Interventions in the alcohol server setting for preventing injuries

Author(s)
Ker K, Chinnock P.
Published
Sunday, January 1, 2006 - 12:00
Publisher
Cochrane Database of Systemic Reviews

Abstract

Background: Injuries are a significant public health burden and alcohol intoxication is recognised as a risk factor for injuries. There is increasing attention on supply-side interventions, which aim to modify the environment and context within which alcohol is supplied and consumed. Objectives: To quantify the effectiveness of interventions implemented in the server setting for reducing injuries. Search strategy: We searched the Cochrane Injuries Group Specialised Register (September 2004), Cochrane Central Register of Controlled Trials (The Cochrane Library Issue 3, 2004), MEDLINE (January 1966 to September 2004), EMBASE (1980 to 2004, wk 36), other specialised databases and reference lists of articles. We also contacted experts in the field. Selection criteria: Randomised controlled trials (RCTs) and non-randomised controlled studies (NRS) of the effectiveness of interventions administered in the server setting which attempted to modify the conditions under which alcohol is served and consumed, to facilitate sensible alcohol consumption and reduce the occurrence of alcohol-related harm. Data collection and analysis: Two authors independently screened search results and assessed the full texts of potentially relevant studies for inclusion. Data were extracted and methodological quality was examined. Due to variability in the intervention types investigated, a pooled analysis was not appropriate. Main results: Twenty studies met the inclusion criteria. Overall methodological quality was poor. Five studies used an injury outcome measure; only one of these studies was randomised. The studies were grouped into broad categories according to intervention type. One NRS investigated server training and estimated a reduction of 23% in single vehicle night-time crashes in the experimental area (controlled for crashes in the control area). Another NRS

examined the impact of a drink driving service, and reported a reduction in injury road crashes of 15% in the experimental area, with no change in the control; no difference was found for fatal crashes. One NRS investigating the impact of a policy intervention, reported that pre-intervention the serious assault rate in the experimental area was 52% higher than the rate in the control area. After intervention, the serious assault rate in the experimental area was 37% lower than in the control. The only RCT targeting the server setting environment with an injury outcome compared toughened glassware (experimental) to annealed glassware (control) on number of bar staff injuries; a greater number of injuries were detected in the experimental group (relative risk 1.72, 95% CI 1.15 to 2.59). A NRS investigating the impact of a intervention aiming to reduce crime experienced by drinking premises; found a lower rate of all crime in the experimental premises (rate ratio 4.6, 95% CI 1.7 to 12, P = 0.01), no difference was found for injury (rate ratio 1.1. 95% CI 0.1 to 10, P = 0.093). The effectiveness of the interventions on patron alcohol consumption is inconclusive. One randomised trial found a statistically significant reduction in observed severe aggression exhibited by patrons. There is some indication of improved server behaviour but it is difficult to predict what effect this might have on injury risk. Authors' conclusions: There is no reliable evidence that interventions in the alcohol server setting are effective in reducing injury. Compliance with interventions appears to be a problem; hence mandated interventions may be more likely to show an effect. Randomised controlled trials, with adequate allocation concealment and blinding are required to improve the evidence base. Further well conducted non-randomised trials are also needed, when random allocation is not feasible. Copyright 2006, Wiley-Liss

Web link

http://www.ncbi.nlm.nih.gov/pubmed/18646123

View PDF