

National mass media campaigns to reduce population consumption of alcohol

Matrix Insight, in collaboration with Imperial College London, Kings College London and Bazian Ltd, were commissioned by [Health England](#) to undertake a research study to develop and apply a method for prioritising investments in preventative interventions for England. Seventeen preventative health interventions were included in the study. Each intervention was evaluated in terms of the following criteria: reach; inequality score; cost-effectiveness; and affordability. This report presents the results of the analysis for one of the interventions: national mass media campaigns to reduce population levels of drinking. The full report of the study is available from the [H.E.L.P.](#) website.

Summary

Description of the intervention

Four annual campaigns promoting avoidance of alcohol were developed and delivered to an audience of young people as they matured from Grades 4-5 to Grades 7-8. Radio messages were directed towards both parents and children. Ten tv and five radio messages placed each year as paid local advertising on outlets serving the intervention school districts. Radio campaign conducted between July and September and full TV and radio campaign ran for a month, beginning about two weeks before school opening. Yearly average of 260 placements on broadcast TV, 1,040 on cable, 950 on radio stations. Purchased placements described by researchers as being of sufficient level to achieve an overall 300 gross rating points (GRP), or an average of three exposures per week per targeted viewer, over 9 months of the year for 3 years, and for about 6 months of the fourth year.

Parent intervention: On average, 12 placements were purchased weekly on each of five adult-interest commercial stations.

Intervention for retailers: Training video showing strategies clerks could use to avoid behaviours affecting availability of alcohol to minors was given to managers of 120 retail outlets in intervention school districts.

Cost effectiveness

A model was not developed for this because:

- Flynn (2006) found no effect of the intervention on drinking beer, supporting the view from a range of reviews that these interventions have no benefit.
- Lifetime benefits of this intervention could not be estimated due to the lack of epidemiological data on the relationship between young peoples' alcohol use and alcohol use later in life (Jones 2007).

Effectiveness evidence

A literature review was undertaken by [Bazian](#) to identify evidence on the effectiveness and cost-effectiveness of national mass media campaigns to reduce population levels of obesity. Further details are available on the [evidence](#) methods page of the **H.E.L.P.** website.

Many of the mass media interventions did not focus on interventions designed to reduce drinking in the population, but rather, were focused on particular problems such as reducing drink driving. However, the review de novo review of the evidence on the effectiveness of national mass media campaigns to reduce population levels of drinking identified one review and one study. Table 1 provides the following details of the studies identified:

- Population
- Intervention
- Results

The review of the evidence on the cost-effectiveness of national mass media campaigns to reduce population levels of drinking identified no economic studies.

Table 2 provides a quality assessment of the effectiveness studies. Further details are available on the [quality appraisal](#) methods page.

The following criteria were applied to select effectiveness evidence for undertaking the economic analysis:

- Location. Studies from the UK were preferred over studies from other locations.
- Population. Studies applied to the general population were preferred over studies applied to restricted population groups (e.g. pregnant women; individuals from specific communities/nationalities).
- Counterfactual. Studies for which the counterfactual intervention was 'usual care' or 'do nothing' in a UK setting were preferred over studies for which the counterfactual was different from 'usual care' or 'do nothing'.
- Method. Studies using more rigorous design methods (e.g. randomised control trials or quasi experimental designs with regression models controlling for confounders) were preferred over studies using less rigorous design methods (e.g. before-after studies or simple correlation analysis).

Table 1. Effectiveness of mass media interventions to reduce population consumption of alcohol

Study reference	Population	Intervention	Results
<p>We do not include discussions of counter advertising in this review (e.g. health warnings on packaging etc). No cost-effectiveness or effectiveness studies were found that assessed the effects of mass media on consumption behaviours. Several sources reference the Babor book as providing evidence of limited effectiveness of education campaigns in general. Chisholm, 2004⁶ states that “evidence for the effectiveness of mass media or school-based awareness campaigns is weak in terms of both methodological quality and their effect on consumption (as opposed to transfer of information or knowledge alone). An intervention that has very low measured effect (but non-negligible costs of implementation) cannot be considered a cost-effective policy option, and therefore mass media and school-based awareness campaigns were omitted from the foregoing analysis.” A de novo review was undertaken for this topic to source original effectiveness and cost-effectiveness studies of mass media interventions to reduce consumption of alcohol. Excluding studies that focussed solely on mass media to reduce drink driving, the de novo review search identified 1 potentially relevant review (Snyder et al, 2002: which meta-analysed the effects of US health campaign on behaviour) and 1 potentially relevant study - Flynn et al (2006). The meta-analysis by Snyder were not all purely mass media (one was about preventing sales to minors, one was in pregnant women and had warnings on bottles, posters etc). Another study - Caswell 1990 - evaluates a mass-media campaign for primary prevention of alcohol-related problems in NZ. However it assesses effects on attitudes and is not extracted here.</p> <p>Flynn et al 2006 found no effect of the intervention on drinking beer - this supports the view that in the way they have been tested, these interventions have no benefit.</p>			
<p>Flynn et al, 2006; USA</p> <ul style="list-style-type: none"> ▪ non-randomised controlled trial 	<p>Intervention delivered to 8 school districts, control to 8 matched areas. In total 2,897 surveys were conducted before the intervention (across all 16 school districts) and 2,419 surveys following</p>	<p><i>Intervention</i></p> <ul style="list-style-type: none"> ▪ Four annual campaigns promoting avoidance of alcohol were developed and delivered to an audience of young people as they matured from Grades 4-5 to Grades 7-8. Radio messages were directed towards both parents and children. 10 TV and 5 radio messages placed each year as paid local advertising on outlets serving the intervention school districts. Radio campaign conducted between July and September and full TV and radio campaign ran for a month, beginning about 2 weeks before school 	<p>Change in proportion of grade 7-8 students reporting that they had consumed beer on at least 1 of the past 30 days (48 months): -9% in treatment versus -11% in control (p=0.74)</p>

Study reference	Population	Intervention	Results
		<p>opening. Yearly average of 260 placements on broadcast TV, 1,040 on cable, 950 on radio stations. Purchased placements described by researchers as being of sufficient level to achieve an overall 300 gross rating points (GRP), or an average of three exposures per week per targeted viewer, over 9 months of the year for 3 years, and for about 6 months of the fourth year</p> <ul style="list-style-type: none"> ▪ Parent media intervention: Between March and May six messages (based on previously successful parenting studies) were aired for 12 weeks each year. On average, 12 placements were purchased weekly on each of 5 adult-interest commercial stations ▪ Intervention for retailers: Training video showing strategies clerks could use to avoid behaviours affecting availability of alcohol to minors was given to managers of 120 retail outlets in intervention school districts <p><i>Control</i></p> <ul style="list-style-type: none"> ▪ No interventions directed towards matched comparison areas 	

Table 2. Quality assessment for effectiveness studies

Study reference	QA for trials/RCTs					Score	Grading (++ 4-5; + 3; -0-2)
	Follow-up	Intention to treat?	Attrition	Groups similar or controlled?	Randomised?		
Flynn et al, 2006; USA	Yes	No	Don't know	Yes	No	2	-

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