EVALUATING INTERVENTIONS TO CUT ALCOHOL-RELATED INJURIES

A Cochrane review gathered evidence on whether interventions by healthcare staff are effective in reducing the incidence of injuries to and by problem drinkers.

BACKGROUND
Drinking too much alcohol is harmful to people’s general health and well-being. It also presents a significant danger of incurring injuries, both intentional and unintentional. Globally it has been estimated that half of alcohol-related mortality can be attributed to injury.

Alcohol consumption has been linked with injuries and deaths resulting from road traffic accidents, falls, drowning, fires and burns. Even moderate consumption has been associated with increases in injuries and deaths resulting from trauma.

WHAT EVIDENCE DID THE REVIEW FIND?
This Cochrane review investigated whether there are ways for healthcare professionals to work with people who abuse alcohol that can reduce the number of injuries. A systematic review was undertaken to evaluate the effectiveness of interventions for problem drinking in preventing injuries. In the review alcohol dependence, alcohol abuse and hazardous use of alcohol were combined under the heading of ‘problem drinking’.

A total of 23 eligible trials were identified from an intensive literature review, 17 of which had investigated whether working with problem drinkers reduced the incidence of alcohol-related injuries. Several approaches were evaluated, with the most common, which was used in nine of the studies, being brief counselling by healthcare workers.

Effect on mortality
Eight of the trials collected data on injury mortality outcomes. Four compared intervention with no intervention. Three of these found a reduced risk of death in the intervention group compared with the control group, although all-effect estimates were imprecise because of the small numbers involved.

Effect on non-fatal injuries
Eighteen trials collected data on non-fatal injuries among problem drinkers. Eleven of these looked at injuries due to all causes while others focused on specific causes such as violence, falls and car accidents.

Of the 11 trials looking at non-fatal injuries, results were available from only six. In five of these, intervention reduced the risk of injuries or accidents compared with no intervention. Four trials found a reduction in injury risk, despite the fact that there were no beneficial effects of the treatment concerning either abstinence or reduced alcohol consumption.

One trial found that giving telephone aftercare reduced drinking-related injuries and accidents, while another found a significantly reduced risk of self-reported alcohol-related injury at six-month follow-up among adolescents who received a brief intervention in A&E.

Effect on specific non-fatal injuries
Seven completed trials collected data on non-fatal violence but data was available from only four of these.

Three trials that collected data on non-fatal violence suggest a reduction with intervention. One of these showed that a motivational interview given to injured problem drinkers resulted in fewer instances of arrest for assault, battery and/or child abuse than standard care.

The only trial looking specifically at the intervention effect on falls from problem drinking found a benefit.

WHAT DID THE REVIEW CONCLUDE?
The evidence suggests interventions with problem drinkers are effective in reducing injuries and events that lead to injury, such as falls, vehicle crashes and suicide attempts.

Although reduced alcohol consumption would seem to be the likely mechanism for any beneficial effects of intervention on injuries, the review does not provide strong support for this.

Five trials did report reduced alcohol consumption or increased abstinence but four showed no effect on these outcomes. The Cochrane reviewers speculate that the beneficial effects on injuries are mediated by other aspects of treatment for problem drinking, for example attention from health professionals and/or social support.

The availability of research examining the effect of brief clinical interventions for problem drinking is increasing. There is also an increasing awareness of the need for interventions for people with alcohol problems, particularly in A&E departments.

The review concludes that increased research on A&E department interventions for problem drinkers should help to identify characteristics of effective interventions for different ages, sexes and other populations, as well as the mechanisms of the beneficial effects of such treatment.

A key finding is that the trials had imprecise effect estimates, and often had methodological weaknesses. This suggests that this approach requires further research. This review indicates that interventions are likely to reduce the incidence of injuries and the reasons for them, but data is insufficient to draw firm conclusions, particularly in terms of the effects of intervention on the incidence of violent injuries to or by the drinker.

Since injuries account for a large proportion of the morbidity and mortality due to problem drinking, further studies are warranted to evaluate the effect that treating problem drinking may have on injuries and to investigate how any beneficial effects on injuries take effect.

REFERENCE