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

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As in Australia, an alcohol harm reduction curriculum adapted for secondary schools in Northern Ireland curbed the growth in alcohol-related problems and also meant pupils drank less. Results suggest this approach might offer a more fruitful focus for education about commonly used substances than simply promoting non-use.

**SUMMARY** Alcohol harm reduction approaches aim to decrease the harmful consequences of drinking without requiring abstinence. School-based substance use education programmes in the United Kingdom have mainly tried to delay the onset of use, though more recent programmes have included harm reduction components. Advantages of harm reduction approaches for adolescent pupils may include not stigmatising younger drinkers, not presenting drinking as a moral issue, and being able to tailor education to the specific pupil population. Such approaches seem most relevant at the ages when young people are first drinking unsupervised by adults and experiencing intoxication.

Developed and first evaluated in Australia, the School Health and Alcohol Harm Reduction Project (SHAHRP) is an example of harm reduction education, featuring skills training, information and activities designed to encourage behavioural change which reduces harms experienced as a result of drinking. Just such an effect was found in the original evaluation, in which the number of harms experienced by pupils in SHAHRP schools was substantially and significantly less than among pupils in schools not running the lessons, and remained so at the last follow-up 17 months after lessons had ended.

Given the prevalence of underage drinking in Northern Ireland and the associated problems, it was decided to adapt SHAHRP for Northern Irish secondary (or ‘high’) schools. As in the original study, the adapted version was delivered over two school years in two phases. The six lessons of phase one took place when pupils were in year 10 (age 13–14), and the four in phase two the following school year. A pilot study had found pupils and teachers felt the programme was easy to deliver, project materials helpful and easy to follow, and activities and discussions relevant and appropriate.

Having established its feasibility, to test the programme’s effectiveness a new study starting in 2005 recruited 29 secondary schools in the Belfast area. Nine carried on with the normal alcohol education curriculum (the control schools), the remainder also implemented SHAHRP. In eight SHAHRP schools it was delivered by the schools’ own teachers after being trained, in 12 by local voluntary-sector drug and alcohol educators. Rather than being assigned at random, schools were assigned to the three alcohol education options so that they would be comparable in terms of gender, socio-economic profile and location.

2349 pupils were surveyed at the start of the study; about 60% were girls, 17% had not drunk alcohol, and around half had already drunk without adult supervision. Surveys were repeated the following two years after the first and second phases of SHAHRP, and finally in March 2008 when lessons had ended at least 11 months before, at which time 2048 of the 2349 pupils (who now averaged 16½ year of age) could be re-surveyed. Though surveys were anonymous and confidential, identifiers could be used to track changes in each individual pupil across the three years.

**Main findings**

Generally the trends in how pupils drank and the harms they experienced were most favourable when SHAHRP lessons had been delivered by external specialists, next most favourable when they had delivered by the schools’ own teachers, and least favourable when SHAHRP had not been implemented at all. Selected more detailed findings below.

Each survey asked pupils who had drunk at some time during the study about any resulting harms over the past year, such as drinking more than they had planned, being sick after drinking, having hangover symptoms, being unable to remember what had happened while drunk, becoming verbally and/or physically abusive, and trouble with parents or police. Pupils divided in four characteristic trajectories over the years of the study. Compared to those in control schools, pupils offered the SHAHRP lessons were more likely to have experienced virtually no harms during the study or a relatively low and stable level, rather than increasing and high levels of harm. When SHAHRP lessons had been delivered by external specialists, pupils were more likely to have experienced virtually no harms than when delivered by the schools’ own teachers. However, both types of SHAHRP delivery significantly improved on usual lessons only.

The drinkers among the pupils were also asked how much they had drunk last time. On this measure, pupils again divided in to four characteristic trajectories. Compared to those in control schools, at each follow-up pupils offered the SHAHRP lessons were more likely say they had drunk very little than to have reported increasing and by the end of the study relatively high levels of drinking. When the lessons had been delivered by external specialists, pupils were more likely to consistently have drunk relatively little than when delivered by the schools’ own teachers.
Each survey also included questions about the harms pupils had experienced over the past year arising from someone else's drinking, such as verbal or physical abuse, sexual harassment, or damage to personal property. Compared to those in control schools, pupils offered the SHAHRP lessons were least likely to have experienced a steep rise in such harms ending in relatively high levels. Whether SHAHRP lessons had been delivered by external specialists or the schools' own teachers did not significantly affect the trends.

Pupils offered SHAHRP lessons were more likely than those in control schools to have become more knowledgeable about alcohol over the study and to end with relatively high levels of knowledge, more so when the lessons had been delivered by external specialists. However, both SHAHRP delivery options significantly improved on usual lessons only. Results were similar in respect of developing safer attitudes to drinking.

The authors' conclusions

A research review associated with guidance on alcohol education from the National Institute for Health and Clinical Excellence remarked that the Australian SHAHRP evaluation offered evidence that programmes focusing on harm reduction through skills-based activities can produce medium to long term reductions in alcohol use and in particular, risky drinking behaviours. However, the review queried the transferability of these programmes and their results to the UK. The featured study shows that in the UK too, classroom-based harm reduction education can have a significant impact on the harm adolescents experienced from drinking. The research also suggests these lessons need to incorporate interactive learning, start just prior to and during the times when pupils first try drinking, be culturally sensitive, and provide realistic scenarios and deal with realistic issues.

Compared to control schools, pupils in SHAHRP schools were significantly more likely to be among groups characterised by better growth in knowledge about alcohol and its effects, safer alcohol-related attitudes, fewer harms from one's own and other's drinking, and less alcohol consumption. These differences were maintained over the 11 months after lessons had ended, though in some cases with diminished strength. External facilitation of the lessons was associated with the best outcomes, particularly with respect to knowledge and attitudes, harms from one's own drinking, and alcohol consumption.

SHAHRP offers abstainers, novice drinkers and more experienced drinkers alike the opportunity to reflect on use, harm and personal safety, including the importance of trusted friends, basic first aid techniques, group transport home, mobile phone availability, not to make decisions while drunk, identify friends becoming drunk, drink-spiking, mixing substances, and arguments and aggressive behaviour. The results show that young people are capable of processing such messages developed and presented within the reality of their drinking experiences. SHAHRP addresses harms without causing any increase in drinking (in fact, the reverse) or decreasing rates of abstinence.

It was unfortunate that two of the schools allocated to the control group withdrew from the study, partially upsetting the attempt to ensure comparability of the schools operating the three alcohol education options. However, differences were adjusted for statistically. Also, no systematic record was kept on the alcohol education delivered to control subjects. In Northern Ireland this typically is embedded in the curriculum as part of science or citizenship lessons, so would be identical to that received by intervention students.

Findings commentary

Together with the original Australian evaluation, this UK study represents fairly strong evidence that if it focuses on this task, a school curriculum can reduce drink-related problems. In Australia harm-reduction effects were greatest among the higher risk pupils who had already drunk without adult supervision; at each follow-up point they experienced about 20% fewer harms than control pupils. A further analysis of results from the featured study has confirmed that was also the case in Northern Ireland, where SHAHRP slowed down growth in drinking and related problems almost exclusively among the nearly half of pupils who before the lessons had already drunk without adults being present.

In Australia, though still very much in the minority, by the last follow up there were a third more abstainers among SHAHRP than control pupils. In Northern Ireland there were some signs that harm reduction lessons from their own teachers at first gave non-drinkers 'permission' to try drinking, but by the end of the study any possible counterproductive impacts among initial non-drinkers had worked their way out and what remained were statistically significant benefits among initial unsupervised drinkers.

In the featured study it seems SHAHRP lessons were additional to usual alcohol education, meaning that impacts might have been due to simply having more time devoted to this topic rather than or as well as the content. In Australia SHAHRP replaced usual alcohol education, thought there too it occupied two years rather than one and occupied more classroom time overall.

In the more restrictive youth drinking environment of the USA, a programme forefronting alcohol problem reduction among its aims had produced similar findings to that in Australia. It retarded growth in alcohol problems (such as getting drunk or sick or complaints from parents and friends), but only among pupils who had already drunk without adult supervision, and only if the lessons did not occur too early to coincide with the development of this drinking pattern. After disappointing initial results, another US substance use education programme including alcohol adopted harm reduction objectives. The revised programme resulted in a significant reduction in risky or harmful drinking. Parallel and consistent findings in different countries with different curricula suggests that harm reduction education on drinking has a real and transferable impact in Western drinking cultures. Such findings contrast with unconvincing evidence from trials of substance use education in general and alcohol education in particular.

For the UK the most important guidance on alcohol education was issued in 2007 by the National Institute for Health and Clinical Excellence. 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 so". Those who doubt ensuring alcohol education is an integral part of the science and PSHE curricula. The 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".

Inspections in 2012 of PSHE lessons suggest English schools are far from adequately implementing NICE's recommendations, in particular in respect of education aimed at reducing alcohol-related harm.
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 deficiencies in part to inadequacies in subject-specific training and support for PSHE teachers, particularly in teaching sensitive and controversial topics.