

# AOTA Evidence Briefs Substance-Use Disorders

\*A product of the American Occupational Therapy Association's Evidence-Based Literature Review Project

## SU<sub>3</sub>

# Brief interventions with heavy drinkers are twice as likely to produce moderation than no intervention at all

Wilk, A. I., Jensen, N. M., & Havighurst, T. C. (1997). Meta-analysis of randomized control trials addressing brief interventions in heavy alcohol drinkers. *Journal of General Internal Medicine*, 12, 274–283.

**Level: I**Meta-analysis

# Why research this topic?

The medical profession has focused its efforts on the medical problems of patients with a heavy dependence on alcohol. Yet only 5% of Americans are severely dependent alcoholics, whereas about 20% are "problem drinkers"—excessive consumers of alcohol but not alcohol dependent. This knowledge has led to efforts at earlier identification and intervention, and to expansion of techniques and goals for treating nondependent or mildly dependent drinkers. In particular, brief interventions have been introduced.

#### What did the researchers do?

Wilk, Jensen, and Havighurst (1997), of the University of Wisconsin–Madison, decided to conduct a **meta-analysis** (see *Glossary*) of randomized controlled trials of brief interventions with heavy drinkers of alcohol.

The researchers searched two computer databases, MEDLINE and PsycLIT, for articles published from 1966 to 1995 that were about alcoholism or alcohol drinking and contained such words in their title as "problem drinking," "intervention," and "clinical trials." They also reviewed bibliographies of relevant articles and of research experts in the field. They retrieved all articles that met the following criteria: "(1) clear focus on alcohol abuse or dependence or on heavy drinking; (2) focus on intervention and outcome; (3) publication in English; (4) human subjects, aged 19 to 65 years and older; and (5) the study design of a prospective clinical trial" (p. 275). They then screened those articles/studies to identify the ones that were truly randomized controlled trials, included a **control group** (see *Glossary*) receiving no alcohol-related treatment or intervention, had a sample size of more than 30, and involved a brief intervention that was "motivational with a self-help orientation" (p. 275).

The researchers initially identified 5,896 articles. Using all the criteria just described, they narrowed the number to 12. They scored the studies for quality. A study with a score of .42 or better was considered high quality. Then they calculated "odds ratios"—the odds of the treatment group achieving moderation 6 or 12 months after the intervention, compared with the control group.

Across the 12 studies represented in the articles, 3,948 people (gender and average age not reported) participated. The interventions all were short, motivational counseling sessions from 10–60 minutes long. Seven involved 1–3 follow-up sessions.

The researchers were interested in the following outcome area: *moderation of drinking* (as measured by a variety of instruments across the 12 studies).

#### What did the researchers find?

The 12 studies had an average quality score of .49, a range of .28 to .76. Eight of them met the standard of high quality: a score of .42 or higher.

Eight of the studies allowed for calculation of odds ratios. The pooled odds ratio of the eight "showed that heavy drinkers who received brief motivational interventions were close to two times more likely to decrease and moderate their drinking compared with those who received no intervention" (p. 277). More detailed analysis showed a greater likelihood of alcohol moderation with more than one session of intervention, with women, and with inpatients.

## What do the findings mean?

For therapists and other providers, the findings suggest that brief interventions with heavy drinkers are twice as likely to produce moderation than no intervention at all. The interventions are low-cost preventive measures.

# What are the study's limitations?

The study has no threats to internal validity. Regarding external validity, it is not generalizable to light drinkers or to people who are dependent on alcohol.

#### **GLOSSARY**

**control group**—A group that received special attention similar to that which the treatment group received but did not receive the treatment.

**meta-analyses**—A specific subset of systematic review that statistically combines data from many studies to find a common effect. The meta-analysis' power comes from the ability to statistically digest many studies and emerge with a final assessment of their common effect.

■ Terminology used in this document is based on two systems of classification current at the time the evidence-based literature reviews were completed: *Uniform Terminology for Occupational Therapy Practice—Third Edition* (AOTA, 1994) and *International Classification of Functioning, Disability and Health (ICIDH-2)* (World Health Organization [WHO], 1999). More recently, the *Uniform Terminology* document was replaced by *Occupational Therapy Practice Framework: Domain and Process* (AOTA, 2002), and modifications to *ICIDH-2* were finalized in the *International Classification of Functioning, Disability and Health* (WHO, 2001).

This work is based on the evidence-based literature review completed by Virginia Stoffel, MS, OTR, FAOTA and Penelope Moyers, EdD, OTR, FAOTA.

For more information about the Evidence-Based Literature Review Project, contact the Practice Department at the American Occupational Therapy Association, 301-652-6611, x 2040.

