

Background

Alcohol use among European young people is a major public health problem. School-based substance abuse prevention programs focusing on the social influence model are widespread but rarely evaluated in Europe.

The EU-Dap (EUropean Drug Addiction Prevention) study is a cluster randomized trial designed to evaluate the effectiveness of a new school curriculum aiming to prevent substance use among European adolescents 12-14 years of age.

Methods

During the school year 2004/2005, 170 schools from seven European countries were randomly assigned to either control or a 12-session standardized school curriculum based on the comprehensive social influence model. The consumption of alcohol and the frequency of episodes of drunkenness and of alcohol-related problems were investigated through a self-completed anonymous questionnaire administered at baseline and 15 months after the end of the program (answered by 5541 students). The association between the intervention and change in alcohol use patterns at post-test was expressed as adjusted Odds Ratio (OR), estimated by multilevel regression models.

Results

Fifteen months after the curriculum completion, the prevention program was associated with a decreased risk of reporting past 30-day episodes of drunkenness and past year alcohol related problems (tab. 2).

Overall, the frequency of consumption of alcoholic beverages was not modified by being exposed to the prevention program.

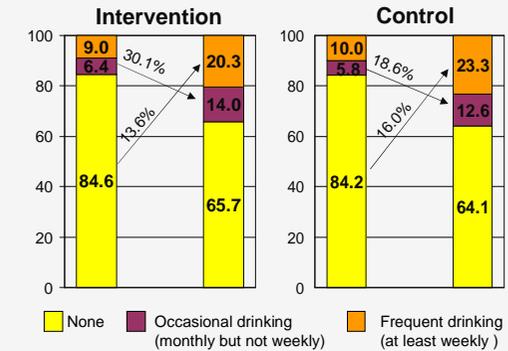
Table 2. Odds ratio (OR) and 95% confidence interval (95% CI) of alcohol use in the past 30 days, and alcohol related problems in the past year for intervention compared to controls at the 15-month follow-up. The EU-Dap Study.

	OR	95% IC
Monthly drinker	0.99	0.83 - 1.18
Weekly drinker	0.95	0.79 - 1.15
At least one episode of drunkenness	0.80	0.67 - 0.97
More than two episodes of drunkenness	0.62	0.47 - 0.81
Alcohol related problems	0.78	0.61 - 0.99

When analysing stages of drinking behaviour significant differences were observed in the intervention group compared to the control group:

- a lower proportion of baseline non-drinkers had progressed to frequent (weekly) current drinking
- a higher proportion of baseline occasional drinkers had remained occasional drinkers, mostly because of lower rates of progression in consumption (fig. 1)

Figure 1. Stages of behaviour – Transitions in the frequency of current alcohol drinking, from baseline to 15-month follow-up, by intervention arm.



Conclusions

School curricula based on the comprehensive social-influence model have potential for reducing the frequency of problematic alcohol drinking among young people in Europe.

Indicators of effectiveness that have received limited attention in previous studies, such as problem drinking, may provide deeper insights on the role of alcohol education in future research.

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Conflict of interest: none

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Table 1. Baseline characteristics of the study sample (n= 5541).

	Intervention	Controls	χ^2	P-value
	(n=2811)	(n=2730)		
Gender	%	%		
Boys	51.9	49.5	3.33	0.07
Girls	48.1	50.5		
Current drinking			2.87	0.413
Seldom or never	84.7	84.3		
Every month	6.3	5.8		
Every week	7.5	7.9		
Every day	1.5	2.0		
Episodes of drunkenness			7.60	0.022
None	95.8	94.2		
1-2 episodes	3.2	4.3		
More than 2 episodes	1.0	1.5		
Alcohol related problems			4.30	0.038
Yes	2.9	3.9		
No	97.1	96.1		
Siblings' drinking			0.81	0.368
Yes	7.4	6.8		
No	92.6	93.2		
Parents allow alcohol drinking			0.92	0.338
Would allow	39.8	38.5		
Would not allow	60.2	61.5		

