



Public Education Campaigns Are Effective

Effective public education campaigns are a vital component of any comprehensive tobacco control program because they help prevent smoking initiation among youth (when most smokers start), encourage smokers to quit and promote available quitting resources, reduce the acceptability of exposure to secondhand smoke, and change the social context of tobacco use so that pro-tobacco messages are no longer dominant. Furthermore, public education campaigns can help change the overall environment, such that citizens become more supportive of tobacco control policies and other interventions. Public education campaigns achieve these impacts by building awareness and knowledge, changing attitudes and beliefs, and contributing to behavior changes.

Public education campaigns must use multiple channels to reach the target audience(s) with evidence-based messages. Evidence suggests that mass media campaigns can have a greater impact on cessation than other methods due to their ability to reach a large number of smokers.¹ To reach key audiences effectively, a campaign should consist of:

- A variety of paid media efforts such as television, radio, print, Internet, cinema, billboards and new electronic media;
- Public relations efforts, including media outreach to generate news coverage of tobacco issues;
- Outreach to, and involvement of, community organizations such as schools, religious institutions and civic organizations; and
- Collateral materials, such as t-shirts, buttons, brochures and posters that can engage the target audience at events, encourage interaction, and have a lasting presence. These materials can be an important part of a public education campaign if developed with strategic messaging and distributed broadly.

Expert Conclusions on Public Education Campaigns

Public health education is a critical component of successful comprehensive tobacco control programs. The scientific evidence on the effectiveness of public education campaigns is strong and continues to grow.

- The U.S. Guide to Community Preventive Services studied the impact of mass media campaigns and other tobacco prevention and cessation methods on prevention of tobacco use and tobacco cessation. The Task Force found “strong evidence” that mass media education campaigns featuring long-term, high intensity counter-advertising, combined with other interventions, are effective in reducing tobacco use initiation, in reducing consumption of tobacco products, and in increasing cessation among tobacco users.²
- The United Kingdom’s National Institute for Health and Clinical Excellence in its draft guidance on smoking cessation interventions cited mass media campaigns as one of 7 proven smoking cessation interventions, based on evidence of effectiveness and cost effectiveness.³
- The U.S. Surgeon General has concluded that mass media campaigns are effective at informing the public, including youth, about the hazards of smoking and at promoting specific cessation actions and services.⁴

- The U.S. Centers for Disease Control and Prevention's recently updated publication, Best Practices for Comprehensive Tobacco Control Programs, states that "Health communication interventions can be powerful tools for preventing smoking initiation, promoting and facilitating cessation and shaping social norms related to tobacco use. Effective messages that are targeted appropriately can stimulate public support for tobacco control interventions and create a supportive climate for policy and programmatic community efforts." The CDC recommends that US states spend in the range of \$1.30-\$3.90 per capita per year on their tobacco control mass media campaigns in order to counter tobacco industry marketing and effectively reduce tobacco use initiation and increase cessation.⁵
- The World Health Organization's international Framework Convention on Tobacco Control (FCTC) cites public education campaigns as a priority. Article 12 of the FCTC states that "Each Party shall promote and strengthen public awareness of tobacco control issues, using all available communication tools, as appropriate. Towards this end, each Party shall adopt and implement effective legislative, executive, administrative or other measures to promote...broad access to effective and comprehensive educational and public awareness programmes on the health risks including the addictive characteristics of tobacco consumption and exposure to tobacco smoke... [and] public awareness about the health risks of tobacco consumption and exposure to tobacco smoke, and about the benefits of the cessation of tobacco use and tobacco-free lifestyles as specified in Article 14.2"⁶

Public Education Campaigns Reduce Tobacco Use

The evidence that public education campaigns reduce tobacco use is solid and extensive, as the additional examples illustrate.

- A study published in the *Archives of Pediatric and Adolescent Medicine* provides powerful evidence that state-sponsored anti-tobacco media campaigns are working to change youth attitudes about tobacco and to reduce youth smoking. The study found strong associations between exposure to state-sponsored TV anti-tobacco advertisements and general recall of anti-tobacco advertising, anti-smoking attitudes and beliefs, and smoking prevalence.⁷ In other words, the more exposure youth had to anti-tobacco ads, the stronger were their anti-tobacco attitudes and beliefs, and the lower was their smoking prevalence.
- The tobacco control programme conducted by the Department of Health England is split into six 'strands', which each contribute to the overall reduction in smoking. A key strand of the Government's tobacco control programme is the provision of an ongoing mass media public education campaign. Adult smoking rates in England fell from 28% in 1998 to 25% in 2004 which translates to 1.2 million fewer smokers. The campaign is the number one reason cited by smokers in the UK as to why they decided to try and quit.⁸
- Research has shown that the antismoking messages required by the U.S. Federal Communications Commission (FCC) during the late 1960s resulted in a decline in per capita cigarette consumption of at least five percent, and a reduction in the prevalence of teenage smoking of three percentage points. During the three years the program ran, antismoking ads were aired in only a one-to-three ratio versus tobacco industry ads, and yet the antismoking ads were found to be nearly six times more effective than the cigarette advertising at influencing smoking behavior.⁹⁻¹³ Subsequently, tobacco companies volunteered to take their own ads off television in order to have the antismoking ads removed.
- U.S./California's Tobacco Control Program, which includes a large public education campaign, produced a 10-percent to 13-percent decline in cigarette consumption. A study in the *American Journal of Public Health* found that the California anti-tobacco media campaign reduced sales of cigarettes by 232 million packs between the third quarter of 1990 and the fourth quarter of 1992.¹⁴⁻¹⁵

- The U.S./Massachusetts tobacco control program, which once had a sizeable public education campaign, contributed to substantial declines in cigarette consumption.¹⁶⁻¹⁷ A 1997 independent evaluation of the Massachusetts campaign found that tobacco consumption dropped by 31 percent from 1992 to the first half of 1997, more than triple the rate of decline observed for the rest of the nation.¹⁸
- Youth tobacco use in US/Florida, US/Minnesota and the United States nationally declined in large part due to comprehensive mass media campaigns. As evidence of the importance of sustaining media campaigns, within six months of the Minnesota campaign being dismantled due to funding cuts, awareness of the main message had eroded and the likelihood of youth to start smoking increased from 43% to 53%.^{19, 20, 21}

Public Education Campaigns Increase Quit Attempts and Cessation Rates

Evidence supporting mass media messages as a mechanism to promote smoking cessation is widespread, and many tobacco control programs around the world have conducted stop smoking campaigns as part of their comprehensive efforts to reduce tobacco use. These campaigns seek to build knowledge about the negative consequences of tobacco use and the resources available to aid in quitting, change attitudes and beliefs regarding tobacco use and readiness to quit and change tobacco-related behaviors. Evidence from several countries suggests that stop smoking campaigns build knowledge, change key beliefs and attitudes, increase calls to quit lines, and contribute to overall decreases in tobacco consumption and increases in quit rates among tobacco users.

- A study published in the March 2006 issue of the *American Journal of Preventive Medicine* found that anti-smoking TV advertisements were the most frequently mentioned source of help among recent quitters. Television advertising reached many more smokers, and thus, it's not surprising that more people claimed it helped them to quit (30.5%) than any of the other methods, including nicotine replacement therapy (NRT), professional help, self-help, prescription, program, website and quitline.²²
- In Australia, sixty percent of recent quitters surveyed reported that the National Tobacco Campaign advertising made them more likely to remain tobacco free.²³
- Several countries have documented a clear correlation between the times when ads are aired and when people call their quitlines, indicating their immediate impact.²⁴
- A study published in the June 2006 issue of *Health Education Research* found that increased exposure to state sponsored anti-tobacco media campaigns increases stop smoking rates, even after controlling for other factors that may affect smoking cessation. Specifically, researchers found that the quit rate among adult smokers increased by about ten percent for each 5000 GRPs (gross rating points) of state anti-tobacco advertising they were exposed to over two years (about two additional ad exposures per person per month).²⁵
- A study published in *Tobacco Control* in 2003 found an increased frequency of negative thoughts about smoking and an increase in quitting related thoughts and actions in the four weeks following the introduction of the National Tobacco Campaign (NTC) campaign in Australia. There was also evidence of sustained increase in cessation activity for a month following onset of the campaign.²⁶
- In U.S./New York, smokers who were aware of state stop smoking mass media messages were significantly more likely to be planning to quit than smokers who were not aware of these media messages.²⁷

Public Education Campaigns Are Cost-Effective

Public education campaigns that help adult and youth smokers quit, help former smokers from relapsing, and prevent youth from ever starting to smoke will produce enormous healthcare cost savings because of reductions in smoking-caused illnesses and deaths.²⁸

- A 2005 study found that a television campaign used to generate calls to a quitline in New Zealand was cost-effective, as the total advertising cost was NZ\$304,560 (US\$193,844 in today's dollars), resulting in costs of NZ\$30 to \$48 (US\$19 to \$30) for each new registrant to the quitline and recruitment of 8 percent of all Maori adult smokers in New Zealand.²⁹
- A study of Turkish-speaking people in England showed that it may be more cost-effective to direct campaigns towards populations with high prevalence of smoking than to those populations with lower smoking prevalence. The estimated cost-effectiveness of this campaign was US\$198 (£105) per life year gained, and resulted in a reduction in smoking prevalence of 3-7 percent.³⁰
- Mass media campaigns can be extremely cost effective versus other healthcare interventions, and sometimes even versus other tobacco control interventions.
 - One study calculated a cost of US\$151-328 per quality-adjusted life year (QALY) saved for a Scottish smoking cessation campaign that included mass media, quitline, and information booklet. The study also found the same intervention to cost US\$298-\$655 per quitter.³¹
 - An analysis of various smoking cessation interventions found the cost per QALY saved for the United Kingdom's No Smoking Day to be just £26, or £40 when discounted (US\$52 and \$80 respectively).³² For perspective, the UK's National Institute for Health and Clinical Excellence used a threshold of £20,000-30,000 (about US\$40,000-50,000) per QALY saved to determine cost-effectiveness of healthcare interventions.
 - Another study calculated a cost of US\$333 per QALY saved for a U.S. youth tobacco use prevention mass media campaign combined with a school smoking prevention program versus the school program alone, based on a 4-year study conducted in New York, Vermont and Montana.³³ For perspective, the U.S. Guides to Community Preventive Services uses a benchmark of US\$50,000 - \$100,000 per QALY saved to determine cost-effectiveness of healthcare interventions.³⁴ As a comparison versus other efforts, calculations of the cost per QALY saved from tobacco dependence treatment interventions range from approximately US\$300 to US\$10,000.³⁵
 - A study from the Netherlands calculated a cost per quitter of US\$796-\$1593 for a stop smoking program that included mass media, quitline, self-help materials and a 9-session cessation program.³⁶
- By prompting current adult and youth smokers to quit, helping former smokers from relapsing, and getting thousands of kids to never start smoking, tobacco-prevention programs can lock in enormous savings over the lifetimes of each person stopped from smoking. The average lifetime healthcare costs of each smoker totals at least \$16,000 (USD) more than each nonsmoker, despite the fact that smokers do not live as long.³⁷ By contrast, the U.S. Guide to Community Preventive Services found that the smoking cessation mass media campaigns evaluated cost only US\$298-US\$1,593 per quitter.

Characteristics of Effective Mass Media Campaigns

Available research and experience shows that a public education campaign should include the following characteristics to be most successful.

- Mass media campaigns need staying power -- ads must be seen and heard often enough to be able to change beliefs, attitudes and behaviors. Building awareness of a campaign, an ad or a message is not sufficient. High frequency/long duration campaigns have higher rates of

effectiveness than low frequency/short duration campaigns. According to a review of smoking cessation media campaigns from around the world conducted by WHO and CDC, media weight (reach and frequency) and campaign duration are crucial elements to insure a continued decline in smoking rates.³⁸

- The campaign should include a variety of refreshed and targeted messages to motivate different people to try to quit at different times.³⁹
- Effective campaigns typically incorporate a variety of paid media, public relations, special events and promotions in a coordinated effort integrated with school and community-based programs, as well as the other elements of a comprehensive tobacco use reduction plan.⁴⁰⁻⁴¹ Multiple components can increase the impact of a campaign; ideally paid television advertising would always be part of the campaign plan, since evidence to date clearly indicates the key role that it plays in a campaign's results.
- Campaigns should reflect lessons learned internationally about effective messages and creative strategies, and campaigns must be planned and executed completely independent of any tobacco industry influence. International campaign reviews can provide direction based on lessons learned from previous campaigns.^{42, 43, 44}
- Campaigns must be grounded in rigorous and state-of-the art research on effectiveness. Formative research and evaluation, process and outcome evaluation should be combined to ensure the greatest likelihood that the campaign will effectively build awareness and knowledge, and change attitudes and behaviors as desired.⁴⁵

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