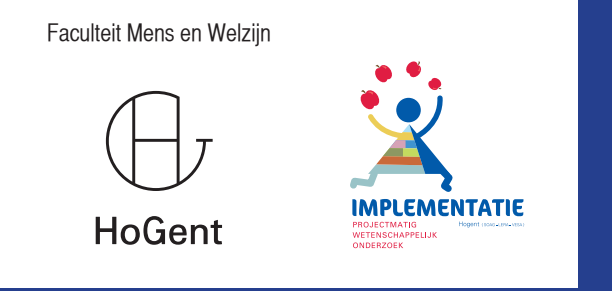


# Using media in alcohol and drug interventions in nightlife: a systematic review

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## Goals

Drug use in nightlife is higher than in the general population which makes it a good opportunity for interventions to reduce and minimize harm from the use of illegal drugs and excessive alcohol consumption. This setting is packed with electronic media possibilities (TV, social network sites, mobile phones applications) which makes it possible to

## Method

**SEARCH STRATEGY:** beginning of October 2011. Articles dating from 2000 onward to focus on more recent media technologies. Only English articles.

SEARCH TERMS: KEYWORDS RELATED TO	
Alcohol and other drugs	alcohol OR “substance use” OR “legal High*” OR “Designer drug*” OR (drug* AND (illicit OR illegal OR legal))
Interventions	prevent* OR interven* OR train* OR campaign* OR education OR “harm reduction” OR program* OR “peer support”
Nightlife setting	licensed premises OR nightlife OR club\$ OR disco* OR Pub OR pubs OR bar OR bars OR festival* OR rave OR Raves OR nightclub* OR night time OR recreat*
Electronic media	internet OR website* OR “web page*” OR online OR “social media” OR facebook OR “social network service*” OR television OR tv OR radio OR media OR news* OR press OR celebrit* OR sms OR “mobile app*” OR “mobile phone*” OR “Cel*” Phone*” OR “smart phone*” OR Magazine*

**RESULT:** 802 articles. Excluding doubles and screening title: 92 articles were hold back.

Scanning all abstracts of the 92 articles on following inclusion criteria:

- The article should be published in a peer-reviewed journal
- The intervention should be aimed at the prevention of harmful alcohol and/or drug use alongside other possible risk behaviour.
- The intervention described should include the use of electronic media (thus excluding flyers, pamphlets) and the media component should be part of the conceptual model of the intervention, thus excluding use of media in finding respondents.
- At least a part of the intervention should take place in the broader nightlife scene, as clubs, pubs, bars, festivals, raves,...

After scanning the articles, looking in specific reviews and databases and different other steps result: a total of 14 manuscripts on a nightlife related intervention on alcohol and/or drugs with an electronic media component were retrieved.

STUDY REFERENCE	INTERVENTION NAME	COUNTRY	SUBSTANCE ADDRESSED	TARGET GROUP	INTERVENTION CHARACTERISTICS	ACTIONS
van Gemert et al. 2011	Don't turn a night out into a nightmare	Australia	Alcohol	Adolescents	<b>AIMS</b> Raise awareness of the harms and costs associated with risky drinking among young Australians.	Social marketing campaign
Saltz et al. 2010	The Safer California Universities study	USA	Alcohol	College students Licensed premises	Reduce the likelihood and incidence of student intoxication at off-campus settings. Reduce alcohol sales to minors.	Enforcement DUI – checkpoints Social host ordinances Media advocacy
Warpenius et al. 2010	Local Alcohol Policy (PAKKA)	Finland	Alcohol	Licensed premises	Reduce the serving of alcoholic beverages to intoxicated clients on licensed premises.	Enforcement Information campaign RBS training (Responsible beverage service) Policy Community mobilization Media advocacy
Saltz et al. 2009	Neighborhoods Engaging with Students project (NEST)	USA	Alcohol	College students	Reduce heavy episodic drinking and intoxication at off-campus parties.	Enforcement with social marketing advertisements and media advocacy Alternative entertainment on campus Education Neighbourhood-based conflict-resolution program
Wood et al. 2009	Common Ground: Rhodemap to safety (RMS)	USA	Alcohol	College students	Decreasing college student drinking Reduce alcohol-impaired driving Reduce the serving of alcohol to intoxicated clients.	Social marketing campaign Enforcement Other environmental management
Gripenberg et al. 2007	Stockholm against alcohol and drugs (STAD)	Sweden	Drugs	Doormen - licensed premises	Increasing the frequency with which doormen intervene in cases of obviously drug use-impaired patrons.	Community intervention Clubs against drugs network Training Media advocacy Policy work Enforcement PR work and media advocacy
Clapp et al. 2005	Not mentioned	USA	Alcohol	College students	Increased students' perceived risk of getting a ticket or being arrested for driving under influence (DUI) and reduce DUI.	DUI checkpoints Media coverage
Huckle et al. 2005	The Auckland Regional Community Action Project (ARCAP)	New Zealand	Alcohol	Off-licensed premises	Reduce access to alcohol from off-license premises by minors.	Social marketing campaign Monitoring Media advocacy Enforcement
Kypri et al. 2005	Think before you buy under-18s drink	New Zealand	Alcohol	Teens and parents	Increase the knowledge of adults of the risks of supplying alcohol to teenagers. Reduction in the percentage of adults who supply alcohol to teenagers for unsupervised consumption.	Social marketing campaign
Wagenaar et al. 2005	Complying with the Minimum Drinking Age	USA	Alcohol	Licensed premises Off-licensed premises	Reduce alcohol sales to minors	Training Enforcement
Wallin et al. 2003	STAD	Sweden	Alcohol	Licensed premises	Decrease violent crimes	RBS training Enforcement Community mobilization
Voas et al. 2002	Operation safe crossing (OSC)	USA	Alcohol	Youths who are crossing the borders (US/Mexican border)	Reduce the number of impaired drivers returning following an evening of binge drinking.	Enforcement Monitoring Media advocacy
Holder 2000 Roeper et al. 2000	Preventing Alcohol Trauma	USA	Alcohol	Licensed premises Off-licensed premises Community Enforcement officers	Reduce local alcohol-involved injuries and deaths. Reduce alcohol sales to minors and intoxicated persons Reduce availability of alcohol	Community mobilization RBS training Enforcement Media advocacy Policy

## Results

### Social marketing campaigns

Three interventions with social marketing campaigns (advertisements) and three combine social marketing and media advocacy: (*Clapp et al., 2005; Gripenberg, Wallin, & Andreasson, 2007; Saltz, Welker, Paschall, Feeney, & Fabiano, 2009*). Focusing on the electronic media in the social marketing campaigns these interventions included different actions: (campus) radio advertisements (*Kypri, Dean, Kirby, Harris, & Kake, 2005; van Gemert et al., 2011; Wood et al., 2009*), magazine, radio interviews, media events (*Kypri et al., 2005*), television, cinema, online advertising (*van Gemert et al., 2011*), website (*Gripenberg et al., 2007; Saltz et al., 2009*) and advertising by email (*Wood et al., 2009*).

In general few aimed effects were seen after implementing a social marketing campaign, especially when this was the only component of the intervention. The interventions showed no significant reduction in unsupervised drinking after the brief mass media campaign 'Think before you buy under-18s drink' (*Kypri et al., 2005*), failed to reach the most important target groups, namely participants reporting frequent risky single occasion drinking (*van Gemert et al., 2011*) or showed mixed results (*Wood et al., 2009*). In the latter study perceptions of alcohol enforcement, alcohol access and the local alcohol environment were successfully altered, but iatrogenic effects on actual drinking behaviour were observed (*Wood et al., 2009*). The most widely seen campaign component were the newspaper advertisements (*Kypri et al., 2005*). The combination of media advocacy and a media campaign showed more promising effects (see media advocacy) (*Clapp et al., 2005; Gripenberg et al., 2007; Saltz et al., 2009*).

### Media advocacy

Nine interventions (11 articles) were find with media advocacy. Media advocacy activities included media releases in the local media (campus media, local television and radio) in all interventions. The other actions varied: media training (*Holder, 2000; Huckle, Conway, Casswell, & Pledger, 2005*), discussing follow-up media, a media launch (*Huckle et al., 2005*), press conferences or media events (*Gripenberg et al., 2007; Voas, Tippetts, Johnson, Lange, & Baker, 2002*), website (*Saltz, Paschall, McGaffigan, & Nygaard, 2010*), e-mails (*Saltz et al., 2010*), involvement of media in steering or working group (*Warpenius, Holmila, & Mustonen, 2010*) and national media releases (television and radio) (*Gripenberg et al., 2007; Warpenius et al., 2010*).

Notably, all nine interventions have implemented at least (increased) enforcement strategies. Moreover, media attention was asked for at least enforcement actions in all interventions. Overall, all interventions showed effectiveness across a number of outcomes.

The sales of alcohol decreased in following situations: sales made without age identification (*Huckle et al., 2005*), sales to minors (*Holder, 2000; Wagenaar, Toomey, & Erickson, 2005*) and sales to intoxicated patrons (*Warpenius et al., 2010*). Risky drinking behaviour (*Clapp et al., 2005; Roeper, Voas, Padilla-Sanchez, & Esteban, 2000; Saltz et al., 2010; Saltz et al., 2009; Voas et al., 2002*) and alcohol-involved crashes were reduced (*Holder, 2000; Roeper et al., 2000*). A reduce in violent crimes (*Wallin, Norstrom, & Andreasson, 2003*), an increase in responsible alcohol serving practices (*Holder, 2000*) and a higher

awareness on alcohol problems (*Holder, 2000; Voas et al., 2002*) was seen. Gripenberg et al. (*Gripenberg et al., 2007*) found an increase in doormen interventions within attempts in entering the club by actors who were obviously impaired.

The role of media advocacy showed mostly positive results. The higher media coverage on intervention related topics was important in raising awareness on community and political level (*Holder, 2000; Huckle et al., 2005; Voas et al., 2002*). This higher awareness lead to behavioural changes. Especially when this media coverage was on enforcement (*Clapp et al., 2005; Holder, 2000; Huckle et al., 2005; Roeper et al., 2000; Voas et al., 2002; Warpenius et al., 2010*). Wallin et al. (2003) even found that most policy changes in favour of the intervention aims were to be found in the intervention area where media coverage of news about licensed premises was primarily focused. Furthermore, local media served as a lightning rod for enthusiasm and provided local staff and project participants with a sense of efficacy and the potential for change (*Holder, 2000*). However, the study of Wagenaar et al. (2005) showed mixed results on the included media variables (print and broadcast media). Television broadcasts regarding enforcement checks conducted in the community decreased (5%) the sales to minors in off-premise establishments with this effect decreasing to zero within two weeks after a broadcast. For on-premise establishments this was only marginally significant. In further analysis, the media variables did not appear to be acting as mediators of the intervention effect.

## Discussion

Nightlife is an expanding and dynamic sector with positive outcomes for the welfare of the community and for individual development (*Calafat, Juan, & Duch, 2009*). However, previous articles have shown a higher use of drugs in these settings (*Van Havere, Vanderplasschen, Broekaert, & De Bourdeaudhui, 2009; Van Havere, Vanderplasschen, Lammertyn, Broekaert, & Bellis, 2011*). To prevent problems with drug use, prevention and harm reduction initiatives are necessary.

The recent communication technologies offer the possibility to interact and communicate on a more personal level. This literature review of interventions in a broader nightlife including an active electronic media component in its design concludes that the least promising actions towards effectiveness are the social marketing campaigns that are not framed in a wider intervention design. More valuable effects are seen when combining social marketing strategies with media advocacy, but also when only media advocacy is implemented in combination with other program components. Even though outcome indicators are very diverse, we found reported effectiveness for all multi-component studies that include media advocacy.

How these electronic media activities contribute to the effectiveness of the desired outcome however is still obscure and could not be established in this review. Much depends on reaching the targeted group.

Alternative social marketing strategies, like peer-based interventions, mobile phone applications or social network websites, could be more effective in reaching this at-risk group of party people. Furthermore, it can be concluded that multi-component approaches have more positive effects, especially when law enforcement with media attention is included. However, public health workers are often reluctant to work with media because of their lack of experience. Public health workers can benefit from a media training and lessons can be learned from marketing agencies who are experienced in targeting different groups to sell their messages.

#### REFERENCES

Calafat, A., Juan, M., & Duch, M. (2009). Preventive interventions in nightlife: a review. *Adicciones*, 21(4), 387-414.  
Clapp, J. D., Johnson, M., Voas, R. B., Lange, J. E., Shillingham, A., & Russell, C. (2005). Reducing DUI among US college students: results of an environmental prevention trial. *Addiction*, 100(3), 327-334. doi: 10.1111/j.1360-0443.2004.00917.x  
Gripenberg, J., Wallin, E., & Andreasson, S. (2007). Effects of a community-based drug use prevention program targeting licensed premises. *Substance Use & Misuse*, 42(12-13), 1883-1898. doi: 10.1080/105922906001532916  
Holder, H. (2000). Community prevention of alcohol problems. *Addictive Behaviors*, 25(6), 843-859.  
Huckle, T., Conway, K., Casswell, S., & Pledger, M. (2005). Evaluation of a regional community action intervention in New Zealand to improve age checks for young people purchasing alcohol. *Health Promotion International*, 20(2), 147-155. doi: 10.1093/heapro/dah010  
Kypri, K., Dean, J., Kirby, S., Harris, J., & Kake, T. (2005). Think before you buy under-18s drink!: evaluation of a community alcohol intervention. *Drug and Alcohol Review*, 24(1), 15-20. doi: 10.1080/09595230500102731  
Roeper, P. J., Voas, R. B., Padilla-Sanchez, L., & Esteban, R. (2000). A long-term community-wide intervention to reduce alcohol-related traffic injuries: Salinas, California. *Drugs-Education Prevention and Policy*, 7(1), 51-60. doi: 10.1080/13690991  
Saltz, R. F., Paschall, M. J., McGaffigan, R. P., & Nygaard, P. M. O. (2010). Alcohol Risk Management in College Settings: The Safer California Universities Randomized Trial. *American Journal of Preventive Medicine*, 39(6), 491-499. doi: 10.1016/j.amepre.2010.08.020  
Saltz, R. F., Welker, L. R., Paschall, M. J., Feeney, M. A., & Fabiano, P. M. (2009). Evaluating a Comprehensive Campus-Community Prevention Intervention to Reduce Alcohol-Related Problems in a College Population. [Article]. *Journal of Studies on Alcohol and Drugs*, 21-27.  
van Gemert, C., Dietze, P., Gold, J., Sacks-Davis, R., Stoeve, M., Vally, H., & Hellard, M. (2011). The Australian national binge drinking campaign: campaign recognition among young people at a music festival who report risky drinking. *Bmc Public Health*, 11, doi: 482.10.1186/1471-2458-11-482  
Van Havere, T., Vanderplasschen, W., Broekaert, E., & De Bourdeaudhui, I. (2009). The influence of age and gender on party drug use among young adults attending dance events, clubs, and rock festivals in Belgium. *Substance Use and Misuse*, 44(13), 1899-1915. doi: 10.1080/10592290802563193  
Van Havere, T., Vanderplasschen, W., Lammertyn, J., Broekaert, E., & Bellis, M. (2011). Drug use and nightlife: More than just dance music. *Substance Abuse Treatment Prevention and Policy*, 6(18), doi: 18.10.1186/1747-5978-6-18  
Voas, R. B., Tippetts, A. S., Johnson, M. B., Lange, J. E., & Baker, J. (2002). Operation safe crossing: using science within a community alcohol intervention. *Addiction*, 97(9), 1205-1214. doi: 10.1046/j.1360-0443.2002.00183.x  
Wagenaar, A. C., Toomey, T. L., & Erickson, D. J. (2005). Preventing youth access to alcohol: outcomes from a multi-community time-series trial. *Addiction*, 100(3), 335-345. doi: 10.1111/j.1360-0443.2005.00973.x  
Wallin, K., Norstrom, T., & Andreasson, S. (2003). Alcohol prevention targeting licensed premises: A study of effects on violence. *Journal of Studies on Alcohol*, 64(2), 270-277.  
Warpenius, K., Holmila, M., & Mustonen, H. (2010). Effects of a community intervention to reduce the serving of alcohol to intoxicated patrons. *Addiction*, 105(6), 1032-1040. doi: 10.1111/j.1360-0443.2009.02873.x  
Wood, M. D., Dejong, W., Frazier, A. M., Lawson, D., Lavigne, A. M., & Cohen, F. (2009). Common Ground: An Investigation of Environmental Management Alcohol Prevention Initiatives in a College Community. [Article]. *Journal of Studies on Alcohol and Drugs*, 96-105.