DRUG & ALCOHOL FINDINGS *Research analysis*

This entry is our analysis of a study considered particularly relevant to improving outcomes from drug or alcohol interventions in the UK. The original study was not published by Findings; click Title to order a copy. Free reprints may be available from the authors – click prepared e-mail. The summary conveys the findings and views expressed in the study. Below is a commentary from Drug and Alcohol Findings.

Links to other documents. Hover over for notes. Click to highlight passage referred to. Unfold extra text
Copy title and link | Comment/query | Tweet

▶ Steps Towards Alcohol Misuse Prevention Programme (STAMPP): a school-based and community-based cluster randomised controlled trial.

McKay M., Agus A., Cole J. et al.

BMJ Open: 2018; 8:e019722.

Unable to obtain a copy by clicking title? Try asking the author for a reprint by adapting this prepared e-mail or by writing to Dr McKay at Michael.McKay@liverpool.ac.uk.

Trialled in schools in Northern Ireland and Scotland, an alcohol harm reduction curriculum for secondary schools plus a parental component led to fewer pupils drinking heavily at a single sitting, but without significantly reducing harm related to the child's drinking.

SUMMARY Few school-based alcohol prevention programmes applied universally to all pupils have been shown to be effective, but interventions which develop social skills appear superior to those that seek only to enhance knowledge, and combined with a school-based alcohol curriculum, advice to parents about setting strict rules around drinking reduces consumption among adolescents.

Key points
From summary and commentary

Aiming to reduce alcohol-related harm, the Steps Towards Alcohol Misuse Prevention Programme (STAMPP) combined alcohol education in secondary schools with an attempt to involve parents in more actively seeking to regulate their children's drinking.

Trialled in schools in Northern Ireland and Scotland, set against usual education it led to fewer pupils drinking heavily at a single sitting, but without significantly reducing harm related to the child's drinking.

Bolstered by this study, school-based programmes aiming to reduce harm rather than prevent drinking per se have a limited but relatively good research record in the UK.

Steps Towards Alcohol Misuse Prevention Programme (STAMPP) built on these findings. It adapted for the UK a combination of the Australian School Health and Alcohol Harm Reduction Project (SHAHRP) secondary school curriculum, plus for parents the Swedish Örebro programme. Given the UK context where youth drinking is not unusual, the aim was not so much to reduce drinking per se, but to reduce harmful drinking.

The SHAHRP curriculum on which STAMPP was based includes alcohol-specific personal and social skills training, and deploys three main preventive strategies: teaching pupils to recognise high-risk situations; increasing awareness of external influences on behaviour; and combining self-control with refusal skills training to enhance confidence that the child can avoid or decline to engage in unhealthy behaviours, without risking loss of standing among their peers. The parental component was based on research indicating that parenting practices aimed at preventing drinking (eg, monitoring and setting rules on children's drinking and encouraging healthy attitudes towards alcohol) was associated with fewer children drinking. Delivered alongside a classroom intervention, in the Netherlands this approach's impact on child drinking seemed due to its effects on children's self-efficacy, self-control and perceptions of parental rules. This approach was adapted for the UK by including UK guidelines on drinking in childhood. It involved several parents' evenings to convey the need to monitor and set family rules on their children's drinking, and an information leaflet sent to all

parents/carers (regardless of attendance) which reinforced discussion points from the meetings.

To test STAMPP's effects in the UK a sample of 105 schools was drawn from all post-primary schools in Glasgow/Inverclyde local authorities in Scotland, and from across Northern Ireland with the exception of a region already delivering SHAHRP. In 2011/2012 schools had to have been teaching grade cohorts of 11–12-year-olds.

The schools were randomly assigned to implement STAMPP or to act as 'control' schools which merely continued with the standard education of the time; in practice, this did not include alcohol-specific lessons. STAMPP was delivered in two phases. The school curriculum started in the school year when pupils were aged 12–13, and a second phase plus the parental component were delivered during the following year. Using confidential questionnaires, pupils were assessed at the pre-intervention baseline in June 2012 and again after 12 months (following delivery of phase one of the classroom component), 24 months (after STAMPP was completed) and 33 months (18 months after STAMPP had ended). [At the final follow-up pupils would have been aged 14–15.] Parents/carers were asked to complete a short postal questionnaire, which coincided with delivery of the information leaflet based on the parents' evenings.

Primary yardsticks of success were whether compared to control schools, at the final follow-up STAMPP had led to fewer children reporting heavy episodic drinking over the past month, or fewer alcohol-related harms due to one's own drinking over the previous six months. Since baseline levels of these measures were taken into account, effectively the comparison was between the degree of age-related change in heavy drinking and related harm between baseline and final follow-up.

In the randomly allocated schools there were 12,738 pupils at the start of the trial of whom 11,316 completed baseline assessments and 10,405 final follow-ups; their responses provided the data for the primary analysis. To check the generalisability of these findings to all pupils, additionally various ways were tried to fill in what might have been the responses of missing pupils.

The evening sessions for parents were poorly attended – by 9% of parents/carers in Northern Ireland and 2.5% in Scotland. Respective return rates of the parent/carer questionnaires were 31% and 18%.

Main findings

The raw figures were that at the final follow-up 17% of respondents in STAMPP schools said they had drunk heavily on at least one occasion in the past month compared to 26% in control schools who carried on with normal lessons. After adjusting for other factors, this equated to a ratio of just 0.6 heavy drinkers in STAMPP schools for every one in control schools, a statistically significant difference.

Differences in experience of alcohol-related harm were in the expected direction, but small and not statistically significant, meaning chance findings could not be ruled out. In STAMPP schools, 35% of pupils said they had experienced such harms in the past six months compared to 39% in control schools. After adjusting for other factors, this equated to a ratio of 0.9 pupils in STAMPP schools for every one in control schools.

Results were essentially unchanged when results were estimated for pupils who did not complete the final assessment. The exception was that heavy drinking was no longer significantly different when the unlikely assumption was made that all missing pupils in STAMPP schools were heavy drinkers, but none were in control schools.

These primary yardsticks of success were complemented by other measures taken at the 24-month and 33-month follow-ups. None revealed any statistically significant impacts of the STAMPP programme, including on whether the pupils had ever, or in the last year or last month, consumed a full drink of alcohol, the age when they first did so, how much they usually drank, and whether their parents allowed them to drink when no adults were present. Also there were no clear or consistent effects when the sample of pupils was subdivided by age, gender, socioeconomic status, drinking at baseline (including whether they had already drunk unsupervised by an adult), and whether the school was in Northern Ireland versus Scotland.

The authors' conclusions

Compared to usual education, by the time pupils were aged about 15 a school/parental intervention targeted at reducing harmful drinking and delivered at ages 12 to 14 had reduced by 40% the proportion who had recently drank heavily at a single 'sitting'. Harms as such were not significantly affected, though might be in a longer term follow-up at ages when these become more common. The intervention was well received by pupils and teachers. The researchers argued that the findings of this trial are likely to be applicable elsewhere, since the schools were drawn from urban and more rural areas and from across the socioeconomic gradient, and effects did not differ in Scotland versus Northern Ireland.

A major limitation of the study was the failure to attract parents/carers to the evening sessions; fewer attended than in corresponding programmes in Sweden and the Netherlands. Additionally, low rates of return of the parental questionnaire suggest that only a minority read the leaflet based on those evenings. Other strategies may better involve parents, but at present the findings will be presumed to mainly reflect the impact of the school lessons. However, in the Netherlands a different set of lessons alone did not generate changes in drinking, which were seen only when the lessons were combined with an Örebro-style parental component [▸ commentary below].

Inevitably schools, teachers and pupils knew whether they had been allocated to STAMPP, but so too did some of the staff who collected outcome data – possible sources of bias in the findings.

FINDINGS COMMENTARY Consistent findings in different countries with different curricula suggest that harm reduction education on drinking curbs age-related growth in underage drinking and resultant harm in Western drinking cultures, usually most effectively where these effects are needed most – among youngsters already engaged in drinking in their early teens (1 2 3 4 5).

Among these studies was an earlier one (1 2) from the same lead researcher conducted entirely in Northern Ireland, which evaluated SHAHRP, the basis for the classroom component tested in the featured study. Poor take-up of the parental component in the featured study, and the fact that the great majority of schools were in Northern Ireland, mean that it amounts to a near-replication of the earlier study. Important differences perhaps were that delivery of the programme was a school year later, and by the final follow-up pupils averaged 16½ year of age rather than 14–15 in the featured study. Perhaps for this reason, the earlier study found impacts on alcohol-related harm not evident in the featured study. Specifically, compared to pupils in usual-education control schools, pupils offered SHAHRP lessons were more likely to have experienced virtually no or low-level harm during the study rather than increasing and high levels of harm. The drinkers among them were also asked how much they had drunk last time. Compared to those in control schools, at each follow-up pupils in SHAHRP schools were more likely to say they had drunk very little rather than increasing and by the end of the study, relatively large amounts. However, drinking and harms were consistently reduced only among unsupervised drinkers, not the case in the featured study, and effects were not substantial; whichever lessons their schools had been allocated to, unsupervised drinkers ended up at very similar levels of drinking, and difference in levels of harm were minor.

These two studies suggest that the classroom component of STAMPP has the potential to reduce both the intensity of adolescent drinking and related harm, but whether it is found to do so may depend on the analysis used to assess outcomes, when and which outcomes are assessed, and perhaps the ages when the lessons are delivered. In the UK harm reduction as an objective for alcohol education has been approved by the health intervention authority (see below). Programmes based on the Australian SHAHRP curriculum have the best research record, but only when set against what seems relatively lacking and poorly provided usual approaches to educating about drinking in schools. Whether other equally intensive and systematic approaches would work as well or better remains unclear.

It was disappointing that the featured study could not demonstrate that alcohol-related harms – the outcome of greatest interest – had actually been reduced by the programme. Associated with this, a cost-effectiveness analysis based on the

featured study was unable to demonstrate that public sector costs incurred by the pupils such as health care, school counselling and criminal justice services, had overall been reduced by the programme, though it was likely to have been cost-neutral due to its small per-pupil costs and a slightly lower public sector burden.

The apparent contradiction that school lessons had no effect in the Netherlands unless combined with the parental component may be explained by the nature of those lessons – far less intensive than SHAHRP and with a different focus. The four lessons in a single year (plus a single-session booster the following year) were conducted by teachers via digital media and aimed to delay drinking rather than reduce harm.

UK policy and practice

For the UK the most important guidance on alcohol education was issued in 2007 by the National Institute for Health and Care Excellence (NICE). It said education "should aim to encourage children not to drink, delay the age at which young people start drinking and reduce the harm it can cause among those who do drink". Recommendations included ensuring alcohol education is an integral part of science and personal, social and health education (PSHE) curricula. The NICE committee stressed that education should be adapted to its cultural context, noting that in the UK "alcohol use is considered normal for a large proportion of the population [and] a 'harm reduction' approach is favoured for young people". Based on surveys in England in 2014, NICE assessed uptake of the guidance, finding that only just over half of pupils recalled a lesson on alcohol in the last year and about the same proportion thought their schools gave them enough information about alcohol.

Inspections in 2012 of PSHE lessons also suggested that English schools were far from adequately implementing NICE's recommendations, in particular in respect of education aimed at reducing alcohol-related harm. Only in just under half the inspected schools had pupils learnt how to keep themselves safe in a variety of situations, and the deficits were particularly noticeable in respect of drinking. Inspectors found that although pupils understood the dangers to health of tobacco and illegal drugs, they were far less aware of the physical and social damage associated with risky drinking. Some did not know the strength of different alcoholic drinks or make the links between excessive drinking and issues such as heart and liver disease and personal safety. The report attributed these shortcomings in part to inadequacies in subject-specific training and support for PSHE teachers, particularly in relation to teaching on sensitive and controversial topics.

Last revised 17 July 2019. First uploaded 07 January 2019

▶ Comment/query
▶ Give us your feedback on the site (two-minute survey)
▶ Open Effectiveness Bank home page
▶ Add your name to the mailing list to be alerted to new studies and other site updates

---

Top 10 most closely related documents on this site. For more try a subject or free text search

STUDY 2015 Alcohol prevention and school students: findings from an Australian 2-year trial of integrated harm minimization school drug education

STUDY 2014 The differential impact of a classroom-based, alcohol harm reduction intervention, on adolescents with different alcohol use experiences: a multi-level growth modelling analysis

STUDY 2018 Alcohol prevention for school students: Results from a 1-year follow up of a cluster-randomised controlled trial of harm minimisation school drug education

STUDY 2012 Alcohol prevention: What can be expected of a harm reduction focused school drug education programme?

STUDY 2013 PROSPER community-university partnership delivery system effects on substance misuse through 6½ years past baseline from a cluster randomized controlled intervention trial

STUDY 2012 Reducing the harm from adolescent alcohol consumption: results from an adapted version of SHAHRP in Northern Ireland

REVIEW 2019 Family-based prevention programmes for alcohol use in young people

REVIEW 2012 Universal alcohol misuse prevention programmes for children and adolescents: Cochrane systematic reviews

STUDY 2011 Effects of a school-based prevention program on European adolescents' patterns of alcohol use

STUDY 2010 The effectiveness of a school-based substance abuse prevention program: 18-month follow-up of the EU-Dap cluster randomized controlled trial