Evidence Summary Title:
The efficacy of motivational interviewing for excessive drinking: Evidence and implications for public health

Quality Assessment Rating: 7 (moderate)

Review on which this evidence summary is based:

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This is an evidence summary written to condense the work of the authors of this systematic review, referenced above. The intent of this summary is to provide an overview of the findings and implications of the full review. For more information on individual studies included in the review, please see the review itself.

Review content summary
A meta-analysis of 15 randomized controlled trials, involving 2,767 participants, was conducted to assess the efficacy of motivational interviewing in reducing alcohol consumption. Results indicated that brief (87 minutes) of motivational interviewing was more effective than no intervention in decreasing alcohol consumption. Comparatively, 53 minutes of motivational interviewing was more effective than a set of diverse treatments in reducing alcohol consumption. However, over time, the effects of motivational interviewing decreased.

Comments on this review's methodology
This is a methodologically moderate meta-analysis. A clearly focused research question was identified. The level of evidence, study design, and the methodological quality was described for each of the primary studies. However, a comprehensive search strategy was not employed and the results of the review were not transparent. Tests for heterogeneity were conducted and it was found that results differed significantly from study to study and it is likely the effects sizes reported overestimate somewhat the true impact of motivational interviewing.

Why this issue is of interest to public health
According to Statistics Canada, in 2002, more than 600,000 Canadians were alcohol dependent. Both men and women are equally classified as alcohol dependent, even though men are twice as likely to be heavy drinkers compared to women. However, alcohol dependent women are twice as likely as men to become depressed. Not only does alcohol consumption have health and social consequences, such as intoxication and depression, it also can lead to death and disability. According to the World Health Organization, the cost of alcohol related problems in Canada amounts to about $18.4 billion or 2.4% of Canada’s gross domestic product. Alcohol consumption is economically draining since it contributes to more than 60 types of diseases and injuries and accounts for 20-30% of worldwide cancers, liver problems, homicides and accidents.

Evidence and implications

Evidence points are not weighted or ranked according to strength.

<table>
<thead>
<tr>
<th>What’s the evidence?</th>
<th>Implications for practice and policy:</th>
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<tbody>
<tr>
<td>1. Motivational interviewing (MI) vs. no-treatment control (9 studies)</td>
<td>1. MI vs. no-treatment control</td>
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<tr>
<td>1.1. Participants that received MI treatment were significantly more likely to have reduced alcohol consumption than those participants who received no treatment (p&lt;0.001)(0.18, 95% 0.07-0.29)</td>
<td>1.1. Public health organizations should offer motivational interviewing as a brief intervention to reduce risky alcohol consumption and related health and social problems.</td>
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<td>1.2. Significant variation was found in the effect sizes across studies (Q = 29.62, p&lt;0.05). A decision was made after the above analysis was conducted to identify possible variables or characteristics that may have accounted for this variability.</td>
<td>1.2. Public health organizations should consider offering booster sessions as the effectiveness of MI treatment fades after three months. However, given the post hoc nature of the analysis, additional research and rigorous</td>
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1.2.1. Follow-up period (5 studies)
1.2.1.1. Participants receiving MI were significantly more likely to have reduced alcohol consumption at three months than those who received no treatment (p=0.013) (0.60, 95% 0.36-0.83)
1.2.1.2. Participants receiving MI were no more or less likely to have reduced alcohol consumption at six months than those who received no treatment (p=0.788)
1.2.1.3. The effects of treatment were significantly greater at 3 months follow-up than at 6 months (Q=15.9, p<0.001)

1.2.2. Drinking severity (7 studies)
1.2.2.1. When patients with more severe drinking problems are removed from the analysis, MI results in significant reductions in alcohol consumption at three months compared to those receiving no treatment (d=0.40, 95% 0.36-0.44) (Q=7.82, p<0.05). The mean duration of brief MI treatment was 87 minutes.

2. MI vs. a comparison treatment (9 studies)
Comparison treatments included usual/brief advice/standard care (5 studies), educational intervention (1 study), skill-based counselling (1 study), and cognitive behavioural treatment (1 study). Average duration of MI in these studies was 53 minutes.
2.1. Participants who received MI intervention were significantly more likely to have reduced alcohol consumption than those who received other treatments (p<0.01) (0.43, 95% 0.17-0.70).

3. Methodological Issues
Methodological issues associated with this review and which may impact the generalizability of these findings include:
3.1. Measurement of alcohol consumption
3.2. Diverse populations
3.3. Multiple factors with potential to influence the results

4. Cost Benefit or Cost-effectiveness Information
4.1. No cost related information was included in the review

4.1. Future research should assess cost benefit or cost-effectiveness of the interventions

General Implications
- MI is effective in reducing alcohol consumption
- Additional high quality research and program evaluations are required in order to address methodological issues associated with this specific review.

Legend: CI – Confidence Interval; OR – Odds Ratio; RR – Relative Risk
**For definitions please see the health-evidence.ca http://www.healthevidence.org/glossary.aspx

References used to outline issue

Other quality reviews on this topic


Related links

• Alcoholics Anonymous http://www.aa.org/


• WHO – Alcohol http://www.who.int/topics/alcohol_drinking/en/

Suggested citation


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