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SHAHRP: School Health and Alcohol Harm Reduction Project – Developments in Australia and the UK

The School Health and Alcohol Harm Reduction Project (SHAHRP) is an evidence-based programme that aims to reduce alcohol related harm in young people. The programme is a world first research study assessing the behavioural impact of classroom-based alcohol harm reduction on students' alcohol consumption and harm in alcohol use situations.

Early development

The programme began in the late 1990s and involved secondary schools in Perth, Western Australia. Before developing and pre-testing the programme, project staff conducted extensive formative work, including talking about alcohol issues with young people, to ensure that activities were based on reality and relevant to young people (Farrington et al., 2000; McBride et al., 2006). The programme is evidenced-based and incorporates findings from a systematic literature review of school drug education research (McBride, 2003), incorporates the experience of young people, and has been well tested in schools with students and teachers (McBride et al., 2006).

The Australian SHAHRP study was conducted over a 32-month period, with earlier data collection at 8 and 20 months after the completion of each phase of the programme (McBride et al., 2004). Each assessment measured knowledge about alcohol, attitudes towards alcohol, total consumption, risky patterns of consumption, context of alcohol use, alcohol-related harms/risks associated with the student's own alcohol use, and alcohol-related harm/risks associated with other people's alcohol use (McBride et al., 2006; McBride et al., 2004).

The evidence-based, classroom programme was conducted in two phases over a two year

period. The initial phase was implemented during the first year of secondary school (13 years old) when most students had not yet started to experiment with alcohol (McBride et al., 2006). It consisted of 17 skill-based activities conducted over 8-10 lessons (McBride et al., 2006). Phase 2, which was conducted the following year (when many young people had started to experiment with alcohol), consisted of 12 activities delivered over 5-7 weeks (McBride et al., 2006).

Activities

The SHAHRP activities incorporate various strategies for interaction including delivery of utility information; skill rehearsal; individual and small group decision making; and discussions based on scenarios suggested by students, with an emphasis on identifying alcohol-related harm and strategies to reduce harm (McBride et al., 2006). Interactive involvement is emphasised, with two-thirds of activities being primarily interactive and another 15% requiring some interaction between students (McBride et al., 2002). Interactive involvement of students provides important practice in reducing harm associated with alcohol use and is a critical aspect of lessons using an evidence-based approach (McBride et al., 2006; McBride et al., 2004).

Programme components

Teacher training

Teacher training is conducted before each phase of SHAHRP. During Phase 1, teachers are provided with two days of training that gives an overview of the study behaviour outcomes, evidence-based components, and interactive modelling of each Phase 1 activity (McBride et al., 2006). Phase 2 training is conducted over two days for teachers new to the project. These

teachers are briefed on the research aspects of the project and Phase 1 intervention activities during the first day of training (McBride et al., 2006). On day two, all teachers participate in interactive modelling of Phase 2 activities (McBride et al., 2006). Trainers who are experienced in interactive techniques are recommended as SHAHRP teacher trainers (McBride et al., 2006).

Teacher manual

The teacher manual provides specific written guidance for teachers. The manual includes detailed and structured lesson plans for eight 60-minute lessons in the first phase and five 50-minute lessons in the second phase. Each lesson plan includes sample questions to help facilitate discussion and processing of activities and to focus on activity intention, coaching points to aid in the management of the activities, and background information about alcohol-related issues (McBride et al., 2006). Additional coaching points included in the teacher manual are based on feedback from teachers who have previously taught the programme (McBride et al., 2006; McBride, 2012).

Student workbooks

Student workbooks are available for each phase to stimulate and engage student's interest, provide information, encourage students to further explore issues and to record what they have learned as a way of consolidating practical activities (McBride et al., 2006). Qualitative results from the SHAHRP study show that students and teachers thought the books were appealing and great to use as reinforcement to the interactive activities (McBride et al., 2006).

Trigger visual

A Trigger Visual is used in Phase 2 of SHAHRP. The DVD features scenarios that young people may experience in alcohol use situations to prompt discussion about how to minimise the harms associated with alcohol use.

Results

The results from initial Australian studies indicated an immediate effect in reducing the harm that young people experienced from their own drinking, and the harm they experienced from other people's drinking (McBride et al., 2004; McBride et al., 2000). Over the period of the study (from baseline to final follow-up 32

months later), students who participated in SHAHRP consumed 20% less alcohol, were 19.5% less likely to drink to harmful or hazardous levels, had 10% greater alcohol related knowledge, experienced 33% less harm associated with their own use of alcohol and 10% less harm associated with other people's use of alcohol than did the control group (who received regular alcohol education) (McBride et al., 2006; McBride et al., 2004).

During the first and second phases of the programme, intervention students consumed 31.4% and 31.7% less alcohol (McBride et al., 2004). Differences in alcohol use were converging 17 months after the end of the programme. Intervention students were 25.7%, 33.8% and then 4.2% less likely to drink to risky levels from first follow-up onwards (McBride et al., 2004). This shows that direct classroom programmes are critically important to creating alcohol use change. However, the impact on harm reduction was maintained. The intervention reduced harm that young people experienced as a result of their own use of alcohol, with intervention students experiencing 32.7%, 16.7% and 22.9% less harm from first follow-up onwards (McBride et al., 2004).

Further developments

SHAHRP targets a key issue affecting the health and wellbeing of young people and their communities, fosters knowledge, understanding and skills for decision making and teaches the application of problem-solving techniques to support healthy living. Between 2000 and 2009, over 70 international requests from policy makers, health and education practitioners and researcher resulted in replication of the study, requests for copyright release of programme materials, and the adoption of the programme in education and youth programs worldwide.

The Australian SHAHRP study was replicated in Northern Ireland, starting in 2005, with the results reinforcing the behavioural findings of the Australian SHAHRP study (McKay et al., 2012). Independent replication of SHAHRP in another jurisdiction, and by a separate research group, provides stronger scientific evidence of the impact of SHAHRP on alcohol behaviours.

The Federal de São Paulo in Brazil is also replicating the SHAHRP study. The research

team has undertaken focus groups with young people to help ensure that the scenarios and situations in the SHAHRP manual and workbooks are culturally relevant to young Brazilians. The Brazilian research team have conducted baseline behavioural assessment and are currently supporting intervention schools in the teaching of Phase 1 of SHAHRP to Brazilian students.

It is expected that SHAHRP will align with the Health and Physical Education learning area of the Australian Curriculum, to be implemented in schools in 2014, and in particular with the proposed strand: Personal, social and community health. The team at the National Drug Research Institute will provide a detailed document of SHAHRP's alignment to the new Australian Curriculum on the website when the curriculum is released.

SHAHRP in Northern Ireland

In Northern Ireland, the Public Health Agency funded SHAHRP as part of the Strategic Direction for Alcohol and Drugs 2006–2011 because alcohol experimentation, more than any other drug, is widespread among young people. SHAHRP was chosen because it challenges young people to consider their behaviours regarding personal health and social responsibility.

Michael McKay and a team of research colleagues at the University of Liverpool and Liverpool John Moores University, with the support of Nyanda McBride, developed the Northern Ireland SHAHRP content and design in order to adapt the programme for local schools. The initial study, a non-randomised longitudinal design with intervention and control groups, followed over 2,500 13 year-olds from 29 schools for 32 months, examining their knowledge of alcohol, attitudes towards alcohol, drinking habits and resultant behaviours. What was different in Northern Ireland from the study in Australia was the inclusion of two intervention groups. In one group the SHAHRP lessons were delivered by trained teachers, (as in Australia), while in the other the intervention was delivered by external facilitators; drug and alcohol education workers from a number of third sector agencies. A robust evaluation using latent class growth modelling found that those in receipt of

SHAHRP (either from teachers or outside facilitators) reported significant, positive results (compared to those in the control group) with respect to improvements in alcohol-related knowledge, 'healthier' attitudes towards alcohol use, less alcohol-related harm, and perhaps most surprisingly considering the findings of previous prevention research, a lower consumption of alcohol at 'last time use'. Furthermore, results showed a greater intervention effect for external facilitators compared to teachers; specifically the provision of SHAHRP by external facilitators was associated with a development of greater alcohol-related knowledge, 'healthier' attitudes, less harms, and a smaller growth in drinking than other conditions.

The findings from the SHAHRP group included:

70% increase in knowledge about alcohol across time

73% increase in 'healthier' attitudes across time

Findings from the control group, compared to the SHARP group, included:

30% increase in proportion of unsupervised drinkers across time

45% increase in self-reported harms resulting from their own drinking

63% increase in self-reported alcohol related harm associated with other people's drinking

SHAHRP is now delivered annually to 16,000 pupils in schools across Belfast and the South Eastern area.

SHAHRP in the UK

In the UK, the National Institute of Health-Public Health Research Programme has funded a randomised control trial (RCT) of SHAHRP with the addition of a parental component to be conducted in Scotland and Northern Ireland (2011-2015). This is being undertaken by a collaboration led by the Centre for Public Health at Liverpool John Moores University.

STAMPP

The trial will use the Northern Irish adaptation of SHAHRP, with the addition of a parental component designed to support parents in establishing family rules about substance use (an adapted form of an intervention delivered in the Netherlands (Koning et al., 2009). The combined treatment is called STAMPP (Steps Towards Alcohol Misuse

Prevention Programme). A total of 105 High schools in Scotland and Northern Ireland have been randomised into intervention and control conditions and a total of 11, 300 participants have completed questionnaires at baseline and at T2 (following delivery of Phase one of the SHAHRP lessons).

One set of schools will receive STAMPP, the other will receive their usual school alcohol education. Parents of the children who receive alcohol education as normal will not be invited to receive any type of intervention.

Phases 1 & 2

Phase 1 of STAMPP is delivered when pupils are in year 10 (age 13-14), coinciding with the onset of alcohol use for many children, and phase 2 in year 11 (age 14-15), when alcohol use becomes more established. Phase 1 consists of six sessions (with 16 activities) and phase 2 consists of four sessions (with 10 activities). Each lesson incorporates skills-based activities and individual and small group discussions to emphasise the identification of alcohol-related harm and the development of harm reduction strategies. Interactive involvement is a key feature of the sessions.

Parental component

The parental component takes place over a single one hour long session and is aimed at parents/carers of intervention children. Parents are able to listen to the latest research findings regarding alcohol use by young people in the trial geographies and learn about some of the determinants of use. Through group discussion, parents are encouraged to agree upon, and set, authoritative rules on how alcohol will be dealt with in their home. Parents are reminded about the agreed rules a few weeks later through an information leaflet.

Classroom intervention

The classroom intervention is delivered by specially trained teachers in the current trial. Teacher training includes an introduction to the concepts involved in harm reduction, rehearsal of delivery of each of the sessions in that intervention phase, and awareness of raising of potentially difficult issues/areas around alcohol. Additionally, teachers will be provided with a support pack which includes detailed lesson plans, and alcohol information sheets. The parental component is delivered by trained prevention practitioners and takes place in the school or community setting.

Schools and timetable

Approximately 100 schools will take part in the research. Around 80 schools will be in Northern Ireland and 20 in Glasgow, UK. Fifty will receive STAMPP and fifty will deliver alcohol education as normal. The study started in November 2011 and lasts for 51 months. Phase 1 of the intervention began in Autumn 2012 and takes place across two annually delivered blocks of lessons.

Changes in alcohol outcomes

Based on previous work it is hypothesised that changes in alcohol outcomes associated with the classroom curriculum are mediated by changes in self efficacy, self regulation, and time perspective and orientation, whereby the skills developed in the sessions enable children to make more accurate decisions on the likely immediate short and long term consequences of different types of alcohol use, and to develop (and adhere to) personal and group strategies to reduce harm experienced by the recipients' own and others' alcohol use. These changes will be reinforced and supported by changes in family based skills.

Conclusion

This article has briefly described the successful development of SHAHRP in Australia and in the UK. More details, about aspects of the process, can be found in the links below. SHAHRP's harm reduction approach represents a change in paradigm to the field of alcohol education which has been dominated for many decades by the North American abstinence based approach. The success of SHAHRP lies in this change of paradigm but also in the critical inclusion of young people in the development and piloting of the program. The inclusion of young people in the formative development of the SHARHP intervention ensured that the program provided student-centred activities and methodologies that are relevant and resonates with the young people who participate in the program.

The SHAHRP studies have also identified key developmental phases of alcohol education provision in the school setting. These include an Inoculation phase provided immediately before the majority of young people are experimenting with alcohol, followed by an Early Relevancy phase when the majority of young people are starting to experiment with alcohol.

The past and continued assessment of the SHAHRP harm reduction approach in international settings, and the application of the SHARHP program in school and other settings by education and health professionals has resulted in the body of work being awarded the 2013 Australian National Drug and Alcohol Award for Excellence in Prevention and Community Education.

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The National Drug Research Institute, Curtin University, Western Australia. SHAHRP website:

<http://ndri.curtin.edu.au/research/shahrp/>

Healthcanal: School alcohol project results in healthier and safer pupils. Nov. 2011.

<http://www.healthcanal.com/public-health-safety/23047-School-alcohol-project-results-healthier-and-safer-pupils.html>

References

Farrington, F., McBride, N. & Midford, R. (2000). The fine line: Students perceptions of drinking, having fun and losing control. *Youth Studies Australia*, 19, (3), pp. 33-38.

Koning, I.M., Vollebbergh, W.A., Smit, F., Verdurmen, J.E., Van Den Eijnden, R.J., Ter Bogt, T.F., Stattin, H. & Engels, R.C. (2009). Preventing heavy alcohol use in adolescents (PAS): cluster randomized trial of a parent and student intervention offered separately and simultaneously. *Addiction*, 104, 1669–1678.

McBride, N. (2003). A systematic review of school drug education. *Health Education Research Theory and Practice*, 18, (6), pp. 729-742.

McBride, N., Farrington, F. & Midford, R. (2002). Implementing a school drug education programme: Reflections on fidelity. *International Journal of Health Promotion and Education*, 40, (2), pp. 40-50.

McBride, N., Farrington, F., Meuleners, L. & Midford, R. (2006). *The School Health and Alcohol Harm Reduction Project. Details of Intervention Development and Research Procedures*. National Drug Research Institute, Monograph 59., Perth, Western Australia.

McBride, N., Farrington, F., Stevens, C. & McKay, M. (2012). *SHAHRP Refresh. Updating the School Health and Alcohol Harm Reduction Project*. Final Report. National Drug Research Institute: Perth, Western Australia.

McBride, N., Midford, R., Farrington, F. & Phillips, M. (2000). Early results from a school alcohol harm minimisation study. *Addiction*, 95, (7), pp. 1021-1042.

McBride, N., Farrington, F., Midford, R., Meuleners, L. & Philip, M. (2004). Harm Minimisation in School Drug Education. Final Results of the School Health and Alcohol Harm Reduction Project (SHAHRP). *Addiction*, 99, pp. 278-291.

McKay, M.T., McBride, N., Sumnall, H.R. & Cole, J.C. (2012). Reducing the harm from adolescent alcohol consumption: Results from an adapted version of SHAHRP in Northern Ireland. *Journal of Substance Use*; 17(2), 98-121. (see also http://findings.org.uk/count/downloads/download.php?file=McKay_M_2.txt)

Bibliography

2013 - McKay, M.T., Percy, A. & Cole, J.C. (2013). Consideration of Future Consequences and Alcohol Use among Northern Irish Adolescents. *Journal of Substance Use*, 18:5, 377-391 (doi:10.3109/14659891.2012.685793).

McKay, M.T. & Cole, J.C. (2013). Adolescent drinking and adolescent stress: A domain-specific relationship in Northern Irish Schoolchildren. *Journal of Youth Studies*, 16, 237-256.

McKay, M.T., Percy, A. & Cole, J.C. (2013). Present Orientation, Future Orientation and alcohol use in Northern Irish Adolescents. *Addiction Research & Theory*, 21(1), 43-51.

2012 - McKay, M.T., Percy, A., Goudie, A.J., Sumnall, H.R. & Cole, J.C. (2012). The Temporal Focus Scale: Factor Structure and association with alcohol use in a sample of Northern Irish school children. *Journal of Adolescence*, 35(5), 1361-1368.

McKay, M.T. & Cole, J.C. (2012). The relationship between alcohol use and peer pressure susceptibility, peer popularity and general conformity in Northern Irish school children. *Drugs: Education, Prevention and Policy*, 19(3), 213-222.

McKay, M.T., Cole, J.C., Sumnall, H.R. & Goudie, A.J. (2012). Framing Health Messages for Adolescents: Should we use Objective Time Periods, Temporal Benchmarks, or both? *Journal of Youth Studies*, 15(3), 351-368.

McKay, M.T., Sumnall, H.R., Cole, J.C. & Percy, A. (2012). Self-esteem and self-efficacy: Associations with alcohol consumption in a sample of adolescents in Northern Ireland. *Drugs: Education, Prevention and Policy*, 19(1), 72-80.

McKay, M.T., Ballantyne, N., Goudie, A.J., Sumnall, H.R. & Cole, J.C. (2012). "Here for a good time, not a long time": Decision-Making, Future Consequences and Alcohol Use among Northern Irish Adolescents. *Journal of Substance Use*, 17(1), 1-18.

2011 - Hale, D., Coleman, J. & Layard, R. *A model for the delivery of evidence-based PSHE (Personal Wellbeing) in secondary schools*. The London School of Economics and Political Science: London ISSN 2042-2695. 2011. <http://cep.lse.ac.uk/pubs/download/dp1071.pdf>

McKay, M.T., Sumnall, H.R. & Cole, J.C. (2011). Teenage thinking on teenage drinking: 15- to 16-year olds' experiences of alcohol in Northern Ireland. *Drugs: Education, Prevention and Policy*, 18(5), 323-332.

McKay, M.T., Sumnall, H.R., Goudie, A.J., Field, M. & Cole, J.C. (2011). What differentiates adolescent problematic drinkers from their peers? Results from a cross sectional study in Northern Irish school children. *Drugs: Education, Prevention and Policy*, 18(3), 187-199.

2007 - McBride, N., Farrington, F. & Kennedy, C. (2007). Research to Practice - Formal Dissemination of the School Health Harm Reduction Project (SHAHRP) in Australia. *Drug and Alcohol Review*, 26, (6), pp. 665-672. [RJ548] Abstract

2004 - McBride, N. (2004). School drug education: A developing field and one element in a community approach to drugs and young people. *Addiction*, 99, pp. 292-298. [RJ439]

2003 - McBride, N., Farrington, F., Midford, R., Meuleners, L. & Phillips, M. (2003). Early unsupervised drinking - reducing the risks. The School Health and Alcohol Harm Reduction Project. *Drug and Alcohol Review*, 22, (3), pp. 263-276. [RJ394] Abstract

2002 - McBride, N. (2002). *Systematic literature review of school drug education*. National Drug Research Institute. NDRI Monograph No. 5. Curtin University, Perth, Western Australia. ISBN: 1 74067 188 0 [M40] Abstract

2000 - McBride, N., Farrington, F. & Midford, R. (2000). What harms do young Australians experience in alcohol use situations. *Australian and New Zealand Journal of Public Health*, 21, (1), pp. 54-59. [RJ321] Abstract

McBride, N., Midford, R. & Farrington, F. (2000). Alcohol harm reduction education in schools: Planning an efficacy study in Australia. *Drug and Alcohol Review*, 19, (1), pp. 83-93. [RJ284] Abstract

1999 - Farrington, F., McBride, N. & Midford, R. (1999). School Health and Alcohol Harm Reduction Project: Formative development of intervention materials and processes. *Journal of the Institute of Health Education*, 37, (4), pp. 137-143. [RJ301]