

This entry is our account of a review or synthesis of research findings selected by Drug and Alcohol Findings as particularly relevant to improving outcomes from drug or alcohol interventions in the UK. Unless indicated otherwise, permission is given to distribute this entry or incorporate passages in other documents as long as the source is acknowledged including the web address <http://findings.org.uk>. The original review was not published by Findings; click on the [Title](#) to obtain copies. Free reprints may also be available from the authors – click [Request reprint](#) to send or adapt the pre-prepared e-mail message. Links to source documents are in [blue](#). Hover mouse over [orange](#) text for explanatory notes. The Summary is intended to convey the findings and views expressed in the review. Below are some comments from Drug and Alcohol Findings.

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### ► [The effectiveness of anti-illicit-drug public-service announcements: a systematic review and meta-analysis.](#)

Werb D., Mills E.J., DeBeck K. et al. [Request reprint](#)

**Journal of Epidemiology and Community Health: 2011, 65, p. 834–840.**

*Governments spend millions on them and they may serve political functions, but do anti-drug media campaigns prevent drug use? This first systematic review finds no strong evidence that they do and some that they can have the opposite effect.*

**Summary** Nations including the UK, USA, Australia and Canada have mounted media campaigns featuring commercials aimed at preventing the use of illicit drugs, generally targeted at young people. Despite their popularity, what impact such campaigns have is unclear. The featured review aimed to fill this gap by analysing relevant English-language articles deriving from studies assessing impacts on intentions to use illicit drugs and/or actual self-reported use.

The review prioritised studies which randomised participants to be exposed or not to the adverts, but also included other studies, and went beyond studies published in peer-reviewed journals to consider conference abstracts and government reports. Eleven studies published between 1989 and 2008 were found. Four observed the impacts of national and local campaigns by surveying the intended audiences, while six recruited study participants and randomised them to view, listen or read campaign adverts or not. Another randomised trial exposed participants to different kinds of campaign ads. All the randomised studies were from the USA and involved young people no more than 22 years of age, and all but one assessed the young people's immediate reactions to the ads. All but one of the observational studies was also from the USA.

### Main findings

Two of the randomised studies found the ads had some of the intended effects, in one case slightly weakening intentions to use illicit drugs, in the other, slightly bolstering intentions to call a drug abuse hotline. Another five found the ads had no significant impacts, or impacts the reverse of what was intended. Data required to pool findings on

intentions to use illicit drugs was available for six comparisons deriving from randomised trials. These amalgamated to a small impact amounting to an **effect size** of 0.15 in the 'wrong' direction – strengthening intentions to use. However, by conventional criteria this result was not statistically significant, so could have reflected chance variation rather than a true impact of the ads.

A similar amalgamation of results from observational studies found that campaigns were associated with a very small reduction in the use of illicit drugs amounting to an **effect size** of 0.04. Though statistically significant, the comparisons which contributed to this figure registered very variable outcomes from increased to decreased use. Notably, the two national studies of national campaigns in Australia and the USA detected no significant impacts on illicit drug use. In Australia, young people did become more negative about the effects of amphetamine and ecstasy, but in the USA they became more accepting of cannabis use.

### The authors' conclusions

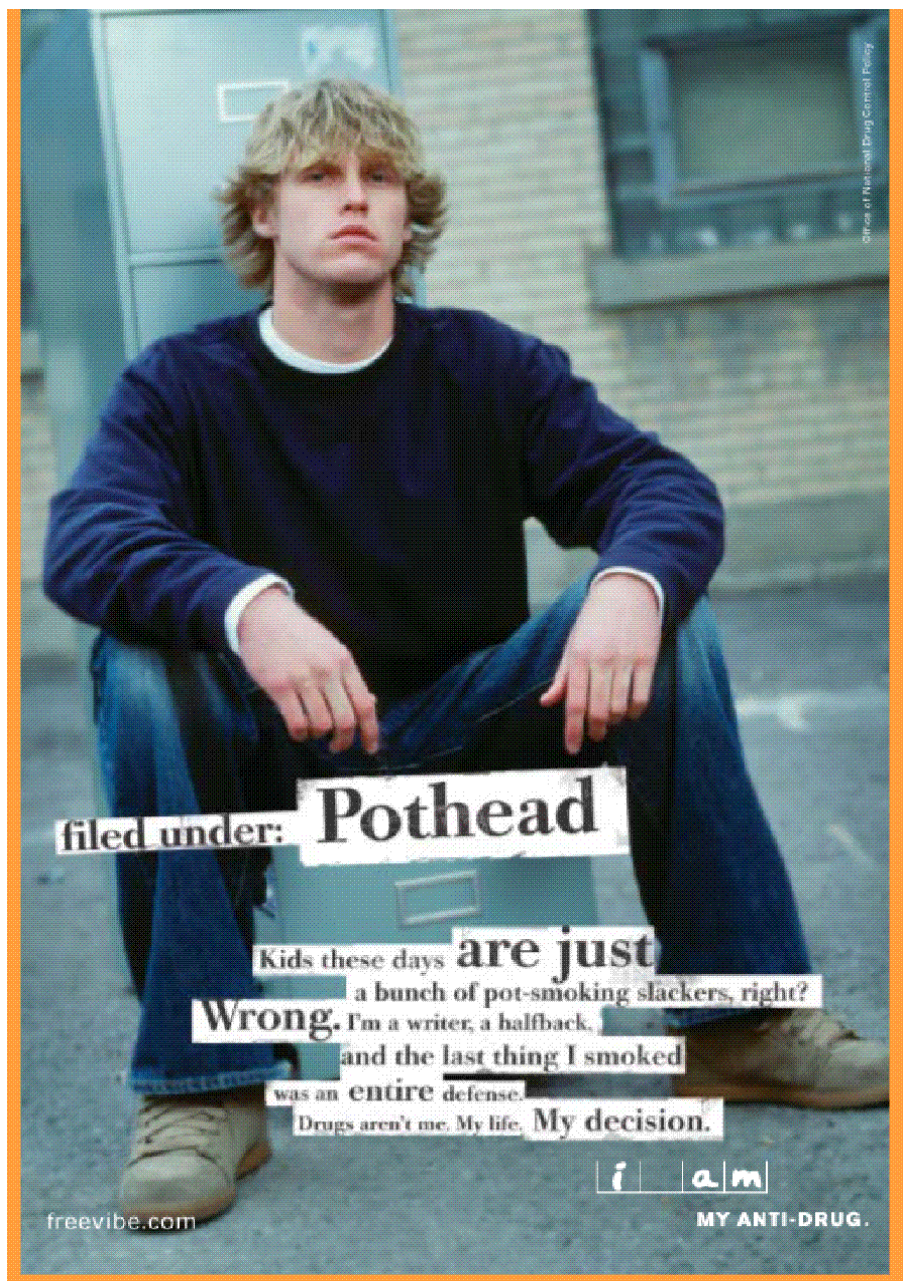
This review concludes that there is insufficient data to support the conclusion that anti-illicit drug public service announcements affect intention to use illicit drugs or self-reported use among targeted youth, and suggests that campaigns can have negative as well as positive effects. Taken together, randomised studies offer no support for a preventive impact of the adverts used in anti-drug campaigns and no study has investigated long-term impacts, while survey studies observing the effects of campaigns in the real world are equivocal.

It could be that the theories underlying the research, which are predicated on a direct relationship between intention and behaviour, fail to account for socio-demographic, environmental and other variables which affect an individual's ability to act according to their intentions. In particular, most evaluations do not take account of features such as ethnicity, where people live, their incomes, and housing situations. One study also found that secondary school children who saw anti-cannabis ads, and then were randomly allocated to an on-line 'chat' about the ads, subsequently recorded attitudes and beliefs significantly less favourable in prevention terms than their peers not allocated to the chats, suggesting that social interaction can affect a campaign's impacts.

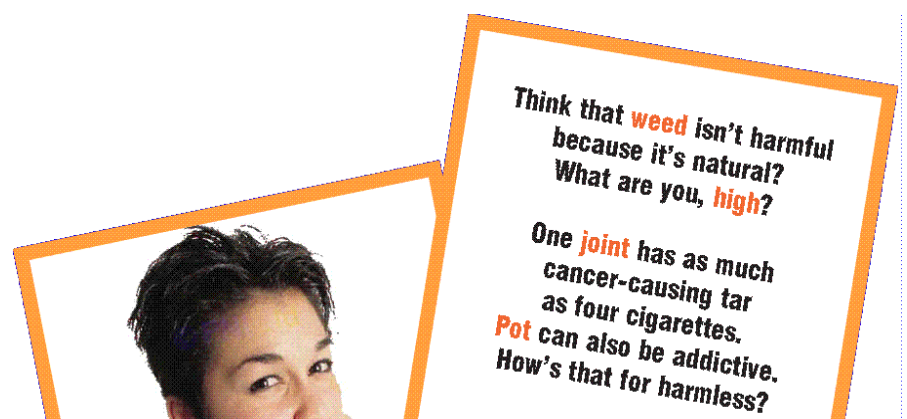
The ability to draw any firm conclusions is however limited by the paucity of studies especially of long-term impacts, and by the variability and quality of the available studies.

**FINDINGS** The conclusion that anti-drug campaigns cannot be shown to generally have achieved their objectives rests on the assumption that their sole objectives are drug use prevention. But as the authors of the featured review hint, such campaigns perform multiple tasks, including perhaps bolstering support for uncompromising anti-drug laws and policies. The most notable failure in prevention terms was the US National Youth Anti-Drug Media Campaign ► *illustrations*. However, **according to** a watchdog on US government spending, its real objective was to persuade US states not to allow cannabis to be legally supplied for medical purposes. The degree to which it may or may not have succeeded in this objective has never been formally evaluated.

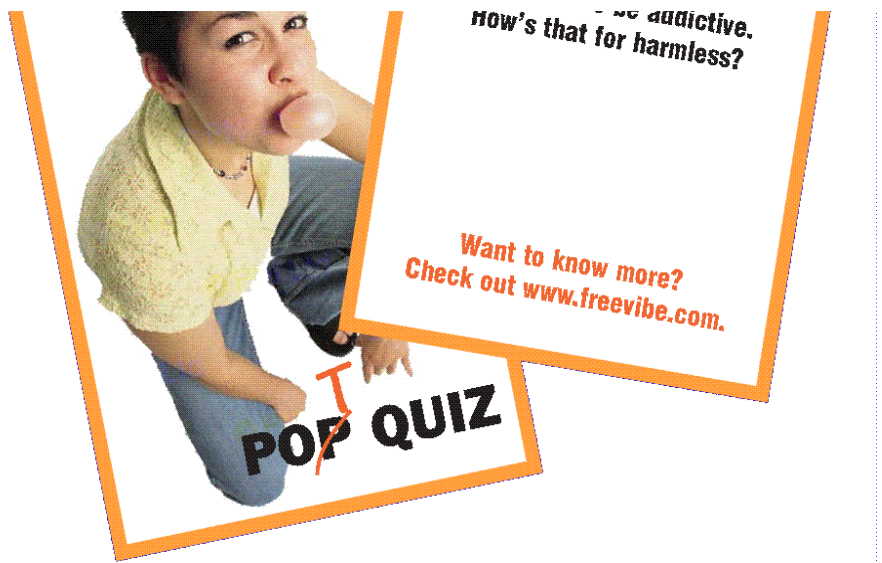




Taking the campaigns at face value, the greatest concern is the potential for counterproductive impacts. There is evidence that these can be generated in several ways and by adverts which seem to carry the strongest anti-drug messages. These may imply that drug use is very common and hard to resist, provoke a 'don't tell me what to do' counter-tendency to use drugs, be rejected as contrary to personal experience, or generate discussions among young people dominated by those most more vociferously pro-drug. Examples below.







Evaluators suspect that the explicitly anti-drug messages of the US National Youth Anti-Drug Media Campaign initiated in 1999 were countered by an "implicit message – that drugs are a big problem and their use is widespread ... and that resistance [to using them] may be difficult". There was also the possibility that while most young people were unaffected by the ads, some resented being 'told what to do' and reacted by moving in the opposite direction. Such tendencies could have accounted for findings that social norms were more favourable to cannabis the more ads a child recalled experiencing, and a non-significant tendency for more exposure to be followed by a greater chance that the child expected to try cannabis during the following year.

As described by Findings, in one of the randomised trials included in the featured review, school children allocated to watch hard-hitting anti-cannabis ads featuring the 'gateway' scenario of cannabis use leading to 'hard drug' addiction ended up feeling more positive about cannabis and more likely to say they would use the drug than peers who had not seen the ads. The researchers conjectured that these children rejected the gateway depiction because it was contradicted by their own experiences, a speculation strengthened by the fact that these youngsters were indeed the ones most sceptical about cannabis leading to harder drugs.

Another study of 12–18-year-olds recruited in shopping centres found they reacted relatively badly to ads which showed cannabis being smoked. Youngsters unlikely in any event to use the drug reacted well to anti-cannabis ads regardless, but those the ads most needed to deter – the ones most likely to use the drug – saw the ads overall as less effective, and especially those which featured the drug or its use.

The featured review highlighted a study of secondary school children who saw anti-cannabis ads, and then were randomly allocated to engage or not engage in an on-line 'chat' about the ads. Compared to those who did not, youngsters who chatted following exposure to the ads subsequently recorded more pro-cannabis and less anti-cannabis beliefs or attitudes, more peer pressure to use cannabis, and less disapproval of cannabis use by adult authority figures. One mechanism seemed to be that young people most likely to use cannabis (those who value new, exciting and possibly risky experiences and have been most exposed to cannabis use) contributed most to the on-line chats and their comments tended to be relatively favourable to cannabis, generating a social climate more supportive of cannabis use. If such discussions are stimulated by anti-drug campaigns, these too could, the analysts speculated, have counterproductive impacts, especially among young people most likely to try drugs.

*This draft entry is currently subject to consultation and correction by the study authors and other experts.*

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