



PERSPECTIVES ON DRUGS

Mass media campaigns for the prevention of drug use in young people

The use of mass media campaigns as a drug prevention intervention is relatively common, but it is not without controversy. Both policymakers and practitioners have debated the effectiveness of such campaigns in reducing drug use among young people, and there is a possibility that they may be counter-productive. In Europe, more than one-third of the 30 countries affiliated to the EMCDDA report that mass media campaigns on illicit drugs are either not carried out or have been cut back, in some cases because of concerns about their safety. This analysis contributes to the debate by reviewing the available evidence on the efficacy of mass media campaigns for drug use prevention.

The use of mass media campaigns to reduce health problems in society gained momentum in the 1970s, with an initial focus on improving cardiovascular health. The positive results obtained by the first campaigns led to their further use in areas as diverse as heart disease, cancer, HIV/AIDS prevention, family planning and domestic violence. From the 1970s on, media campaigns were increasingly used in the prevention of tobacco, alcohol and illicit drug use.

Mass media campaigns in public health disseminate information about health, or threats to it, in order to persuade people to adopt behavioural changes. They are usually implemented via television and radio, newspaper or magazine advertisements, billboards and road posters. They can also use the Internet, text messaging and e-mail. Public health media campaigns are generally undertaken by public bodies and may be standalone interventions or they may be integrated into complex social marketing programmes, and may encompass several rounds of delivery.

The potential of mass media campaigns lies in their ability to propagate simple and focused messages to large audiences repeatedly, over time, at a low cost per capita. It is also assumed that they are able to reach a large and heterogeneous proportion of the population (Wakefield et al., 2010). However, a major ethical dilemma associated with such campaigns lies in the fact that the target population has generally not requested this kind of social intervention, and furthermore they might have negative effects (see below).

Full edition of this article with interactive features available online at

emcdda.europa.eu/topics/pods/mass-media-campaigns



Where do public health media campaigns work?

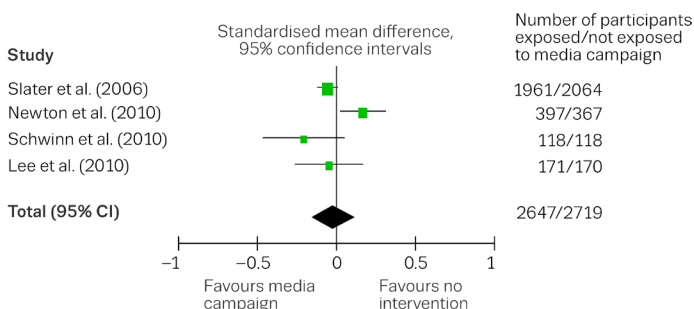
Media campaigns have been successfully applied to the reduction of tobacco use and the promotion of road safety, and have shown moderately positive results in a number of areas including: the promotion of healthier nutrition, physical activity, participation in screening for breast and cervical cancer, organ donation and pre-hospital response times for potential heart attack symptoms (Wakefield et al., 2010). Media campaigns have been widely used for the prevention of illicit drug use in young people. They often address specific substances with the aim of reducing use and raising awareness about the associated problems. These types of campaign typically target young people because evidence shows that drug use often starts during adolescence, a time in life when young people may experiment with cigarettes, alcohol and illicit drugs. Relatively few drug prevention media campaigns have been formally evaluated, however, and most of the evaluations have solely focused on assessing whether people understood and retained the main messages, and if they liked them. Where stronger evidence is available, it is rarely conclusive.

A meta-analysis of evaluation studies on drug prevention media campaigns

A meta-analysis was carried out of studies that evaluate the effectiveness of mass media campaigns to influence drug use, intention to use, or the attitude towards illicit drugs of young people under the age of 26. A search of the scientific literature found 23 studies, which involved around 200 000 young people and were conducted in Australia, Canada and the United States between 1991 and 2011. Only 14 of these met the criteria for inclusion in the meta-analysis. The results of the analysis of the nine randomised controlled studies are presented below. Of the remaining studies, four showed a non-statistically significant reduction of use in the experimental groups or no effect, and one study found an unwanted effect (Hornik, 2006; Hornik et al., 2008).

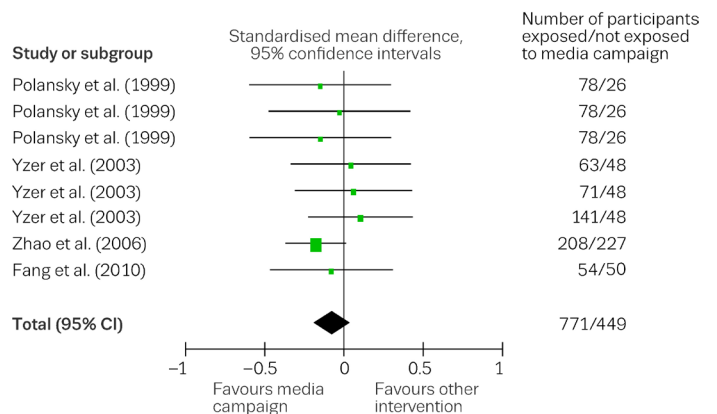
Results

Randomised studies on mass media campaigns versus other interventions to reduce drug use



Explanation: The four randomised controlled studies analysed compared an experimental media campaign with no intervention (Lee et al., 2010; Newton et al., 2010; Schwinn et al., 2010; Slater et al., 2008). In the above graph, the black diamond summarises graphically the results of the meta-analysis. It overlaps with the vertical line '0', also known as the 'no effect line'. Statistically speaking, the diamond includes the 'null hypothesis' – that there is no difference between those exposed to media campaigns and those not exposed. Furthermore, in one study (Newton et al. 2010), drug use is lower in the group not exposed to media campaigns. A fifth study (Fang et al., 2010) that otherwise merited inclusion, however, was excluded from the meta-analysis because no measures of effect on reduction of drug use were available for the experimental group.

Randomised studies on mass media campaigns versus other interventions to reduce intention to use drugs



Explanation: The pooled results of these four studies, comparing an experimental media campaign with no intervention (Fang et al., 2010; Yzer et al., 2003; Zhao et al., 2006), a lower level of exposure to the intervention, a non-drug related intervention (Yzer et al., 2003), three different non-drug related interventions (Polansky et al., 1999), or a combination of interventions (Yzer et al., 2003) are weakly in favour of media campaigns.

In summary, this meta-analysis of randomised studies found no effect on reduction of use and a weak effect on intention to use illicit substances. It also identified reports of possible unwanted effects in terms of young people declaring that they would like to try drugs.

Few European evaluations

In Europe, a systematic evaluation of whether mass media campaigns are leading to changes in drug use attitudes and behaviours has yet to be carried out. A number of countries report having evaluated mass media campaigns in drug prevention (Bulgaria, Denmark, France, Netherlands, Sweden, United Kingdom), but most of the studies in question have

What theories are behind media campaigns?

Mass media campaigns, whether they are used as a drug prevention or health promotion tool, tend to be based (explicitly or implicitly) on a number of psychological theories and models. These are summarised below.

Media campaigns that aim to prevent drug use by providing information are based on the health belief model (Glanz et al., 2002). Under this model, awareness about the severity of a health condition along with knowledge of the benefits of actions to avoid it is essential for healthy behaviour. Therefore, the provision of factual information about the negative effects and dangers of drugs is supposed to deter use.

The theory of reasoned action or planned behaviour (Ajzen, 1991) proposes that an individual's behavioural intentions have three constituent parts: the individual's attitude towards the behaviour, the social norms as perceived by the individual, and the perceived control over one's own behaviour. According to this model, drug use is a consequence of a rational decision (intention), which is based on the individual's attitude to drug use, the perceived social norms towards drug use, and the belief about controlling one's own behaviour. Social marketing campaigns aimed at setting or clarifying social and legal norms (as well as information campaigns) are based on these theories.

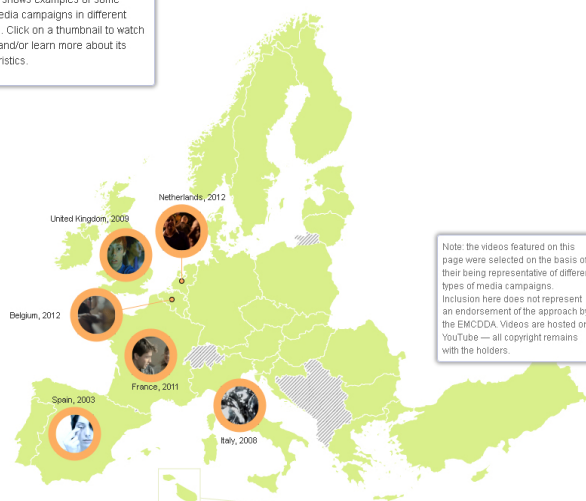
Social norms theory (Perkins and Berkowitz, 1986) attests that an individual's behaviour is influenced by perceptions, often incorrect, of how other members of their social group think and act. Campaigns based on this theory, also referred to as 'normative education', challenge the misconception that many adults and most adolescents use drugs and accept (tolerate) substance use.

Related to the social norms theory is the super-peer theory (Strasburger et al., 2008), which postulates that media (or advertisement) portrayal of substance use (or casual sex or violence) gives adolescents the impression that this is common behaviour or even a behavioural model. Social marketing campaigns aimed at correcting false normative beliefs are based on social norms or super-peer theories.

Social learning theory (Bandura, 1977) postulates that personality and behaviour are an interaction between environment, behaviours and the psychological processes of an individual. Also referred to as observational learning, social learning theory places emphasis on observing and modelling other people's behaviours, attitudes and emotional reactions. Social marketing campaigns providing positive role models or promoting realistic social norms are based on this theory.

Interactive element: map with videos

The map shows examples of some recent media campaigns in different countries. Click on a thumbnail to watch the item and/or learn more about its characteristics.



Interactive: examples of media campaigns in Europe available on the EMCDDA website: emcdda.europa.eu/topics/pods/mass-media-campaigns

merely assessed whether people had seen the campaign, had discussed the slogans with their friends, liked the idea or the slogans, or increased their knowledge. Although, the Scottish media campaign 'Know the Score' was evaluated, the reports did not meet the inclusion criteria for our meta-analysis. Nevertheless, it is interesting to note that the report on cocaine did not exclude the possibility of the campaign having an unintended harmful effect. In a similar vein, a Dutch evaluation of a media campaign (Wammes et al., 2007) aiming to reduce cannabis use found that adolescents exposed to the campaign were slightly more likely to think that smoking cannabis with friends would be enjoyable compared with adolescents not exposed to the campaign.

Conclusion

The majority of the studies reviewed here assessed media campaigns conducted in the United States. Furthermore, the questionnaires that were used to ask young people about their use or intention to use illicit drugs are diverse, and rarely comparable. These two factors taken together

limit the generalisability of the results and, in particular, the applicability of those results to the European context.

The pooled analysis of studies found that media campaigns had no effect on reduction of use and a weak effect on intention to use illicit substances. Reports of possible unwanted effects in terms of young people declaring that after having watched a media campaign they were willing to try drugs raises concern. This is particularly relevant for prevention interventions, which are provided without a demand from the target population. Campaigns might

affect individuals differently, depending on their level of awareness. However, being informed might not have a direct effect on behavioural change, while perception of norms (the perception that everybody is using drugs) may have an impact.

Based on this review of the available evidence, it is recommended that such campaigns should only be provided in the context of rigorous, well-designed and well-powered evaluation studies.

Facts and figures

Table summarising the main characteristics of mass media campaigns

Category	Objective	Target audience	Main message
Information campaign	Warning	General or youth population	Information about the dangers and risks of a range of illicit substances
	Empowerment	General population, especially parents	Information about behaviours that will contribute to drug prevention
			Information about where and how to seek support, counselling and treatment regarding children's illicit drug use
		Youth population	Information about where and how to seek support, counselling and treatment regarding illicit drug use
Support	General population	Information about existing prevention interventions or programmes in communities, in schools or for families, in order to strengthen community involvement and support for them	
Social marketing campaign	Correct false normative beliefs	General or youth population	The true, unexaggerated levels of drug use in peer populations ('you're not weird if you don't use because 80% of your peers don't either')
	Setting or clarifying social and legal norms	General or youth population	Information that deglamourises and demystifies drug use and related behaviour (e.g. drug driving) and explains the rationale for community norms and control measures
	Setting positive role models or social norms	General or youth population	Promotion of positive lifestyles and behaviours that are not associated with drug use

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