

Lessons Learned from Substance Use Related Mass Media Campaigns

Summary of TTA Request

TTA goal: Provide a brief summary of media campaigns focused on reducing substance use behavior.

Conclusions from review: Below we detail out a few peer-reviewed papers that discuss media campaigns to reduce substance use behaviors. A previous search had revealed that there are little to no rigorous studies of media campaigns related to opioid use. Key findings from the papers we reviewed include:

- Media campaigns are costly, and should be weighed against other prevention/intervention activities;
- Campaigns should be designed to saturate the market of the desired audience;
- It is important to measure the impact of the campaign both in terms of its intended effect, and any negative effects/unintended consequences; and
- Researchers most often utilized an interrupted time series analysis evaluate the effect of media campaigns.

Reviewed Papers

Fresh Empire Campaign

Article Link for Paper #1a: <https://ajph.aphapublications.org/doi/full/10.2105/AJPH.2016.303595>

Moran, M. B., Walker, M. W., Alexander, T. N., Jordan, J. W., & Wagner, D. E. (2017). Why peer crowds matter: Incorporating youth subcultures and values in health education campaigns. *American journal of public health, 107*(3), 389-395.

Article Link for Paper #1b: <https://www.sciencedirect.com/science/article/pii/S1054139X19304483>

Guillory, J., Henes, A., Farrelly, M. C., Fiacco, L., Alam, I., Curry, L., ... & Delahanty, J. (2019). Awareness of and Receptivity to the Fresh Empire Tobacco Public Education Campaign Among Hip Hop Youth. *Journal of Adolescent Health.*

Name of Campaign: US Food and Drug Administration's (FDA's) Fresh Empire campaign

Targeted Behavioral Change: Prevent tobacco use among multicultural youth.

Campaign strategy: The FDA worked with Rescue Social Change, a behavioral change marketing agency, to target a specific type of youth based on peer-crowds. This peer crowd was the "Hip-Hop" crowd which had been previously identified as having a higher risk of using cigarettes and cigarillos. This media campaign intentionally targeted the key, at-risk demographic through marketing strategies that aligned with the peer crowd's characteristics (e.g., "hip-hop" interests, norms and values). The FDA launched these campaigns over a variety of media, such as television ads, social media ads, local community

engagements, and local hip-hop events. The FDA initially launched this campaign in the Southeast region in 2015, and expanded to 36 markets across the US later that year.

Measured effectiveness: In the first article, the researchers described the media campaign and the intended, ongoing evaluation study that was designed to track and measure the campaign's influence on shaping and potentially changing tobacco-related behaviors among the youth targeted in this campaign. The first article did not produce any evaluation findings.

The second article measured the effect of the FDA's Fresh Empire campaign through a series of surveys administered directly to youth in the treatment and control markets. The researchers found that youth in treatment markets had a higher degree awareness of the Fresh Empire campaign than youth in control markets. While the researcher concluded that campaign exposure is "a necessary first step before achieving changes in tobacco-related attitudes and beliefs", they acknowledged that heavily digital campaigns (e.g., internet, social media-based) may take longer to reach a market saturation threshold compared to broadcast campaigns (e.g., radio, television).

Limitation: Identifying and targeting peer crowds have many challenges. Youth may be hesitant to identify themselves as part of a particular group and classification systems may introduce biases and may not align with youth's perceptions of themselves. To date, most peer crowd targeting has been utilized in the context of tobacco use prevention.

Additional resources for this campaign: <https://www.fda.gov/tobacco-products/fresh-empire-campaign>

Health-Related Mass Media Campaigns

Article Link for Paper #2: <https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2442500>

Stern, R. J. (2015). Mass media campaigns to prevent chronic disease—a powerful but underused tool. *JAMA internal medicine*, 175(11), 1745-1745.

Name of Campaign: none specified

Aim of Paper: To describe the importance and consideration for health-related mass media campaigns.

Important Considerations:

- "messages should be well crafted and visible enough to saturate the target audience—an expensive undertaking";
- "Campaigns also have greater impact when paired with policy initiatives that facilitate the desired behavior changes";
- Mass media campaigns can have unintended consequences if not done correctly, or if they contain the wrong messages; and
- Researcher suggest that well-executed campaigns are expensive, and some may instead prefer to use the funds to provide more services.

Systematic Review of Illicit Drug Prevention Mass Media Campaigns

Article Link for Paper #3: <https://bmjopen.bmj.com/content/bmjopen/5/9/e007449.full.pdf>

Allara, E., Ferri, M., Bo, A., Gasparrini, A., & Faggiano, F. (2015). Are mass-media campaigns effective in preventing drug use? A Cochrane systematic review and meta-analysis. *BMJ open*, 5(9), e007449.

Aim of Paper: Determine if there is evidence that mass-media campaigns can be effective in reducing illicit drug consumption and the intent to consume.

Behavioral change studied: Illicit drug use; Illicit drug use intention

Methods: Included 19 studies of mass-media campaigns and evaluations. The researchers noted that the campaigns components, implementation, and outcome evaluations varied markedly. Found that 8 of the 19 studies of campaigns had no effect on use or intentions to use.

- Some studies had positive effects (i.e., reduced use or intention to use)
 - Office of National Drug Control Policy-Above the Influence
 - Be Under Your Own Influence
 - The Meth Project (effective for those 12-17 years)
 - Antimarijuana campaigns in Fayette Co, KY and Knox Co, TN (for high-sensation seekers only)
- Two studies had negative effects.
 - Office of National Drug Control Policy National Youth Anti-Drug Media Campaign
 - A campaign to change attitudes on methamphetamines and other drugs

Important findings: Most media campaigns were rooted in some underpinning theory related to behavioral change. No clear characteristic of a media campaign was evident for successful or unsuccessful campaigns. There were many limitations to the analyses due to the heterogeneity of the included studies. The authors cautioned that mass media campaigns have the potential to be harmful, and that their development and implementation should be carefully done, and then rigorously evaluated using methods such as a cohort or interrupted time series design.

Systematic Review of Mass Media Campaigns to Reduce Alcohol-Induced Injuries

Article Link for Paper #4 : <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-015-2088-4>

Yadav, R. P., & Kobayashi, M. (2015). A systematic review: effectiveness of mass media campaigns for reducing alcohol-impaired driving and alcohol-related crashes. *BMC public health*, 15(1), 857.

Aim of Paper: To conduct a systematic review to assess newer evidence from quantitative studies (since 2004) on the effectiveness of mass media campaigns for reducing alcohol-impaired driving (AID) and alcohol-related crashes.

Behavioral change studied: Alcohol-related injuries or crashes

Methods: Included 19 studies. Nine studies had campaigns that included law enforcement measures implemented at the same time as the campaign BUT these studies did not evaluate the impact of the media campaigns independently. Nine were controlled interrupted time series, 7 were uncontrolled interrupted time series, and three were controlled before-after studies.

Measurement of Effectiveness: Eight studies used alcohol-related fatal crashes as the main outcome while the rest used proxy measures. These studies were fairly heterogeneous in design. While some individual evaluations found some significant changes, the pooled analyses (from only 7 of the 19 studies) found that the media campaigns did not lead to an overall reduction in alcohol-related driving crashes or injuries.

- “Six out of the eight studies that assessed the effects of media campaigns independently showed statistically significant difference after intervention. Some of these studies have attributed their success in their campaigns to have a message that emphasized the consequences of alcohol-induced driving.”
- Most of the included studies did not provide enough details about their campaigns to understand all components and intensity of message.

This project was supported by Grant No. 2017-YX-BX-K002 awarded by the Bureau of Justice Assistance. The Bureau of Justice Assistance is a component of the Department of Justice's Office of Justice Programs, which also includes the Bureau of Justice Statistics, the National Institute of Justice, the Office of Juvenile Justice and Delinquency Prevention, the Office for Victims of Crime, and the SMART Office. Points of view or opinions in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice