more medically advisable) abstinence route is not applicable, such as when abstinence has not been able to be achieved or if patients are adamantly unwilling to altogether stop drinking. A controlled-drinking objective is yet more viable if accompanied by therapy supportive of that objective, and/or when patients aim to drink within recommended low-risk limits, rather than self-defining a reduction target.

The review provides evidence to address some of the concerns about the controlled-drinking paradigm. Offering such a goal does not in itself undermine patients' insight into required behaviour changes. Across the reviewed studies, a third of patients who maintained low-risk drinking after controlled-drinking approaches did so by not drinking at all. More generally, when this was allowed for, a substantial proportion of participants who initially chose a controlled-drinking goal switched to abstinence. Secondly, there is no indication that severity of alcohol use disorder predicts whether a patient will do better under an abstinence-oriented versus a controlled-drinking aim/regimen; the results do not confirm the conventional wisdom that controlled drinking is only acceptable for non-dependent patients.

The gap between the need for alcohol treatment and its utilisation is large and chronic, while unsatisfactory results from current abstinence-oriented treatments also indicate a need to refine such approaches or find alternatives. Maintaining an exclusive treatment goal of abstinence in a society that condones and encourages drinking perpetuates a binary model of alcohol use disorders (whereby these disorders are seen as the preserve only of 'alcoholics') that is not conducive to recognising one has an alcohol problem or then seeking treatment. For instance, a binary model allows most of those with drinking problems to contrast these with stereotypes of the 'alcoholic other', and to conclude that their drinking is insufficiently serious to warrant treatment. Alternative, non-binary models that view drinking problems along a continuum ranging from lower to higher risk appear to offer important benefits for extending problem recognition and help-seeking and reducing stigma, potentially substantially reducing the public health burden of alcohol use disorders. Most people who sought treatment in recent clinical trials have not expressed an interest in abstinence-based goals, meaning that the common public view that abstinence is required as part of treatment

is a significant barrier to treatment-seeking, and one which contributes to the shame and stigma associated with treatment.

FINDINGS COMMENTARY The featured review confirms accumulating evidence and expert opinion which endorses reduced-risk drinking as a feasible goal in the treatment of dependence, one which (unless abstinence is made the gold-standard yardstick of success) studies find is about as likely as abstinence-oriented approaches to produce desired drinking and social outcomes. For more on the history of controlled drinking as a treatment objective and on research and contemporary opinion, see the Effectiveness Bank hot topic on the issue.

While the overall results of the review are not surprising, it is a surprise that there that aiming for abstinence was no more effective in studies which had recruited a greater proportion of patients with more severe alcohol use disorders diagnosed as dependence. Accepted wisdom is that controlled drinking may be possible for people who had not so badly lost control of their drinking as to be diagnosed as dependent, but would prove near impossible for those with the pathologically impaired control implied by that diagnosis. However, this will not be the last word on the issue, and nor are these findings definitive. They emerged from analyses based on outcomes from each study as a whole, meaning any trend to greater severity favouring an abstinence goal might have been submerged among the other very large differences between the studies in their participants, treatments, and assessments. It remains possible that an amalgamation of trends within each study would have shown that once everything else was more or less held constant, greater severity did favour an abstinence goal. It also remains possible that the severity dimensions which might be captured by a diagnosis of dependence are not those relevant to whether abstinence becomes the more suitable objective. For example, in the US system in use until 2013, a diagnosis might be made solely on the basis of physical dependence and often drinking more than you intended to, with no reference to social circumstances and psychological vulnerabilities which might make it more difficult to stop drinking while still within relatively safe levels.

A trio led by Katie Witkiewitz – a researcher who has made a substantial contribution to investigating the issue – submitted a commentary on the featured review, arguing that it "provided compelling evidence that controlled drinking is possible, even among some individuals with severe [alcohol use disorder]". For the trio, which included James Morris, a prominent commentator on UK alcohol policy, the review's findings confirmed recent research which showed that among people with alcohol use disorders, drinking reductions short of complete abstinence are achievable, sustainable and associated with improvements in how they feel and function for several years after treatment. They agreed with the reviewers that the results further support non-abstinent recovery as a potential treatment target that could extend the scope and reach of treatment across the problem-drinking population. Beyond treatment, they also saw the review's findings as consistent with the drinking reductions and personal/social functioning improvements achieved by most people with alcohol-related problems who recover outside of the context of formal treatment.

Alcohol treatment services in the UK are unambiguously advised by the National Institute for Health and Care Excellence (NICE) to guide drinkers at the more severe end of the spectrum of alcohol use disorders towards abstinence and to favour moderation lower down the scale, yet without ever ruling out non-abstinent goals if working with these is required to engage the drinker in treatment.

On the ground, pragmatism is the rule. Surveyed in 1999/2000, two-thirds of the leaders of British substance use services fully endorsed the acceptability of controlled drinking as an intermediate outcome for non-dependent alcohol 'abusing' clients, and only slightly fewer as a final outcome, though the corresponding figures for physically and psychologically dependent clients were 42% and 29%. However, absolute dogmatism was relatively rare; even when rejection was at its maximum, only 23% saw controlled drinking as a "completely unacceptable" final goal for dependent drinkers, and 60% of services made such treatment available to their dependent clients.

Our thanks to James Morris of London South Bank University and the Alcohol 'Problem' Podcast for bringing this 'early view' version of the review to our attention.

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