

# Information and education

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## Introduction

In 2006, it was concluded that there was limited evidence for the effectiveness of public service announcements and public education campaigns (particularly those focusing on low-risk drinking guidelines), although media advocacy approaches could be important to gain public support for policy changes ([Anderson & Baumberg, 2006](#)). Likewise there was limited evidence for the impact of warning labels, although there was an argument for their use in relation to consumer protection and consumer rights. There were individual examples of the beneficial impact of school-based education, but systematic reviews and meta-analyses found that the majority of well-evaluated studies showed no impact, even in the short term. There was considerable experience of what might be best practice in school-based education programmes, but unconvincing evidence of their effectiveness. This is not to imply that education programmes should not be delivered, since all people do need to be informed about the use of alcohol and the harm done by it, but school-based education should not be seen as the only and simple answer to reduce the harm done by alcohol.

## School-based information and education

Many systematic reviews have evaluated school-based education and concluded that classroom-based education is not effective in reducing alcohol-related harm ([Foxcroft et al., 2003](#); [Jones et al., 2007](#)). Although there is evidence of positive effects arising from increased knowledge about alcohol and improved alcohol-related attitudes, there is no evidence for a sustained effect on behaviour. One systematic review of 14 systematic reviews identified 59 high-quality programmes, of which only 6 were able to demonstrate any evidence of effectiveness ([Jones et al., 2007](#)). Another systematic review of the impact of universal school-based prevention programmes for alcohol reported in 2011 found 53 trials ([Foxcroft & Tsertsvadze, 2011a](#)). However, estimating the overall impact was hampered by poor reporting quality in almost all the trials. Of the 11 trials that evaluated alcohol-specific interventions, 5 found no effect and 6 found some evidence of effect in some outcome measures. Of the 39 trials that evaluated generic interventions, 25 found no effect and 14 found some evidence of effect in some outcome measures. The most commonly observed positive effects across programmes were for drunkenness and binge-drinking. Unfortunately, it was not possible to identify any characteristics that distinguished trials with positive results from those with no effects. It is interesting to note that one of the series of reviews that did find a positive outcome ([Tobler et al., 2000](#)) was based on inappropriate analyses which, on proper analysis, found no effect ([McCambridge, 2007](#)).

It has been suggested that parenting programmes might have more promise but, even here, mixed effects have been found. For example, a systematic review of 14 parenting programmes found reductions in alcohol use in only 6 programmes ([Petrie, Bunn & Byrne, 2007](#)). Another systematic review of the impact of family-based prevention programmes for alcohol reported in 2011 found 12 studies reporting 9 trials (not 12 trials as reported in the review) ([Foxcroft & Tsertsvadze, 2011b](#)). Three of the nine trials found no effect. In the remaining six trials, there was evidence for effect, although this was not consistent across all outcome measures and time periods.

It has also been suggested that social marketing programmes might have more promise but, even here, mixed effects have been found. A systematic review of 15 social marketing programmes found 8 out of 13 studies showing some significant effects on alcohol use in the short term (up to 12 months), 4 out of 7 studies showing some effect at 1–2 years, and 2 out of 4 studies showing some effect over 2 years (Stead et al., 2007).

A systematic review of the impact of multicomponent prevention programmes for alcohol reported in 2011 found 20 trials (Foxcroft & Tsertsvadze, 2011c). In general, the scientific quality and reporting of the trials was poor. Of the 20 trials, 8 found no effect. There was some evidence for some positive outcomes in the remaining 12, but in only 4 studies was the effect consistent across the range of outcome measures used. From this review, it cannot be reliably concluded that multicomponent interventions for the prevention of alcohol-related harm in young people is effective.

A systematic review of preventive interventions addressing under-age drinking identified 25 reviews and over 400 interventions. The evidence for 127 of these was reviewed and only 12 were found to have promising evidence on alcohol outcomes (Spath, Greenberg & Turrisi, 2008). The promising interventions were mixed, and it was not possible to identify any clear group or category of programme that showed promise.

While education primarily aims to affect behaviour through influencing attitudes, there is some evidence to suggest that in fact attitudes are influenced by behaviour, thus raising the question of whether interventions should focus on attitudes or behaviour. Research in adolescent smoking has found that attitudes towards smoking were neither consistent nor strong predictors of smoking behaviour over time (de Leeuw et al., 2008). The same study found that in fact, past smoking was related to attitudes indicating that adolescents adapted their attitudes to match their behaviour. It also suggested that other factors play important roles in beginning and continuing to smoke, such as favourable social images and peers who smoke.

## **Public education campaigns**

In general, public information campaigns have been found to be ineffective in reducing alcohol-related harm (Babor et al., 2010). Exceptions are mass media campaigns to reduce drinking and driving which, when implemented in the presence of strong drinking and driving countermeasures, can have an impact (Elder et al., 2004). Counter-advertising, a variant of public information campaigns which provides information about a product, its effects and the industry that promotes it in order to decrease its appeal and use, has inconclusive effects (Babor et al., 2010).

## **Campaigns based on drinking guidelines**

While campaigns based on drinking guidelines have been used in some countries, there have been no rigorous evaluations as to whether publicizing such guidelines has any impact on alcohol-related harm (Babor et al., 2010). In 2009, the Australian National Health and Medical Research Council released a revision of Australia's official low-risk alcohol guidelines, specifying low-risk consumption levels for both short- and long-term consumption. Large general population surveys run in 2007 and 2010 provided before and after measures of respondents' estimates of low-risk drinking levels (Livingstone, 2012). In the 2010 survey, fewer than 5% of respondents estimated low-risk drinking levels that matched those in the 2009 guidelines. Generally speaking, younger respondents and heavier drinkers provided higher estimates of low-risk drinking thresholds. There was little change in the estimates between 2007 and 2010.

## Social responsibility messages

There is evidence that social responsibility messages from alcohol manufacturers or retailers, whether stand-alone or when added to product advertisements, benefit the reputation of the sponsor more than they do public health. For example, a study that assessed the impact of adding drink-driving messages to bar advertisements showed that inclusion of the message had positive effects on the perception of the advertiser in terms of concern about the safety of bar customers, but did not affect the attitudes or intentions variables (Christie, 2001). Similarly, another study found the message in alcohol industry social responsibility spots to be ambiguous, especially for the group aged 16–18 years, but that the source of the message (the alcohol company) was favourably perceived. Two thirds of the sample perceived the spots to be fairly or very similar to beer commercials, with over two thirds agreeing that the spots suggested that beer drinking was fun (Smith, Atkin & Roznowski, 2006). A recent review indicated that ambiguity and inconsistency in the use of the “responsible drinking” concept in alcohol advertising and public health commentary is widespread and conducive to misunderstanding (Barry & Goodson, 2010).

## Consumer labelling and warning messages

In France, since 2007 a health warning has been placed on alcoholic drinks packaging in order to promote abstinence during pregnancy, supported by a press campaign and extensive media coverage. Two telephone surveys were conducted in 2004 and 2007 among two independent representative quota samples of the French population aged 15 years and over (approximately 1000 people interviewed in each survey) (Guillemont & Leon, 2008). It was found that the recommendation that pregnant women should not drink alcohol was better known after the introduction of the health warning (87% of the respondents) than before (82%) ( $p < 0.001$ ). After the introduction of the label, 30% thought that the risk for the fetus started after the first glass compared with 25% in 2004 ( $p < 0.01$ ). These rather modest results contrast with evidence from tobacco, where there is evidence of impact although it may reflect the nature of the warning labels, since it seems that the introduction of more graphic and larger warnings for cigarettes, with rotating messages, has affected behaviour (Borland et al., 2009). Nevertheless, warning labels are important in helping to establish a social understanding that alcohol is a special and hazardous commodity (Wilkinson & Room, 2009).

## What to do about education and information

When looking at education alone, the lack of evidence for effectiveness could lead to policy-makers considering withdrawing funds from education programmes altogether. This would involve several risks, including: losing the importance of education for society in improving individual capital; losing an important means of gaining awareness of and support for other control measures; and leaving a gap which may be filled by industry-backed programmes. Many education programmes focus on young people, and there is evidence that young adults and adults are often overlooked; it is easier for young people to see such programmes as hypocritical when adults are left alone. Young adults and adults often serve as drinking role models for young people and also support easy access to alcohol, which is associated with increased drinking in all age groups, and are therefore an important target audience (Giesbrecht, 2007). The conceptual shift from influencing attitudes to affecting behaviour to looking at the influence of behaviour on attitudes is important to consider, especially among young people. It may be more effective to focus education/information activities on policy-makers and the general public as a means to raise awareness of the burden of alcohol-related harm and the benefits of effective measures to reduce this harm. Interventions could be reframed to encourage and support consumer advocacy by providing information on how the public can influence alcohol policy.

## Conclusions

The following conclusions should be helpful for policy and practice.

- There is extensive evidence that school-based information and education programmes do not consistently lead to sustained changes in behaviour.
- Although they show some promise, there is no consistent evidence to demonstrate that parenting programmes and social marketing programmes lead to sustained changes in behaviour.
- Although poorly researched, there is no consistent evidence that public education campaigns lead to sustained changes in behaviour.
- There are no rigorous evaluations to demonstrate whether or not campaigns based on drinking guidelines lead to sustained changes in behaviour.
- Although there is limited research, there is some evidence that social responsibility campaigns by the alcohol industry can be counterproductive due to ambiguity and mixed messages.
- There is some evidence to show that consumer labelling and warning messages do not lead to sustained changes in behaviour.

Information and education on the risks from alcohol and how to reduce them is needed for an educated population and for the development of individual capital, although as an isolated policy measure it will not reduce alcohol-related harm. Education policy could benefit from incorporating a conceptual shift from influencing attitudes to affect behaviour to looking at the influence of behaviour on attitudes. Education and information activities could be reframed to encourage and support consumer advocacy by providing information on how the public can influence alcohol policy.

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