Psychological interventions for alcohol misuse among people with co-occurring depression or anxiety disorders: a systematic review

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CRD summary

This review concluded that there was some evidence that cognitive behavioural therapy and motivational interviewing were effective in the treatment of co-occurring alcohol misuse and depressive or anxiety disorders. The review was limited by the available evidence. The authors' cautious conclusions are likely to be reliable.

Authors' objectives

To determine the efficacy of psychological interventions to reduce alcohol misuse in patients with co-occurring depressive or anxiety disorders.

Searching

PubMed and PsycINFO were searched from inception to March 2010 for relevant studies in English. Search terms were reported.

Study selection

Eligible studies were randomised controlled trials that evaluated psychological interventions for co-occurring alcohol misuse among patients with mood or anxiety disorders diagnosed using recognised diagnostic criteria. Eligible trials were required to utilise a treatment manual and report data on alcoholic use outcomes. Psychological interventions were defined as non-pharmacological treatments for either alcohol misuse alone or alcohol misuse and mood or anxiety disorders. Studies in which a large proportion of patients presented with psychotic disorders compared to affective disorders were excluded from the review. Studies of in-patient participants with various disorders were excluded.

The included studies were conducted in outpatient clinics and psychiatric wards in Australia, USA, Holland and Canada. Patients presented with depressive disorders, dysthymia, social phobia, panic disorder and agoraphobia. Most of the included population were male. Mean ages ranged from 32 to 45 years. Interventions included cognitive behavioural therapy, motivational interviewing and interpersonal psychotherapy. Comparator treatments were psycho-education, standard psychiatric interviews and brief supportive psychotherapy. Where stated, the interventions were conducted by clinical psychologists, therapists and nurses. Where stated, intervention durations ranged from 12 to 32 weeks. The outcomes evaluated were those related to daily and/or monthly use of alcohol, alcohol abstinence and severity of anxiety or depression.

Two reviewers independently performed the study selection.

Assessment of study quality

Methodological quality was assessed by two independent reviewers using the PEDro scale of patient eligibility, random allocation, allocation concealment, baseline similarity of groups, blinding of assessors, adequacy of follow-up, use of intention-to-treat analyses, use of between-group comparison of outcomes and presentation of point estimates and variability of outcomes. The maximum attainable quality score was 9.

Data extraction

Data were extracted by one author and checked by a second to compare effect sizes for alcohol use, depression and anxiety outcomes between studies and between treatments. Mean differences were calculated using the Cohen's d-statistic.

Methods of synthesis

The results of the review were presented in a narrative synthesis. The reviewers presented forest plots of paired standardised mean differences and 95% confidence intervals (CI) comparing baseline and immediate post-intervention alcohol outcomes stratified by alcohol outcome measure and for depression and anxiety outcome measures.

Results of the review

Eight randomised controlled trials (14 to 284 patients) were included in the review. One study scored 9 on the PEDro scale, two studies scored 8, one scored 7, two scored 6 and two scored 5. Follow-up ranged from one month to 12 months post-intervention. Reported losses to follow-up ranged from 14% to 86%.

Alcohol misuse in patients with mood disorders: One study found motivational interviewing and cognitive behavioural therapy over nine sessions were associated with larger significant reductions in alcohol consumption in patients with depressive disorders than was the case with brief interventions. In another study, improved alcohol use outcomes were found for patients with depression who received cognitive behavioural therapy compared to brief interventions but depression and global functioning outcomes were similar at 18 weeks follow-up.

Interpersonal psychotherapy of 16 weeks duration achieved significantly improved outcomes in depressive outcomes, compared to brief supportive psychotherapy but had little observed effect on alcohol consumption in patients with dysthymia. In one study motivational interviewing for a single 45-minute session was associated with significant reductions in alcohol use at six months compared to provision of an information package in hospitalised patients with mood and anxiety disorders. In one study, motivational interviewing was found to confer benefits in numbers of standard drinks consumed and fewer episodes of binge drinking compared to an attention-control group condition in a group of patients with mixed psychiatric inpatients; however, there were no differences between groups in patients who attended aftercare or in abstinence rates in this study.

Alcohol misuse in patients with anxiety disorders: In one study, cognitive behavioural therapy was found at three months follow-up to be associated with significant reductions in alcohol use and anxiety when treatment was focused either on alcohol use alone or on both alcohol use and anxiety. Another trial found significant effects on anxiety of cognitive behavioural therapy (12 weekly 60-minute sessions) and alcohol treatment compared to alcohol treatment alone in patients with social phobia. There were no differences between groups for alcohol use outcomes. A trial that compared 10 sessions of behaviour therapy with the same number of cognitive therapy sessions found that these interventions were similarly effective in reducing drinking and anxiety symptoms at 12 months follow-up; patients in this trial were diagnosed with panic disorder with agoraphobia and alcohol dependence.

Effect sizes for changes in alcohol use and depression/anxiety symptoms immediately following treatment: Interventions associated with large changes (at least one standard deviation) on alcohol use included therapist-delivered cognitive behavioural therapy for patients with depression (one study), group motivational interviewing for mixed psychiatric samples (one study), parallel cognitive behavioural therapy for alcohol and anxiety (one study) and targeted alcohol-focused cognitive behavioural therapy for patients with anxiety disorders (one study).

Authors' conclusions

There was some evidence that cognitive behavioural therapy and motivational interviewing were effective in the treatment of co-occurring alcohol misuse and depressive or anxiety disorders. Longer interventions were associated with improved mood and alcohol use outcomes.

CRD commentary

The review addressed a clear question. Study inclusion criteria were outlined. Two appropriate databases were searched for relevant studies but there were no attempts to identify unpublished studies. The review was restricted to studies in English so there was a risk of language bias. Steps were taken by the reviewers to minimise errors and biases at each stage of the review process.

The authors' decision to summarise the results in a narrative review appeared justified because of the clinical heterogeneity between the studies. Methodological quality of the included trials was medium to good but results of the included trials were limited by small sample sizes, lack of long term follow-up, high losses to follow-up (up to 86% in one trial), reliance on self-reported outcome measures and lack of information on treatment adherence.

Despite the limited search and the possibility that studies may have been missed, the authors' conclusions about the limited evidence presented are likely to be reliable.

Implications of the review for practice and research

Practice: The authors stated that contingency management where patients were rewarded for desirable behaviours provided an avenue for enhancing the effectiveness of cognitive behavioural therapy and improving attendance at follow-up appointments.

Research: The authors stated that further research was required as there was limited research available to inform psychological treatment for co-occurring alcohol misuse and depressive or anxiety disorders

Funding
National Health and Medical Research Council, Australia; Queensland University of Technology Vice Chancellor's Senior Research Fellowship; Australian Postgraduate Awards.

Bibliographic details
Baker AL, Thornton LK, Hiles S, Hides L, Lubman DI. Psychological interventions for alcohol misuse among people with co-occurring depression or anxiety disorders: a systematic review. Journal of Affective Disorders 2012; 139(3): 217-229

PubMedID
21890213

DOI
10.1016/j.jad.2011.08.004

Original Paper URL
http://www.sciencedirect.com/science/article/pii/S0165032711004617

Indexing Status
Subject indexing assigned by NLM

MeSH
Adult; Alcohol-Related Disorders /complications /therapy; Anxiety Disorders /complications /therapy; Cognitive Therapy; Depressive Disorder /complications /therapy; Female; Humans; Male; Middle Aged; Motivational Interviewing; Randomized Controlled Trials as Topic

AccessionNumber
12012029787

Date bibliographic record published
21/11/2012

Date abstract record published
20/06/2013

Record Status
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.