The effect of alcohol advertising and marketing on drinking behaviour in young people: systematic review of published longitudinal studies

Introduction

Drinking behaviour and associated harm increasingly is a cause for concern, particularly amongst young people. Many factors may contribute to a young person’s decision to drink, including parental and peer group influence. The role that alcohol marketing and advertising plays in the drinking practices adopted by young people is an important question and a matter of much debate.

A large body of research has linked alcohol advertising to increased awareness and liking of alcohol advertisements and positive associations with drinking behaviour. However, many of these studies are cross-sectional designs, or do not measure drinking outcomes exclusively in young people.

The authors focused on a systematic review of the evidence from cohort studies which evaluated the relationship between alcohol advertising or marketing and alcohol use in young people at a later point in time. If such studies are well designed, conducted and analysed they can provide supportive evidence for a causal association between a particular exposure and an outcome.

The authors carried out a comprehensive search for relevant articles using several electronic bibliographic databases (October 2006) supplemented with hand searches of reference lists of retrieved articles.

Findings

They found seven studies meeting the review inclusion criteria. Five were conducted in USA, one in Belgium and one in New Zealand. All were prospective cohort studies, one of which also reported data for follow-up on 18 year olds based on retrospective data collection. The studies provided data on more than 13,000 young people aged 10 to 26 years old.

Different measures of exposure were assessed in each study. For example, TV, radio, magazine, in-store alcohol advertising, watched TV show index and hours of TV and music video viewing.
Alcohol consumption was evaluated in all studies at follow-up using a variety of different outcome measures. For example, any alcohol use in the past month, any alcohol use in the past year, drinking frequency, drinking frequency at specific locations and alcohol use whilst going out.

The results of each study are described below:

• New Zealand men who recalled seeing more alcohol advertisements at age 15 drank significantly more beer at 18 years. In the same cohort, in beer drinkers aged 18, liking of alcohol advertising had a positive impact on beer consumed at age 21 years and were more likely to be heavy drinkers at 26 years.

• In Californian school children increased viewing of TV programmes with alcohol advertisements increased the chance of beer consumption one year later.

• Exposure to in-store beer displays significantly increased the chance of alcohol consumption two years later in US adolescents.

• In 15 to 26 years olds in the USA, for each additional advertisement seen the number of alcohol drinks consumed increased by 1%.

• In Californian school children for each additional hour of TV viewing per day there was a 9% increased risk of initiating drinking 18 months later.

• Increased hours of television and music video viewing were associated with higher quantity of alcohol consumed one year later in Belgian school children.

• School children in Vermont were significantly more likely to have tried alcohol for the first time at follow-up at one to two years with greater exposure to alcohol portrayals in popular movies.

Implications

All seven studies demonstrated significant effects across a range of different exposure variables and outcome measures. These included exposure to direct advertising using broadcast and print media and indirect methods such as in-store promotions and portrayal of alcohol drinking in films, music videos and TV programmes.
There are several limitations that should be considered when interpreting the results of this review. One of the biggest threats to the validity of observational studies such as cohort studies is the issue of confounding, whereby the outcome of interest is modified by some other factor or factors in addition to the exposure of interest. Whereas all of the studies controlled for a number of confounding factors possibly related to alcohol drinking behaviour, unmeasured or unknown confounders cannot be adjusted for and it is not possible to know if residual confounding influenced the analysis. Given the magnitude of the effect sizes shown in these studies, it is possible they were due to residual and unmeasured confounding.

Further research exploring the potential causal impact is warranted; the role of mass media as a potential source of influence on alcohol related knowledge and behaviour of young people has been neglected in many countries.

Nonetheless, we now have stronger empirical evidence to inform the policy debate on the impact of alcohol advertising on young people.

This work was carried out at Oxford Brookes University by Lesley Smith under the guidance of David Foxcroft.