

**INQUIRY INTO STRATEGIES TO REDUCE ALCOHOL  
ABUSE AMONG YOUNG PEOPLE IN NSW**

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**The School Health and Alcohol Harm Reduction Project (SHAHRP): having a behavioural impact on young peoples' risky alcohol use and experiences of alcohol-related harm.**

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**Alcohol and Young People**

**Brief Background**

*Within a period of about 10 years, young people change from individuals who have never had an alcoholic drink to individuals who, as an age group, are the heaviest drinking section of the population (1, 2). The harm experienced by young people in alcohol use situations is associated with their own consumption of alcohol and other people's consumption of alcohol, and tends to occur with single occasion use (acute) rather than from long term use (chronic) (3). A higher number of years of potential life, quality of life, and productivity are lost from acute alcohol related events experienced by young people than those lost to chronic diseases associated with alcohol use in older consumers (3). In addition, alcohol is linked to the three leading causes of death among young people: unintentional injuries, homicide and suicide (4).*

Approximately 80% of young Australians have consumed alcohol by age 19, with 62.4% of 14-19 year olds consuming alcohol in the last 12 months, and 21.8% consuming alcohol on a weekly basis (2). The success of the SHAHRP program in modifying alcohol-related behaviours is an important program impact, as alcohol use and risk of harm is high. The short and long term harms associated with alcohol use in young people are considerable as alcohol also acts as a precursor to other health and lifestyle problems experienced by young people that can impact negatively on their future (5). In particular, alcohol consumption can act as a risk factor for unsafe sexual practices (6), violence and injury, (7, 8), adverse behavioural problems (9), academic failure (5), and mental health and social problems (10). In addition, early age of onset and feeling drunk during initial drinking experiences increases probability of problem drinking in adulthood (11).

The recent National Drug Strategy Household Survey estimates that 57.4% of young Australians 14-19 years of age were victims of an alcohol-related incident in the previous 12 months (2). In addition, young people have factors unique to their situation that can impact on the potential for harm associated with alcohol consumption. In particular, young people generally have little experience in alcohol use situations and therefore have relatively limited capacity to predict factors that will impact on the event and potential outcomes (12). Young people also have lower tolerance to the effects of alcohol which makes the loss of physical, cognitive and emotional functions more immediate (12). In Australia, the age of first alcohol use remains stable (2), however, alcohol is still estimated to be responsible for 65% of the burden of disease in Australia compared to 19% for tobacco and 16% for illicit drugs respectively (13). To reduce this burden, effective early intervention and prevention strategies are essential.

### **School-based Alcohol Education**

Alcohol prevention most commonly occurs in the school setting. Although there are barriers and supporting factors for implementing alcohol education in schools including: the crowded curriculum; limited teacher skills and time; poor status of health education (the umbrella subject in which alcohol education is usually placed), lack of readily available evidence-based programs, and a historical poor impact on young people's alcohol behaviours. There are also important factors for developing and supporting the implementation of effective alcohol programs in schools. These factors are practice and policy driven, for example, alcohol education is mandatory in various jurisdictions, and when not mandatory, is often given priority status and policy recognition by schools and education departments which creates a place within the curriculum, provides opportunity for teacher training and for sourcing of evidence-based programs, thereby countering many of the previously mentioned barriers to alcohol education. There is clearly ongoing demand and need for alcohol education programs and this is well demonstrated in Australian Education context (14-19). In addition to this continual need to make alcohol education programs available to the education sector, conceptually, the provision of alcohol education in schools is an important component in a community approach to reduce alcohol-related problems. This is particularly so as curriculum-based programs are one of the few methods which provide sustained, direct contact with young people in a setting which engenders learning. The provision of curriculum programs is also critical as reviews of the evidence report that this aspect of a whole-of-school program is most effective in comparison to any other school-based component (20, 21).

Scientific evidence focusing on the harm reduction paradigm has changed expectation and the evidence-basis of alcohol education in the school setting (22). The end result of this are programs which offer sustained behavioural change in an increased range of alcohol use and alcohol-related behaviours, countering previous barriers to alcohol education based on the historical poor impact on young people's behaviour (23, 24). The School Health and Alcohol Harm Reduction Project (SHAHRP study) is a leader in the field in this new style of research-driven alcohol education (22, 25, 26) and its success can be linked to several factors. The first is the primacy of a harm reduction approach in program and evaluation. This change in paradigm seems to be critical as it accepts alcohol use, and/or exposure to use as part of young people's life experience, provides strategies (including non-use) for reducing exposure to, or the impact of alcohol-related harm (22, 27). This approach broadens the scope for impacting on alcohol use and situation of use with young people by acknowledging a greater range of alcohol-related experiences to which young people may be exposed (27). A harm reduction approach also gives attention to young people who do drink and who choose to continue to drink, a group largely ignored in abstinence-based programs (27).

Another evidence-based factor identified by school-based alcohol harm reduction is the involvement of the target group/s in program development (23, 27). The SHAHRP program has its genesis in the needs and experiences of young people as young people played a critical part in the formation and piloting of the program (27-29). By encompassing the experiences of young people in program development SHAHRP has inherent relevance to young people. This acceptance is acknowledged by teaching staff who note that students are 'switched on' to this style of alcohol education and it is much easier to teach as a result in the increased level of student interest (27). The

formative aspect of SHAHRP also focused on 'best fit' within schools by piloting and modifying the program based on teacher review, with a particular emphasis on functionality in the school setting (27).

A third and equally important evidence-based factor leading to the success of the harm reduction paradigm in schools, as demonstrated in the series of SHARHP studies, was the adoption of secondary level evidence. Primary evidence from randomised controlled trials provided little direction for the development of alcohol programs (30). Rather they provide no guidance as past reviews at this level note that school alcohol programs have no impact, and therefore evidence-based factors leading to success (or failure) are rarely identified. To help guide program development, the SHARHP researchers reviewed secondary primary studies in their consideration of curriculum program elements (27). This approach provided an array of elements that could be considered in program development and for further testing (Figure 1) (27). Although not considered evidence-based at the time of development using RCT criteria, the SHARHP research now provides evidence that these components are important in achieving impact in research driven curriculum-based alcohol programs and therefore provides greater guidance to future programs.

A final and extremely important factor that contributed to the success of SHAHRP is the early intent to make the program readily available to schools at low or no cost. School access to evidence-based effective programs has been reported as a limitation to the development of the field (27, 31, 32), as rigorous scientific evaluation is largely driven by research organisations with little dissemination follow-up, resulting in reduced access for practitioners. The history of external policy and practice access to and use of the SHAHRP program shows that formal dissemination of research is critical to uptake (8, 14, 18, 19, 25).

The SHAHRP study and program has overcome many of the historical barriers to effective school-based alcohol education and this has significantly contributed to the development of the alcohol education field. The research and practice benefits to the field include contribution to the evidence-based components of research, with resultant increased use of evidence-based programs in policy and practice.

#### **TIMING AND PROGRAMMING CONSIDERATIONS**

Ideal timing of interventions: *inoculation phase; early relevancy phase; later relevancy phase; based on local prevalence data*

In the context of Health Education program

Based on the needs of the target group: *include formative phase*

Target group involved in planning and testing of interventions

Adopt a harm minimisation goal

Classroom more effective than whole-of-school approach

Booster sessions

#### **CONTENT AND DELIVERY**

Social influence: *Normative education; use of Resistance Training Skills should be limited*

Interactive, activity oriented

Utility knowledge

Focus on behaviour change

Multi drug focus (< 12 years); single drug focus (> 12 years)

Peer interaction

#### **TEACHER TRAINING /SKILLS OF TEACHER/FACILITATOR**

Teacher training: *interactive training including modelling of activities*

#### **DISSEMINATION**

Marketing from research to practice: *make effective programs available to schools*  
Cost: *outlined in detail and minimised so that purchase of effective programs is widely possible*

#### **RESEARCH AND EVALUATION ISSUES**

Report control group drug education participation

Fidelity of implementation/Implemented as intended: *Implementation monitored and reported*

Measures of program success: *based on use, drug-related behaviours including harm associated with drug related situations. Instruments should be assessed prior to use for validity and reliability*

Cluster analysis issues: *individual, class and school level results should be presented*

Duration of measurement: *longitudinal follow-up as delayed effects are a common in curriculum programs*

Group students on previous use: *in addition to analysing main effects, include effects by baseline drug use*

#### **Figure 1 SHAHRP Identified and Secondary Review Evidence-Based Components**

##### **The SHAHRP Studies**

The SHAHRP Study was the first documented alcohol harm reduction research study to assess for impact on alcohol use, alcohol-related behaviours and alcohol-related harm in a school setting using a harm reduction paradigm (23, 26, 31). A series of studies from formative to dissemination have contributed to the development of SHAHRP (23, 24, 28, 33, 34). The SHAHRP formative intervention research study incorporated: a systematic review of drug education research to identify evidence-based components (35); and information from focus groups with older secondary students reflecting on their alcohol-related experiences (28). This version of SHAHRP was piloted with students and teachers to provide an additional assessment of content, implementation and functional capacity (23, 27). Subsequent longitudinal research of the refined SHAHRP program included assessment with 2300 young people in secondary schools over a 32 month period (23).

The recent SHAHRP Refresh project (2011/12) provided scope to update aspects of SHAHRP resources and to refine some of the program information (36). No changes were made to program activities. Updates to the program included: updated Australian prevalence data; provision of secondary reference data to support teacher knowledge (provided on the SHAHRP website, for example, the effects of alcohol on brain development in adolescence); provision of additional harms experienced by contemporary youth, and harm reduction strategies associated with these harms, for example, social networking risks; Functional changes to increase ease of use, for example, provision of pre-printed activity cards. All modifications made to the SHAHRP program were based on input from Key Informants who have been using the SHAHRP program for several years (36).

##### **The SHAHRP program components**

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. Interactive involvement is emphasized, with two-thirds of activities being primarily interactive and another 15% requiring some interaction between students. 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. The SHAHRP Phase 1 and 2 program components include:

***Teacher training.*** Teacher training is conducted before each phase of SHAHRP.

During Phase 1, teachers participate in two days of training with trained facilitators to provide an overview of the study behaviour outcomes, evidence-based components, and interactive modelling of each Phase 1 activity. Phase 2 training is conducted over two days for teachers new to SHAHRP. These teachers are briefed on the research aspects of SHAHRP and Phase 1 intervention activities during the first day of training. On day two, all teachers participate in interactive modelling of Phase 2 activities. Trainers who are experienced in interactive techniques are recommended as SHAHRP teacher trainers.

***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 Phase 1 and seven 50-minute lessons in Phase 2, the timing of which can be readily modified to meet school timetabling. Each lesson plan includes sample questions to help facilitate discussion and debriefing or processing of activities, coaching points to aid in the management of the activities, and background information about alcohol-related issues. Additional coaching points included in the teacher manual are based on feedback from teachers who have previously taught the program.

***Student reflections.*** Student reflection booklets are provided 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. Qualitative results from the SHAHRP study clearly demonstrate students and teachers perspectives that the booklets are appealing and important as reinforcement to the interactive activities (27).

***Trigger video.*** The SHAHRP Trigger Visual is used during for Phase 2 and 3 of SHAHRP. The video, featuring professional actors, incorporates scenarios that young people may experience in alcohol use situations to prompt discussion about how to minimize the harms associated with alcohol use

### **RCT Longitudinal Assessment of the Behavioural impact of the SHAHRP Program**

The SHAHRP intervention, in its existing form, with its existing components has achieved significant behavioural impact and subsequent health cost savings in reducing risky drinking and alcohol-related harm experienced by young people (23, 24). The components of the SHAHRP program that have this level of evaluation are: SHAHRP Phase 1 and Phase 2 classroom program (alcohol harm reduction education in early secondary school), the SHAHRP trigger visual, and the SHAHRP teacher training protocol. As noted previously, behavioural impact was assessed in Australia during the SHAHRP longitudinal study (23) involving 2300 young people in secondary school over a 32 month period. A replication of this study, supporting behavioural findings was conducted in Northern Ireland involving 2349 young people over the same follow-up period (24). Both studies had a statistically significant impacted on young people's level of utility knowledge, attitudes towards alcohol, total consumption, risky consumption, and harm associated with own use of alcohol. The Australian results showed that students who participated in SHAHRP had: 10% greater alcohol related knowledge; 20% lower alcohol consumption (total); 19.5% less harmful or hazardous alcohol consumption; 33% less harm associated with their

own consumption of alcohol; 10% less harm associated with other people's consumption of alcohol, than students who participated in regular alcohol education. The SHAHRP program was particularly successful with early risky drinkers (33). Early unsupervised drinkers from the intervention group were significantly less likely to experience harm associated with their own use of alcohol compared to the corresponding comparison group. Unsupervised drinkers experienced 18.4% less alcohol related harm after participating in both phases of the program and this difference was maintained (19.4% difference) 17 months after the completion of the program (33). These results were unprecedented for an alcohol prevention program with a harm minimisation goal and have had a significant contribution on the alcohol education research field

### **The Research, Practice and Policy Impact of SHAHRP**

School Health and Alcohol Harm Reduction Project (SHAHRP) program has a strong history in demonstrating proof-of-evidence in reducing young peoples' risky alcohol use and alcohol-related harms. This demonstrated through an additional replication in Northern Ireland which supported the Australian RCT results. The scientific strength of SHAHRP is the replication of critical behavioural findings in two different countries under two separate research groups. These findings increase the scientific value of SHAHRP as an evidence-based, effective program, and make SHAHRP an important guide to implementation and research. An additional four replications of the SHAHRP program are currently underway, two in the UK (National Institute of Health (UK) funding a randomised controlled trial of SHAHRP with the addition of a parental component (37); London School of Economics is in initial planning stages of a RCT to assess the impact of SHAHRP on academic outcomes); in Brazil (Universidade Federal de São Paulo) where researchers are in the initial stages of replicating the research (38); and in Australia by the Department of Education in Victoria who are assessing SHAHRP with an additional illicit component.

The translation of SHAHRP to policy and practice is best exemplified in the history of the SHAHRP program adoption into core activity by external health, education, youth and research organisations worldwide (39, 40). In the last four years, 17000 organisations from 130 countries have accessed information and program materials from the SHAHRP website. Most recently, the SHAHRP program has been adopted in practice and is now provided to 16 000 students in Northern Ireland annually (41). SHAHRP has also contributed to policy considerations in the UK with the London School of Economics and Political Science, identifying SHAHRP as one of ten evidence-based programs to be incorporated into UK Secondary Personal and Wellbeing Curriculum in schools (25). In Canada uptake of SHAHRP has occurred within the Canadian Public Health Agency, the Canadian Office of Juvenile Justice (to divert formal proceedings and detention), and the Centre for Drug Dependencies.

In Australia, where alcohol education is mandatory in some states, and will be included in the new National Curriculum, SHAHRP is well recognised with Victorian (15, 42), South Australian (14), and Queensland (16); Western Australian, and Tasmanian education departments recommending SHAHRP as an important evidence-based alcohol resource.

The SHAHRP Study is a leading study assessing the impact of a school-based alcohol harm reduction intervention and is an important consideration for reducing risky drinking and alcohol-related harm in young people.

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