



Reducing Alcohol Use in a Military Population

Background

At the end of the 1990s, one in five U.S. military personnel were heavy alcohol users. Alcohol dependence and problem drinking can be expensive to treat, and the problem was already taking its toll in the military. In 1995, the Department of Defense (DoD) spent approximately \$5.6 million in direct health care costs related to alcohol abuse, and another estimated \$12.7 million in terms of lost productivity, among active-duty personnel. Alcohol abuse has well-known and documented serious health consequences, including liver damage, impaired immune and endocrine system function, heart damage, and psychosis. Similarly, it often has other serious negative social and/or health consequences, such as

- high-risk sex
- occupational injury
- drunk driving
- domestic violence.

In looking at force health protection, the DoD needed to know the most cost-effective ways to address the problem of alcohol abuse, so it turned to RTI International to examine the comparative merits and costs of different alcohol-use interventions. In 2004 DoD awarded RTI a roughly \$1.5 million, 4-year contract to compare two motivational interviewing (MI) interventions with the Substance Abuse Seminar, or treatment as usual (TAU) intervention.

MI interventions have been shown to be effective in reducing harmful drinking in a number of populations. The sessions focus on increasing



awareness of current drinking behavior and consequences, facilitating comparison of oneself with a standard, and encouraging the identification of strategies to reduce risks related to consuming alcohol (e.g., pacing drinks, avoiding drinking games).

RTI's study will provide the DoD with the details it needs on

- the short- and long-term effectiveness of both individual MI and group MI with heavy-drinking military personnel;
- group and individual MIs compared with a TAU control group to test factors that may mediate responses to the MI interventions; and
- the cost-effectiveness of the three interventions.

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RTI's Approach

Drawing on its experience with alcohol abuse and dependence studies, RTI is collecting data at four assessment points: baseline and 3, 6, and 12 months following the intervention across four study sites. Individuals referred for assessment (N=750) were randomly assigned to one of the three intervention groups:

- An individual MI (IMI)—in which Air Force personnel are randomly assigned to receive a brief, 1-hour MI session.
- A group MI (GMI)—which tests whether MI can be effectively offered in a small group format. Individuals in this condition attend one 2-hour meeting.
- The Air Force's 6-hour TAU program of "substance abuse awareness education" is largely unevaluated, but research data from a comprehensive review of treatment approaches indicate that educational lectures and films typically have low impact with populations of problem drinkers.

Cost-Effectiveness Analysis

RTI is assessing the cost and the effectiveness of each intervention (combining them in a cost-effectiveness analysis) at each of the follow-up points: 3, 6, and 12 months after baseline. This precise critical information allows decision makers to understand how much it costs to achieve a given gain in effectiveness. RTI breaks down the information into useful, practical details.

Results

In addition to its substantive reports to DoD, RTI plans to disseminate its findings in numerous practical ways:

- in peer-reviewed professional journals
- in briefings at Air Force bases and for other military interest groups
- in a study manual for the Air Force ADAPT programs
- at several major national conferences, such as meetings of the Research Society on Alcoholism and the American Psychological Association.

For more information about reducing alcohol use in a military population, contact

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