2007

Optimising school nurse involvement in youth based tobacco control programs: presented to the Western Australian Health Promotion Foundation

Child Health Promotion Research Unit, Edith Cowan University
Edith Cowan University

Copyright Warning

You may print or download ONE copy of this document for the purpose of your own research or study.

The University does not authorize you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site.

You are reminded of the following:

- Copyright owners are entitled to take legal action against persons who infringe their copyright.
- A reproduction of material that is protected by copyright may be a copyright infringement.
- A court may impose penalties and award damages in relation to offences and infringements relating to copyright material. Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.
Optimising School Nurse Involvement in Youth Based Tobacco Control Programs

Presented to
The Western Australian Health Promotion Foundation

January 2007
Annual report to the Western Australian Health Promotion Foundation

File Number: 15052

Chief Investigators: Prof Donna Cross
Dr Marg Hall
Ms Therese Shaw
Dr Greg Hamilton
Ms Stacey Waters
Ms Ilse O’Ferrall
Prof Linda Kristjanson
Dr Lydia Hearn
Prof Alison Garton
Ms Rosemary Saunders

Project Title: Optimising School Nurse Involvement in Youth Based Tobacco Control Programs

Organisation: Child Health Promotion Research Centre
School of Exercise, Biomedical and Health Science
Edith Cowan University

Project Personnel: Ms Felicity Stephens (Project Director)
Ms Laura Bond (Project Coordinator)

Contributors: Ms Renee Campbell-Pope (Research Assistant)
Ms Patricia Cardoso (Research Assistant)

© Edith Cowan University, 2007

ISBN: 0-7298-0629-4
Table of Contents

**TABLE OF CONTENTS** II

**LIST OF TABLES** IV

1 **SUMMARY** 1

2 **INTRODUCTION** 3

3 **OBJECTIVES** 8

4 **PROGRESS** 10
   4.1 Project Management and Stakeholder Engagement 10
   4.2 Postgraduate Students 11
   4.3 Ethics Approval 11
   4.4 Literature Review
      4.4.1 Models and Frameworks 12
   4.5 Delphi Process 15
   4.6 School-based Data Collection
      4.6.1 Staff Interviews 17
      4.6.2 Student Surveys 18

5 **RESULTS** 20
   5.1 Delphi Process 20
      5.1.1 Ranked Strategies 21
   5.2 School Staff Interviews 24
      5.2.1 Characteristics of Staff Interviewed 24
      5.2.2 School Tobacco Policy and Procedures 24
      5.2.3 Health Education 26
      5.2.4 Health Promotion 26
      5.2.5 Programs and strategies 27
      5.2.6 Parents 28
      5.2.7 Community 29
      5.2.8 Collaboration 29
      5.2.9 Barriers 29
      5.2.10 School nurse role 30
      5.2.11 Training 30
      5.2.12 Other resources 30
      5.2.13 Aboriginal Education Officer 31
      5.2.14 Manager of Student Services 31
      5.2.15 School Psychologist 31
   5.3 Student Questionnaires 32
      5.3.1 Characteristics of Students 32
      5.3.2 Student Perceptions of Smoking Prevalence 32
      5.3.3 Student Perception of Difficulty to Quit Smoking 33
      5.3.4 School-based Support for Students Who Smoke 33

6 **EFFECT OF RESEARCH ON PROFESSIONAL DEVELOPMENT** 35
List of Tables

Table 1: Staff interviewed ...................................................................................... 24
Table 2: School tobacco policies ........................................................................... 25
Table 3: Penalties for students caught smoking .................................................... 25
Table 4 Further involvement by School Nurse in smoking cessation strategies .... 28
Table 5: Student perception of other students' smoking behaviour ....................... 32
Table 6: Importance of school-based support for students who would like to quit or reduce cigarette smoking ................................................................. 33
Table 7: Willingness of students who smoke to talk to the school nurse about smoking or how to quit ............................................................................. 34
1 SUMMARY

A significant proportion of youth smoke regularly, placing them at risk of addiction to cigarette smoking. It is known that adolescence is a critical period for the establishment of adult drug use behaviours. The key focus for this research program is the investigation of interventions addressing adolescent smoking cessation, with a particular emphasis on School Nurse involvement.

The research program aims to provide capacity building benefits at three levels: to secondary school nurses, to two post-graduate students, as well as school health promotion /smoking prevention/cessation practitioners and researchers. Ultimately this project may add previously underused but well trained, highly credible resources to efforts to decrease the use of and harm associated with tobacco amongst Western Australian youth.

While this project commits to training opportunities for two higher degree research students, one principally to investigate, develop and measure the delivery mechanisms for the tobacco control capacity building of school nurses and the other student to develop and determine the effectiveness of the smoking related interventions delivered to adolescents by school nurses, other opportunities for higher degree research student projects exist and will be encouraged throughout the project.

The PhD and Masters/Honours students (and other research students) will be actively involved in all levels of this research program and mentored by experienced researchers to build their capacity to lead new tobacco research.

The research project aims to provide a clear framework to support nurses in the implementation of their role and to articulate clearly the structure and direction of the secondary school nursing program and ways it can contribute to a reduction in harm from smoking among adolescents. In the first year of this project the following activities have occurred: stakeholder engagement, scoping of evidence for the intervention and processes, validation and adaption of findings for WA using local, national and international experts, and piloting of capacity building. Development of a school intervention delivery strategy will be refined and pilot-tested in 2007. Further funding will be secured to conduct a randomised cluster intervention control trial to measure the
additional impact of the school nurses' capacity building intervention program on the school drug education tobacco prevention program currently used in most WA schools.
A significant proportion of youth smoke regularly, placing them at risk of addiction to cigarette smoking [1]. Reductions in smoking prevalence among adolescents in the most recent 2002 ASSAD survey are in line with international secular trends. While reasons for these decreases remain unclear, the proportion of committed smokers remains high [2]. There is growing evidence that harm minimisation (HM) interventions that prevent or delay the onset of regular smoking among adolescents may result in greater reductions in morbidity and mortality than programs targeted only at preventing ever smoking [3].

As most harm minimisation programs have targeted adults or current users, little is known about the application of harm minimisation principles to primary and secondary prevention of tobacco use among adolescents, most of who have not initiated use or are in the early stages of habit formation. It is known that adolescence is a critical period for the establishment of adult drug use behaviours. If smoking does not commence in teenage years it is unlikely to occur [4], however if it does commence, within approximately two years of initiation, smoking habits largely become fixed [5, 6]. For adolescents, potential HM strategies include reducing recruitment and delaying initiation, increasing cessation, decreasing the risks of active smoking by reducing the number of cigarettes smoked, and preventing progression through social contact (not necessarily through use of the drug) into use of other drugs, and reducing exposure to environmental tobacco smoke [7]. The Smoking Cessation for Youth Project trial conducted by investigators on this team was one of the first studies conducted that successfully tested smoking harm minimisation strategies with students aged 14-17 years [3].

Recently, the concept of adolescent smoking cessation interventions has gained increasing support [8-10], as natural cessation among adolescents is a relatively rare occurrence [10-12]. Most adolescent occasional smokers are aware of the dangers of smoking [13, 14] and report they intend to quit smoking within five years of graduation from high school, yet only half achieve this goal [15] and multiple-quit attempts are common [16]. Thus, although the development of adolescent cessation programs has been established as appropriate and acceptable to teenagers [17, 18], and would appear to hold much promise, research supporting adolescent cessation programs remains sparse, and few studies have used experimental designs [10]. Health Canada suggests more cessation research is required in the schools where smokers are a 'captive
audience’. Australian school students have reported an interest in smoking cessation programs conducted by non-teaching personnel [18].

School nurses and other pastoral care staff are a resource available in Western Australian schools devoted to the health and welfare of students. Their involvement would provide a movement away from reliance on curriculum prevention-only approaches, towards a more comprehensive combination of prevention and cessation [10].

Despite increasing calls for more school nurse involvement in Australia and several recommendations for their role in health education and promotion [19, 20] there is little empirical data that documents nurses’ proactive impact on student health, especially to address smoking cessation. However, it is clear that in collaboration with teachers, other professionals, community members and parents, school nurses can play a role to positively influence student smoking behaviours [21, 22]. They can communicate new health knowledge, support a non-smoking policy and provide smoking cessation interventions [23]. Moreover, recent research suggests schools that provide counselling and education for students caught smoking, rather than discipline-only approaches, may have lower smoking rates [24]. School nurses and other pastoral care staff are ideally situated to contribute to counselling/education practices. In the context of the nurse’s clinical role, for example, opportunities may also arise to address students’ lack of health knowledge or skills and provide individualised attention, including brief smoking cessation counselling [25]. Yet lack of knowledge and counselling skills have previously been cited as barriers to nurse involvement in smoking cessation [14, 26, 27]. An important factor determining nurses’ willingness to participate in smoking cessation efforts within the school is their belief that students are comfortable accepting assistance from the school nurse.

Previous reports have identified that students view school nurses as non-authoritarian, non-judgmental and credible [28]. Likewise, a study by Nash (1987, cited in [29]) claimed that little social distance existed between the school nurse and student, unlike the separation that characterises student-teacher relations, and in the Australian context, these findings were bolstered by those of Livingstone et al [30] which indicate that 75% of all consultations with the school nurse are through self-referral. In line with this, Bradley [25] found that students believe nurses are more likely to keep a confidence than are teachers. Nurses have also been found to have a greater ability to communicate with
parents, and members of the family, especially in rural and remote regions. Moreover, parents have also been reported to perceive the role of the school nurse as an advocate for their child and as a positive influence on their child's decisions [31]. Thus, while increasing interest has focused on adolescent smoking cessation interventions [9, 10, 12, 13, 15-18] the use of school nurses provides an important structural intervention to meet the needs especially of students who already smoke [16]. Moreover, school nurses can also provide effective support for developing school policies for addressing smoking. Brief interventions based on Motivational Interviewing (MI) [34] have been used to assist adolescents to examine their health-compromising behaviours in a non-judgemental manner [35]. Lawendowski [27] reports that MI is useful for adolescents because it is brief, non-confrontational and respectful of adolescents' decision-making abilities. This technique was tested with school nurses as part of the Smoking Cessation for Youth Project to help students to discover the positive and negative consequences of smoking, to consider benefits of and barriers to quitting, and to provide resources and support to prepare students for quit attempts [36].

Despite growing interest for school nurse involvement in adolescent smoking interventions, multiple barriers exist with regards to their successful implementation [37]. One of the key barriers with Australian nurse programs has been that despite their underlying goal to provide holistic services, there has been no clear definition or delineation of the school nurse's role [38, 39], resulting in them covering a myriad of services [40]. This has hampered efforts to stress the importance of their role in educating for health, rather than about health [37] and has resulted in lack of standardised educational requirements or programs for school nurses that strengthen competencies in supporting and listening to students. Nurses who come into the school health setting generally have varying levels of clinical experience where the outcome of their actions is often tangible. A shift from a clinical to preventative health model, which is difficult to quantify, causes feelings of anxiety [41]. A study by Hope and Hart [42] found that 86% of secondary school nurses felt they needed further education and training in counselling skills. Moreover, their lack of preparation to assume their role within a health promoting school policy is frequently exacerbated by feelings of loneliness and perceived lack of support. A study by Periard et al [43] found that the majority of school nurses were the only serving nurse within the student population, with 62% reporting isolation from colleagues as a major problem. In the Australian context, this isolation together with the rigid unattractive career structure, are cited as reasons why the school nurse system is struggling to obtain quality applicants [44].
Another key barrier is the lack of resources. The demands of curriculum time and the accountability of policy imperatives to deliver improved student achievement erodes the importance of student well-being, and leads to emphasis on health education rather than a preventative model [45]. The National Health and Medical Research Council [46] believes there is a need for greater investment in the capacity for schools to implement and sustain school health programs. In this respect, professional development issues were raised frequently as a barrier, with school nurses reporting dismay at the lack of resources available for services involving psychosocial issues [38]. Nurses referred not only to the financial issues but also to the physical limitations which meant they were frequently interrupted during important counselling sessions. In addition, lack of staff support was highlighted as causing fragmentation in services [39]. Novice nurses reported feeling unsupported by inadequate programs of orientation to school nursing practice, lack of mentoring, and insufficient information on the education system. Moreover, lack of knowledge of how to engage boys was seen as another barrier in which they needed support [47], as girls were more likely to use self-referral and hence they pointed out the disproportionate number of girls visiting the service. Finally, management dissonance has also been another barrier with each State in Australia having a different model for managing school nurses, making it difficult for nurses to negotiate the links between management bodies of both the Health Department and the Education Department.

Despite the extensive literature on the school nurse, their role is not well understood or managed in Australia. Although Downie et al [38] found school nurses in Australia emphatically believe their role is in health promotion, a study by Hope [48] investigating the practices of secondary school nurses in Melbourne, found emergency responses and first aid were their major activity accounting for 80% of their work. An initial pilot study by our team as part of the Smoking Cessation for Youth Project [38] indicates that nurses in Western Australia viewed smoking reduction and cessation as a high priority in secondary schools. They also found that the materials developed were acceptable and feasible. Therefore efforts to convince school nurses to expand their role may be unnecessary. Rather they require time, suitable materials, training and other support from within the school and its community.

This program will therefore help to build the capacity of a team of researchers, improving their understanding of the role of the school nurse in Western Australia, and developing appropriate models for the professional development and support of school nurses, so as to overcome the disparity between their proposed and actual role in terms of offering a
preventative framework for school health promotion activities, and in particular, tobacco control.
3 OBJECTIVES

This project aims to provide capacity building benefits at three levels: to secondary school nurses; to at least two post-graduate students; as well as to school health promotion /smoking prevention/cessation practitioners and researchers. Ultimately this project may add previously underused but well trained, highly credible resources to efforts to decrease the use of and harm associated with tobacco amongst Western Australian youth.

This project also aims to provide a clear framework to support nurses in the implementation of their role and to articulate clearly the structure and direction of the secondary school nursing program and ways it can contribute to a reduction in harm from smoking among adolescents.

This project aims to build the capacity of School Nurses by providing a comprehensive and user friendly framework for addressing smoking cessation and smoking-related harm among adolescents. This project has identified strategies through previous research and stakeholder groups, and will test these strategies with School Nurses and adolescents in order to select the best strategies for smoking cessation to be delivered by School Nurses in a secondary school setting.

Objectives:
- To assess how secondary school nurses in WA can best provide primary prevention and early intervention programs to reduce tobacco smoking among adolescents, using approaches that are meaningful and relevant to young people, especially those at higher risk of tobacco use;
- To clarify and strengthen the role of secondary school nurses in this process and to ensure a common understanding of this among all stakeholders in the process;
- To determine what specific skills, training and support are required to assist secondary school nurses to play a more active role in combining primary prevention, early intervention, intervention, and post-intervention tobacco control programs;
- To develop, implement and evaluate school nurse and other health professional skills training and support resources to strengthen the role of secondary school nurses to improve cessation counselling and other smoking prevention and cessation related skills and techniques with adolescents in WA;
• To collaboratively develop, implement and empirically determine the effectiveness of an evidence-based smoking reduction intervention that is considered feasible and useful primarily by secondary school nurses;
• If the intervention is found to be successful, to systematically disseminate the intervention state-wide in cooperation with the Departments of Health and Education and Training.
4 PROGRESS

4.1 Project Management and Stakeholder Engagement

Stakeholder engagement was sought initially through the involvement of 10 principal investigators on the research grant. Further engagement was sought through the formation of a management committee and particularly an advisory committee. The Management Committee is comprised of the project principal investigators and staff of the Child Health Promotion Research Centre (CHPRC). Key organisations, stakeholders and experts were also invited to join the advisory committee to provide expert opinion, guidance and support on key decision making.

A strong team is responsible for overseeing this project. The project Management Committee is responsible for the day to day administration of the project and comprises:
Prof Donna Cross
Ms Ilse O’Ferrall
Dr Greg Hamilton
Ms Therese Shaw
Ms Stacey Waters
Dr Lydia Hearn
Prof Alison Garton
Ms Rosemary Saunders
Prof Linda Kristjanson
Ms Fiona Edwards
Ms Felicity Stephens
Ms Laura Bond
Ms Joanne House

In addition, the project Advisory Committee’s role is to contribute to the direction and progress of the project. Members are affiliated with organisations representing health, nursing, tobacco control and adolescent health. The Project Advisory Committee comprises:
Ms Denise Sullivan, Cancer Council of WA
Prof Mike Daube, Curtin University of Technology
Dr Greg Hamilton, Canterbury District Health Board, New Zealand
4.2 Postgraduate Students

Throughout this five year project at least three higher degree research students will be actively involved in this project. During 2006 one student, Laura Bond began her Masters and coordinated the project.

4.3 Ethics Approval

Ethics approval for the formative stage of this project was granted by the Edith Cowan University Human Research Ethics Committee.

4.4 Literature Review

An extensive literature search of national and international empirical and theoretical evidence was conducted to inform the process and content of interventions to build school nurses’ and other allied health professionals’ capacity to reduce young people’s smoking. These findings have been used to guide instrument development and identify successful smoking control and cessation strategies. A copy of the literature review summary table can be found in Appendix A along with a summary table of school-based smoking interventions (Appendix B).
4.4.1 Models and Frameworks

The project development and strategies have been underpinned by a number of models and frameworks including the Health Promoting Schools Framework, Harm Minimisation and Capacity Building. To follow is a summary of these theoretical tools.

4.4.1.1 Health Promoting Schools Framework

The Health Promoting School is an 'inclusive' concept; recognising the many influences of the school's environment on health, and of engaging students, staff, parents and broader community members in the health promotion process [49]. Ideally, schools should implement policies that promote a healthy lifestyle supported by classroom curriculum, school ethos, school health services, physical environment and links between the school, home and wider community. For the purposes of this intervention framework, Booth and Samdal's [50] adaptation of the Health Promoting Schools (HPS) model has been used. A brief summary of each of the components (policy, curriculum, ethos, school health services, school-home-community links and physical environment) of the HPS model is provided below.

Policy
A school's health policy should represent the school's vision for the health of the whole-school community, and indicators for how this vision will be achieved. Policies should be clear and concise, contain strategies for action, be proactive, involve the whole-school in their development, be continually promoted, consistently implemented and regularly evaluated.

Curriculum
Within the HPS model, the formal school curriculum should support the development of cognitive, physical and interpersonal health-related skills, as well as intrapersonal development, with the aim of changing knowledge, attitudes and behaviours.

Ethos
School ethos can be defined as the culture of the school and is typically symbolic of the interactions between school community members and more importantly, the quality of these interactions. A school's ethos can therefore be influenced by the characteristics of communication, ability to embrace and support change, a safe and supportive environment and respect for one another.
School Health Services
The HPS model encourages schools to recognise the importance of involving key school and allied health services in the delivery and support of health interventions. Such support could include health screening, health counselling, first aid, identification and management of chronic and mental health illness and prevention of infections and non-infectious diseases. For many health interventions, school health service teams, including a school nurse, counsellor, psychologist, chaplain, police officer or health promotion professional, can support behaviour change from a health-care perspective.

School-Home-Community Links
School-home-community links are vital for the sustainability of whole-school efforts to change behaviours of young people. Parents play a significant influential role in supporting and reinforcing learning at school. Further, government and non-government agencies can provide support to schools in implementing programs by providing expert advice, advocacy, financial support, guest speakers for students and referral services.

Physical Environment
The physical environment of a school is often overlooked in the planning and implementation of health promotion programs. However the physical environment can provide structural and organisational support, cues and reinforcement of classroom and whole-school learning to facilitate long term behaviour change.

4.4.1.2 Harm Minimisation
The purpose of incorporating a harm minimisation approach into school strategies recognises that some students do smoke and prevention only messages are not heard by all students. Creating a continuum of strategies for a range of students from non-smokers to smokers provides a more tailored approach to smoking cessation.

The National Drug Strategic Framework [51] defines harm minimisation as the development and implementation of policies and programs designed to reduce drug-related harm. The Framework recognises the aim of harm minimisation as one to improve health, social and economic outcomes for the community and the individual and encompasses a wide range of approaches.
The framework includes:

- Supply reduction strategies to disrupt the production and supply of illicit drugs;
- Demand reduction strategies to prevent the uptake of harmful drug use, including abstinence based strategies to reduce drug use; and
- A range of harm reduction strategies designed to reduce drug-related harm for individuals and communities.

Implementing a harm minimisation approach recognises that:

- Cigarette smoking is prevalent in society;
- Some people will continue to smoke regardless of attempts to dissuade them; and
- Cigarette smoking has a number of perceived benefits for young people (coping with stress, fitting in with peers etc).

The purpose of incorporating this approach into school-based strategies recognises that some students do smoke and prevention only messages are not heard by all students. Creating a continuum of strategies for a range of students from non-smokers to smokers provides a more tailored approach to smoking cessation.

4.4.1.3 Capacity Building

Capacity building has been used in a wide range of strategies and processes to improve health practices and their sustainability [52].

- Capacity building can be defined as the development of sustainable skills, organisational structures, resources and commitment to health improvement in health and other sectors, to prolong and multiply health gains [53]
- A capacity building approach provides a framework for thinking about the infrastructure and processes that need to be in place to address health inequality [54]

The project aims to build the capacity of School Nurses by providing a comprehensive and user friendly framework for addressing smoking cessation and smoking-related harm among adolescents. This project has identified strategies through previous research and stakeholder groups, and will test these strategies with School Nurses and adolescents in order to select the best strategies for smoking cessation to be delivered by School Nurses in a secondary school setting.
4.5 Delphi Process

To validate the proposed strategies for intervention as identified in the literature, the Advisory Committee convened an expert committee of researchers and practitioners to systematically adapt and validate the proposed strategies. A list of potential panel members were also devised through suggestions given by Management Committee members as well as authors selected from relevant and current journal articles. The potential panel members were sent an email and fax-back form to register their interest in participation (Appendix C). The Delphi Technique was used as a validation process to reach consensus amongst the expert committee. The Delphi Technique was conducted in the form of a questionnaire which provided a summary of the proposed strategies. This Delphi process involved two rounds. In the first round the Delphi panel members were asked to review a list of Health Promoting School strategies identified from the literature that can be delivered by the school nurse to address smoking behaviour among adolescents (targeting those who have never smoked through to those who smoke regularly and heavily). Panel members were asked to decide whether they agreed the strategies were appropriate and worthwhile for nurses to conduct by indicating their level of agreement with each of the strategies by typing a number (from: 1 = strongly agree, to 5 = strongly disagree) in the column beside each strategy. Panel members were also asked to include any comments and to add any strategies they thought had been missed at the end of each section. The aim of the first round was to identify the most promising strategies including the potential skills mix nurses would need to possess to deliver these.

In the second and final round of the Delphi, panel members were asked to rank the strategies according to their relative contribution to reducing the harm from smoking for young people given the limited time nurses can allocate to these tasks and the availability of other resources and support. The second round questionnaire was amended based on the feedback received from the panel in the first round. Consensus data from the Delphi process will be used to refine intervention strategies and to identify the capacity needs for nurses to effectively deliver these strategies. A copy of the round 1 and round 2 Delphi questionnaires are contained in Appendix D and E.

The Delphi Panel consisted of the following members:

- Dr Greg Hamilton, Canterbury District Health Board, NZ
- Dr David Ryder, Edith Cowan University
4.6 School-based Data Collection

The data collection phase of the project was conducted in Perth metropolitan secondary schools and consisted of school staff interviews and student surveys. This phase was conducted as an additional component of the project and was not outlined in the initial grant proposal. The aim of the data collection was to gather first-hand information at a school level about:

- Tobacco-related school based policy and procedures including disciplinary actions;
- Tobacco-based health education within the curriculum;
- Tobacco-based programs and strategies;
- School Nurse role and day-to-day duties;
- School Nurse involvement in tobacco control;
- Involvement of other key staff in tobacco control;
- Whole-school approach and attitude to tobacco control;
- School-level barriers to delivering tobacco control;
- Student perceptions of smoking behaviours; and
- Student preferences for seeking help or guidance to quit smoking.
This phase was conducted in partnership with the Edith Cowan University (ECU) School of Nursing, Midwifery and Post Graduate Medicine and involved the third year nursing students as part of their practicum placements in Western Australian metropolitan secondary schools. Working with the practicum nursing students built upon the capacity building aspect of the study as the nursing students received training in health promotion, tobacco control and research methods.

4.6.1 Staff Interviews

4.6.1.1 Recruitment
As part of their required practicum placements, nursing students were assigned to various health settings including primary schools, secondary schools and community health centres by the School of Nursing, Midwifery and Post Graduate Medicine. For the purpose of this study, a convenience sample of 19 nursing students who each attended one secondary school, were selected to participate. The secondary schools were contacted by a letter to the Principal to request their participation in this project. The letter (Appendix F) contained an overview of the project, specific details of their involvement and a fax back form (Appendix G). Following conformation from the Principal, a letter was also sent to the School Nurse at each of the secondary schools to inform them of the project and request their participation (Appendix H). This letter was also followed up with a courtesy phone call. Follow up phone calls were made in order to confirm participation of the schools.

4.6.1.2 Instrument Development
Three staff interview transcripts (Appendix K) were developed by the CHPRC for nursing students to collect role-specific information from the School Nurse, Administrative staff (Principal or Deputy Principal) and Health Education teachers. The interview questions aimed to gather qualitative data about current school policy, procedure and practice in regard to tobacco control and cessation. The staff interviews were developed by the CHPRC and informed by a review of current literature, particularly the Health Promoting Schools framework. The survey was reviewed by members of the Management Committee who included professionals from adolescent health, education, nursing and tobacco fields. Comments made by the Management Committee were integrated and recirculated for further comment until all were in agreement the interview questions adequately addressed the research objectives.
Nursing students were also encouraged to interview health services or pastoral care staff within the school. A Psychologist, an Aboriginal Education Officer and the Manager of Student Services were among those interviewed by the nursing students. Secondary school staff involved in interviews conducted by the nursing students were provided with an information letter and consent form developed by the CHPRC. Staff agreeing to participate were asked to sign the form prior to the interview being conducted. The information letter and the consent form are contained in the Rotation one task booklet (Appendix K).

4.6.1.3 Practicum Nurse Training
Practicum nursing students participating in this project were provided with training by the Project Team. Training for the staff interviews included: an introduction and background to the CHPRC and previous youth-based tobacco research conducted by the centre; information on youth tobacco use and cessation, capacity building and harm minimisation informed by the literature review; and, training in research methods, particularly interview techniques. Nursing students were presented with an information booklet (Appendix K) at the training day which comprised the background information and interview transcripts. During the training session, students were provided with an opportunity to read through the interview questions and practice interviewing techniques. This training was conducted over two half days in early August 2006.

4.6.2 Student Surveys

4.6.2.1 Recruitment
A convenience sample comprising ten secondary schools was recruited for participation in the student survey phase. A total of 59 practicum nurses (19 of whom participated in the staff interview phase) worked in nine groups of six and one group of five within these ten schools. Student nurses developed and delivered a health promoting information session around tobacco control and administered surveys to one class of Year 8, 9 or 10 students. Seven of the schools who participated in the staff interview process also took part in this phase of the project. The recruitment letter for these schools can be viewed in Appendix I. Those schools that hadn't been involved in prior research for this project were contacted by a letter (Appendix J) to the principal and the school nurse to seek their school's involvement in this phase of the project. Fax back forms were provided with the initial letter and schools were followed up by phone. Ten of the schools contacted to participate in this research declined to participate.
Permission was granted by the Edith Cowan University Human Research Ethics Committee to conduct student surveys without requiring parental consent providing the Principals of each school were content with the process. The student surveys remained anonymous and no personal information regarding smoking behaviours was collected.

4.6.2.2 Instrument Development

In order to evaluate school-based smoking cessation strategies, School Nurse involvement in tobacco control and student perceptions of tobacco use and where to receive cessation advice; the student nurses surveyed one class of Year 8, 9 or 10 students. The student survey was developed by the CHPRC and informed by a review of current literature, including the Health Promoting Schools framework and intervention materials. Prior to dissemination, the survey was reviewed by members of the Management Committee who included professionals from adolescent health, education, nursing and tobacco fields. Comments on the survey were integrated and re-circulated for further comment until all were in agreement the survey questions adequately addressed each research objective.

4.6.2.3 Practicum Nurse Training

One half day training was conducted in September 2006, for nursing students prior to their placement in secondary schools. This training included: a project overview; a summary of strategies identified from the literature; a summary of findings from the staff interviews conducted; and questionnaire administration training. Nursing students were provided with a booklet during the training (Appendix L). Once again the booklet contained a project overview, a summary of the current literature and specifically a list of smoking cessation strategies. The nursing students were required to fulfil specific tasks for their course as well as taking part in the student data collection process. The booklet provided guidelines to assist with the development of posters, pamphlets and an information session (course requirement of the School of Nursing). These guidelines were provided in order to control the information delivered to secondary school students, as the focus of the study is on harm minimisation and cessation strategies rather than prevention messages.
5 RESULTS

5.1 Delphi Process

A thorough review of youth-based, school-based, tobacco and nursing related literature and intervention materials guided the development of the Delphi instrument. Current strategies found within the literature were organised under the Health Promoting School headings of: school health services, policy, school-home-community links, curriculum and the physical environment.

The Delphi Process was conducted in two rounds. In the first round the Delphi panel members were asked review a list of Health Promoting School (HPS) strategies aimed at addressing smoking behaviour among adolescents by School Nurses and other health services staff (Appendix D). Panel members were asked to indicate their level of agreement with each strategy by number (from: 1 = strongly agree, to 5 = strongly disagree). The level of agreement was used to determine if strategies were correctly placed under each of the HPS headings and to determine if strategies were appropriate for delivery by the School Nurse or other health services staff. Panel members were also asked to include any comments and to add any strategies where they felt applicable. The aim of the first round was to identify the most promising strategies including the potential skills mix nurses would need to possess to deliver these. Feedback from panel members in the first round was used to refine the instrument strategies for further examination in the second round.

In the second and final round of the Delphi (Appendix E), panel members were asked to rank what they judged to be the top five strategies. Strategies were ranked in order of importance relative to their contribution in reducing harm from adolescent smoking within the capacity of the school nurse. The second round questionnaire was amended based on the feedback received from the panel in the first round. A total of 18 panel members participated in the first round, with 14 participating in the second and final round. Results for the final Delphi process are presented:
5.1.1 Ranked Strategies

Only nine of the 14 participants in the second round Delphi process provided a complete ranking of five strategies in order of importance. All strategies receiving a ranking by panel members were entered into the statistical package SPSS for Windows (version 13) and the mean score for ranked strategies calculated. In total 33 strategies received a ranking between ‘1’ and ‘5’, as well as the value of ‘0’ for those strategies that were found not to be effective at all. The top strategies as listed below consisted of all strategies with a mean score between ‘1’ and ‘3’.

School Health Services

The school nurse and other health service staff (counsellor, chaplain, psychologist and pastoral care) receive adequate training and support to provide tobacco-related services to adolescents. These staff can help adolescents one-on-one or in groups by:

- Providing opportunistic cessation intervention where appropriate when students who smoke are presenting with other concerns (1.4)
- Providing easy access to evidence-based cessation help and support to current users (1.6)
- Providing harm reduction strategies using techniques such as Motivational Interviewing or Brief Intervention to prevent escalation of smoking by students who smoke in a context that doesn’t condone smoking and where cessation is the preferred goal (2).
- Providing group and individual counselling and/or activities such as those based on Motivational Interviewing concepts to encourage students who smoke to discuss their smoking (2)

To deliver appropriate tobacco-control interventions and strategies, the school nurse should receive training and accreditation:

- In tobacco cessation counselling techniques such as Motivational Interviewing and/or Brief Intervention (2).
- To update their skills and to build their self-efficacy in tobacco control delivery (3).
Policy
The school nurse assists with the development of and provides support for school policies addressing tobacco. Their involvement within the school policy can include:

- Acting as a catalyst or joining with other school 'champions' to maintain the motivation of the school community to reduce harm from adolescent smoking (1).
- Leading a school health policy advice group to increase power for policy output (2).
- Supporting students who smoke by contributing to a policy which includes strategies to help them to quit or reduce harm to themselves and others from smoking (i.e. not purely punitive actions) (2.5).

School-Home-Community Links
The school nurse and other health services staff can help to enhance the school-home-community links by:

- Sending the school's tobacco policy home with every student at the beginning of the year to frame smoking as a health issue, to describe potential harms of youth smoking, to detail the availability of the school's resources to help parents whose children are smoking and the consequences of tobacco use infractions on school premises (2.5).

Physical Environment
The school nurse and other health service staff can help to prevent, control and reduce harm from smoking by:

- Advocating to address problems associated with retailers selling tobacco products to students (2).
- Providing a private and confidential office environment for students to discuss smoking related issues (this refers to students wishing to discuss their issues, not only students who have been caught smoking on school premises) (3).

Other skills and capacity school nurses need to help students and their families reduce their harm from smoking

- Assessment skills to help determine when smoking is a coping approach to a much larger problem (i.e. abuse, isolation, inability to make friends) (1).
- Counselling skills in order to undertake some of the roles expected of the school nurse. Need to ensure they are trained to a sufficient skill level in counselling (2).
To be able to develop effective relationships with parents, students and the school (3).

The information collected from the Delphi phase will aid in the development of an intervention to pilot in the second year of this study.
5.2 School Staff Interviews

A total of 19 Edith Cowan University nursing students conducted interviews with key school staff including: School Nurses, Principals, Deputy Principals, Health Education Coordinators and other staff involved in tobacco-related issues. Interview questions are located in Appendix K. All 19 nursing students participated and provided information from 19 secondary schools. The schools involved in the research comprised Government and Non-Government schools from the Perth metropolitan area and included schools from varying levels of socio-economic status.

5.2.1 Characteristics of Staff Interviewed

<table>
<thead>
<tr>
<th>Table 1: Staff interviewed</th>
<th>Number (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools</td>
<td>19</td>
</tr>
<tr>
<td>School nurses</td>
<td>19</td>
</tr>
<tr>
<td>Administrative staff</td>
<td>17</td>
</tr>
<tr>
<td>Health education staff</td>
<td>14</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
</tr>
</tbody>
</table>

5.2.2 School Tobacco Policy and Procedures

The Administrative staff (Principal/Headmaster/Deputy) were asked to describe their school's tobacco policy. Seventeen administrative staff participated in an interview. Sixteen reported having a school tobacco policy in place; one school did not report having a specific policy. All schools involved in the research reported that smoking was not allowed on the school premises. At one school, the tobacco control was covered in a Behaviour Management Policy covering both legal and illegal substances. Table 2 lists the tobacco policies as reported by the schools.
Responses were recorded for 17 schools when administrative staff were asked what actions were taken if a student is caught smoking. For most schools, the procedure varied according to the number of times a student was caught smoking. If a student was caught smoking cigarettes on more than one occasion, the level of penalty increased. If a student was caught smoking the first time they were likely to receive counselling by the School Nurse and parents were contacted, at most schools, more than one action was taken for the first offence. For subsequent offences, suspension was the preferred option and parents were notified. Table 3 lists different actions taken by the 17 schools.

### Table 3: Penalties for students caught smoking

<table>
<thead>
<tr>
<th>Penalties</th>
<th>1st Offence</th>
<th>Subsequent Offences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counselling by School Nurse</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Counselling by external agency</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Warning and counselled by Administrative staff</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Smoking assignment</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>Fitness program</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Parents contacted</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Letter, pamphlet or information package sent to parents</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Cigarettes confiscated</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>In-school detention</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>After-school detention</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Suspension</td>
<td>2</td>
<td>8</td>
</tr>
</tbody>
</table>

*Respondents were able to select more than one response.*
5.2.3 Health Education

Interview responses reported by 14 health education staff from 14 different schools, outline that for a number of schools (43%) it is compulsory for students to study three units of health education from Years 8-10 including the drug education components of the Health Education Syllabus. Students at five schools received education on tobacco use and related health risks in Year 8 during health education classes only, a further two schools covering tobacco health education in Years 9 and 10 reported tobacco education was covered more thoroughly in the Year 8 lessons. Only one school covered tobacco education at the Year 11 level. At one school, regular health education lessons were replaced by an elective subject. Three schools concentrated on other areas of health education including illicit drugs, violence, nutrition and exercise.

5.2.4 Health Promotion

When asked if the school was a health promoting school, 16 (94%) of the 19 School Nurses interviewed, reported their school was. Only four of the Nurses (25%) reported addressing smoking as a specific component of their health promoting school. A total of five schools (31%), including two schools (12%) that specifically address smoking, reported being asthma friendly schools. Other health promoting schools provided: the Promoting Adolescent Sexual Health (PASH) program, which includes a tobacco control component; the Adolescents Coping with Emotions (ACE) program; the Virtual Infant Parenting (VIP) program; and health campaigns addressing nutrition, sexual health, mental health, weight loss, exercise and sun safety.

The School Nurses were also asked what smoking-related health promotion days or weeks the school was involved in. Of the 19 responses, five (26%) reported being involved in World No Tobacco Day. This involved displaying posters around the school and an information and display area in the library. Asthma was also promoted in four (21%) of the schools which included World Asthma Day, National Asthma Week and Bubble Day. Two (10%) schools promoted Quit Week by displaying posters, handing out pamphlets and conducting quizzes. Thirty seven percent (n=7) of the School Nurses reported not having any involvement and two nurses (10%) did not provide a response.
5.2.5 Programs and strategies

Of the 19 School Nurses who were asked which tobacco control programs or strategies they delivered, 26% (n=5) reported having no involvement. Of the School Nurses who delivered tobacco-related programs or strategies, 85% (n=12) reported delivering tobacco education by providing health education materials and resources and conducting classroom tutorials and workshops. Forty three percent (n=6) reported providing counselling for students, a further three reported conducting motivational interviewing, six delivered strategies from the Keep Left or Smarter than Smoking resources and two provided quit packs for students wanting to quit smoking. Other strategies included displaying posters in the health centre, the library, physical education office, classrooms and other areas around the school.

Interestingly, when the Administrative staff were asked what types of tobacco control programs or strategies the school delivered, the majority referred to health education programs (76%, n=13) and school policy (30%, n=5). Only two reported School Nurse involvement in providing strategies (11%).

Six School Nurses reported the most effective strategies included one-on-one counselling with students, this included brief interventions and motivational interviewing. The following topics were covered in counselling sessions: the impact of smoking on various systems of the body; legalities; cost of buying cigarettes; looking at why students smoke cigarettes; and developing quit plans. Other successful strategies included parent meetings with the School Nurse and student and parent education evenings. Providing support to students who smoke was reported by one School Nurse, education for highlighting alternatives to smoking and the long-term impact of education were also reported.
School Nurses were asked how else they would like to be involved in smoking cessation strategies in schools. Responses are reported in Table 4.

Table 4 Further involvement by School Nurse in smoking cessation strategies

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Number (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>More health promotion</td>
<td>2</td>
</tr>
<tr>
<td>Assistance from outside agencies</td>
<td>1</td>
</tr>
<tr>
<td>Smarter than Smoking grant</td>
<td>1</td>
</tr>
<tr>
<td>Regular newsletter items</td>
<td>1</td>
</tr>
<tr>
<td>Delivery of classroom education</td>
<td>1</td>
</tr>
<tr>
<td>Involvement of ongoing school programs</td>
<td>3</td>
</tr>
<tr>
<td>Student referral to Nurse for counselling</td>
<td>2</td>
</tr>
<tr>
<td>Work with other staff</td>
<td>1</td>
</tr>
<tr>
<td>Already involved</td>
<td>1</td>
</tr>
<tr>
<td>Smoking not really an issue</td>
<td>3</td>
</tr>
<tr>
<td>Do not know</td>
<td>1</td>
</tr>
<tr>
<td>No response</td>
<td>4</td>
</tr>
</tbody>
</table>

*Respondents were able to select more than one response.

5.2.6 Parents

The School Nurses from four schools (21%) involved parents in tobacco-related issues by including health promotion messages such as tobacco-related issues in the school newsletter. Three School Nurses (16%) also engaged parents by sending home information letters and pamphlets about how to support their child to be smoke free and to outline school strategies relating to tobacco use. Two nurses (10%) reported involving parents by conducting counselling sessions/interviews with the parent and student present. One Nurse reported involving parents by inviting them to participate in an annual health expo. Four Nurses reported parents were not involved in tobacco-related issues or programs (21%).
5.2.7 Community

The School Nurses were asked about community involvement in tobacco-related issues or programs within the school. Nine of the 19 School Nurses reported they did not involve the community in tobacco-related issues or programs. The most forms of contact with the community was through the school newsletter (n = 3), and by involving the community in health promotion days or events (n=3), one school involved in the 'Keep Kids in School' program reported collaboration with surrounding businesses who would not serve students during school hours, one School Nurse provided student support by providing referral to their local General Practitioner and another School Nurse collaborated with Health Promotion Officers at a community health centre.

5.2.8 Collaboration

When asked which other staff members the School Nurse would like to work with to deliver smoking cessation, eight reported the health education teacher or coordinator (42%), three reported the Deputy Principal or Deputy Headmaster (16%), three reported sports/physical education teachers (16%), one Nurse suggested school counsellors (5%) and finally, one Nurse (5%) would like to see form teachers more actively involved. Three School Nurses did not provide a response to this question (16%).

5.2.9 Barriers

Lack of time was the main barrier for School Nurses in delivering smoking cessation programs and/or strategies, eight nurses reported they needed more time to help young people with smoking cessation (42%). Time was also a factor affecting the availability of students to take part in smoking cessation programs (26%, n=5). Financial resources were reported as a barrier by two Nurses as well as human resources (10%, n=2). Students with parents who smoke was reported as a barrier, in some cases, parents provided cigarettes to their children. The absence of whole-school involvement (26%, n=5) and lack of interest of school/staff interest in tobacco control (21%, n=4) was reported. Other barriers included minimal or no involvement from other school staff, lack of communication and collaboration between the School Nurse and teachers on tobacco-related curriculum content, minimal support for health promotion and the Nurses role within the school and a focus on disciplinary actions rather than treating cigarette smoking as a health problem.
5.2.10 School nurse role

A total of 19 Nurses were asked about their role and day-to-day duties as a School Nurse. Most Nurses reported their primary role within the school was to deliver health promotion (n = 12) and health education (n = 11), followed by the delivery of first aid (n=9), referral to other health services (n=8), counselling (n=8), liaising with other school staff (n=8) and providing health care (n=7). One nurse reported being involved with the development of health policy within the school. Collaborating with health service staff (n=7) and liaising with school staff (n=8) and parents (n=6) was reported by respondents.

5.2.11 Training

A total of 15 out of 19 School Nurses (79%) reported receiving training to support the delivery of smoking cessation strategies, 12 (80%) of which received training in either the Keep Left or Smarter than Smoking resources. One School Nurse attended training through the School Drug Education program (6.6%), one Nurse has completed the In-Touch training which covers drug issues in schools (6.6%) and another Nurse attended education sessions for activities on smoking for students in Years 1-12 (6.6%).

When asked what further training School Nurses would need to help deliver smoking cessation strategies in schools, 26% Nurses reported they did not need any further training or skills (n=5). One Nurse (5%) suggested other school staff should attend training for tobacco-related issues. Other responses included access to and training for new programs (10%, n=2), a refresher course in current programs, resources from the Quit campaign and 'Towards a Smoke-free Generation' activity kit from the Department of Health.

5.2.12 Other resources

Aside from training, School Nurses suggested other resources which would enable them to help young people further with smoking cessation. Time was the biggest factor reported by 26% of the School Nurses (n=5), having more time would enable Nurses to deliver more resources to the students. More interest and involvement in tobacco control by the school would also aid in helping students further (21%, n=4). Visual information was reported as an avenue to help young people with smoking cessation. Displaying posters
showing the impact of smoking-related harm on the body and displaying posters in the broader school community were reported.

5.2.13 Aboriginal Education Officer

The Aboriginal Education Officer interviewed at one school reported involvement in tobacco control by working with health education teachers to deliver drug and tobacco awareness programs. The role of the Aboriginal Education Officer is to support health education classes and deliver information to students upon request, in a non-judgemental manner. When asked about factors inhibiting how the school responds to smoking by students, the respondent reported the layout of the school grounds enabled students to find places to smoke. Another factor included lack of parental support. The Aboriginal Education Officer recommended raising awareness among students rather than implementing specific strategies.

5.2.14 Manager of Student Services

One Manager of Student Services was interviewed for this research. The participant reported providing social communication and health education pamphlets. The key role of the Student Services Manager is to provide referral for students to health centres and community programs. When asked which strategies are working best to discourage smoking among students, the respondent reported personal relationship support, including parental support, encouragement and support to stop smoking.

5.2.15 School Psychologist

Interview responses were collected from only one School Psychologist from the 17 schools. The Psychologist mainly provided emotional support for students within the school. The respondent did not report specific involvement in tobacco control or smoking cessation for students.
5.3 Student Questionnaires

Practicum nursing students developed and delivered a short information session covering tobacco control, cessation and harm minimisation topics to one class of Year 8, 9 or 10 students. Following the session, the nursing students administered a 15 minute, self-complete survey to all the students in the class who were willing to participate. The survey questions were developed by the CHPRC and sought information about normative perceptions, school-based smoking cessation/control strategies and preferred staff for the delivery of smoking cessation/control strategies and programs. All student responses remained anonymous. A copy of the student questionnaire can be found in Appendix M.

5.3.1 Characteristics of Students

A total of 229 secondary school students in Years 8, 9 and 10 participated in the survey. 58% were Year 8 students, 16% Year 9 students and 25% Year 10 students. Of the participating students, 50% were male and 34% were female, 16% students did not report their gender.

5.3.2 Student Perceptions of Smoking Prevalence

Survey participants were asked to report how many students they believed smoked cigarettes in their school. Almost 60% of respondents reported they thought 'some' students smoked cigarettes in their school, 20% believed 'most' students smoked cigarettes and 2% reported they believed no other students smoked cigarettes.

Table 5: Student perception of other students' smoking behaviour

<table>
<thead>
<tr>
<th></th>
<th>n=229</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Not many</td>
<td>35</td>
<td>15</td>
</tr>
<tr>
<td>Some</td>
<td>136</td>
<td>59</td>
</tr>
<tr>
<td>Most</td>
<td>45</td>
<td>20</td>
</tr>
<tr>
<td>All</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>No response</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>
5.3.3 Student Perception of Difficulty to Quit Smoking

Participants were asked to list some reasons why they thought some young people may find it hard to quit smoking. A large proportion of students (64%, n=146) reported the addiction to nicotine and smoking as an inhibitor for quitting smoking. Peer pressure (22%, n=51) and smoking to be 'cool' or 'popular' (20%, n=46) were also reported. Having friends who smoke (6%, n=14) and parents or family who smoke (4%, n=9) was a factor in quitting. One participant reported there were no support systems in place to help students to quit smoking and nine reported they did not know how to quit or where to go for cessation help.

5.3.4 School-based Support for Students Who Smoke

Table 6 indicates the importance of school-based support for students who smoke cigarettes. Most respondents (86%) reported school-based support for students who would like to quit smoking or reduce their cigarette smoking as 'very important' or 'important'. Only 12% reported this type of support was 'not very important' or 'not important at all'.

Table 6: Importance of school-based support for students who would like to quit or reduce cigarette smoking

<table>
<thead>
<tr>
<th></th>
<th>n=229</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very important</td>
<td>119</td>
<td>52</td>
</tr>
<tr>
<td>Important</td>
<td>79</td>
<td>34</td>
</tr>
<tr>
<td>Not very important</td>
<td>26</td>
<td>11</td>
</tr>
<tr>
<td>Not important at all</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>No response</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
Participants were asked to report how willing they thought students who smoke cigarettes would be to talk to the School Nurse about his/her smoking or how to quit (Table 7).

Table 7: Willingness of students who smoke to talk to the school nurse about smoking or how to quit

<table>
<thead>
<tr>
<th></th>
<th>n=229</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not willing</td>
<td>132</td>
<td>58</td>
</tr>
<tr>
<td>Don't think they would be willing</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Depends on the situation</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Don't know</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Don't know any students who smoke</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>No response</td>
<td>59</td>
<td>31</td>
</tr>
</tbody>
</table>

Over half the respondents (58%) reported students would not be willing to speak to the School Nurse about smoking or how to quit. The most prominent reason given why students may not be willing to speak to the School Nurse (n=132) about this issue is fear of punishment or discipline (24%, n=32). Fear of parents finding out was also reported by 3% of students (n=4). Respondents reported that students may be uncomfortable talking to the School Nurse or be too embarrassed to speak to the Nurse (11%, n=15) and would rather speak to someone they know or trust (2%, n=3). Seven percent of participants reported students would not be willing to talk to the Nurse because they believe it's the student's business and they can 'handle it themselves' (n=9). Other reasons for not speaking to the School Nurse about smoking were; some students would not want to tell anyone they are smoking and do not like talking about their smoking (5%, n=6), they enjoy smoking and do not want to quit (10%, n=13), and they think it is 'OK' and 'cool' to smoke (5%, n=6).

When asked who in the school students would go to for advice and support if they wanted to quit or reduce their smoking, 22% of the respondents reported the School Nurse, 21% reported the Chaplain, 20% reports friends, 19% report a teacher and 10% reported the school counsellor. A number of students referred to specific teachers by naming them and stated they had a good relationship with the particular staff member and/or trusted them.
This project has and will continue to provide training opportunities for a significant number of students at Edith Cowan University.

During 2006 one Masters Student was involved in the project. She has worked as the Project Coordinator and has been involved in all stages of the project to-date, including stakeholder and Delphi panel member recruitment, literature searching and review, preparation of Delphi questionnaire and coordination of the 2 rounds of the Delphi process, School recruitment, training practicum students, development of practicum booklets, interview questions and student questionnaire and analyses of results.

As described in section 3.6 of this report 59 under-graduate nursing students from Edith Cowan University completed their Health Promotion and Community practicum placements in metropolitan secondary schools as part of the formative stage of this project. These students were involved in data collection through interviews and administering student questionnaires and well as researching, preparing and presenting tobacco cessation and health promotion messages to secondary school students. All practicum nursing students were presented with a letter and certificate of participation to include in their portfolio (Appendix N).
Outputs

- The establishment of an advisory committee comprising stakeholder organisations, researchers and experienced practitioners in key areas of health promotion, education, psychology, public health, nursing and primary care;
- The development of close contacts with key stakeholders and national/international expert advisors to review literature to determine the critical success factors associated with effective school smoking cessation programs and the roles which school/community nurses can play;
- Determination of school nurses' willingness to and perceptions of their role to assist with smoking reduction (including cessation) within the school through consultation at organisational and individual levels;
- Identification of effective and appropriate smoking cessation/reduction strategies for adolescents and young adults that involve school nurses, other school staff and parents;
- The promotion of a coordinated, state program to strengthen the capacity of school nurses and other community health professionals to improve cessation counselling and other smoking prevention and cessation related skills and techniques with adolescents and young adults;
- Improved coordination between schools and community-based health services to strengthen the role of the school nurse and build regional and state support networks to encourage relevant research in WA;
- The development of new researcher capacity to conduct rigorous tobacco control research (especially in the areas of youth and cessation).
8 COMMUNITY BENEFITS FROM THE RESEARCH

Primary goal of this project is to enhance and extend the training component of the CHPRC's program in youth-based tobacco control research. In particular, the capacity building program will focus on examining, prioritising and empirically testing some promising areas of research and intervention success in youth tobacco control including harm minimisation strategies targeting 11-17 year olds, involving teachers, parents and in particular school nurses. The program is designed to build capacity at two tiers through formal research training and via the training outcomes of this research with school nurses and other community health professionals who have significant and positive contact with youth. By working with young researchers to develop and test effective interventions to raise the participation of school nurses, the program aims to build a strong, sustainable community/academic partnership to gain experience working together to collect initial data and develop rigorously designed school and community based interventions for youth-based tobacco control.

The project aims to provide opportunities that:

- Build on existing research knowledge and experience to support new and less experienced researchers, academics, practitioners, and government and non-government organisations who work with young people, thereby generating innovative, broader ranging approaches to address smoking cessation in WA.
- Expand significantly the skills and resource capacity of school nurses and other community health professionals to effectively contribute to tobacco control with young people.
- Develop the collaborative efforts and pool of experienced researchers in youth-based tobacco control.
- Enhance the empirical evidence base to provide timely and strategic policy advice and support for decision making regarding the role and training of school nurses in tobacco control and youth health promotion.
9 PARTNERSHIPS

A number of partnerships have been established throughout the course of this project. A Management Committee was established to provide the Project Team with research direction:

- Prof Donna Cross
- Ms Ilse O’Ferral
- Dr Greg Hamilton
- Ms Therese Shaw
- Ms Stacey Waters
- Dr Lydia Hearn
- Prof Alison Garton
- Ms Rosemary Saunders
- Prof Linda Kristjanson
- Ms Fiona Edwards
- Ms Felicity Stephens
- Ms Laura Bond
- Ms Joanne House

An Advisory Committee was also formed for further direction. The Advisory Committee were invited to participate in the Delphi process phase of the study:

- Ms Denise Sullivan, Cancer Council of WA
- Prof Mike Daube, Curtin University of Technology
- Dr Greg Hamilton, Canterbury District Health Board, New Zealand
- Ms Fiona Edwards, Smarter than Smoking Project
- Ms Sharon McBride, Child and Adolescent Health Service, Department of Health
- Ms Roslyn Frances, Tobacco Control Branch, Department of Health
- Ms Catriona Coe, School Drug Education and Road Aware Project
- Ms Sue Keenan-Smith, North Metropolitan Area Health Service
- Ms Barbara Elliott, Armadale Health Service, Kelmscott Senior High School
- Dr Shelley Beatty, Edith Cowan University
- Prof Cobie Rudd, Edith Cowan University
- Ms Debbie Eggleston, Health Promoting Schools Association
- Ms Robyn Robson, Independent School Nurses’ Association
- Prof Donna Cross, Child Health Promotion Research Centre
• Ms Felicity Stephens, Child Health Promotion Research Centre
• Ms Laura Bond, Child Health Promotion Research Centre

The Delphi panel consisted of Advisory Committee members, as well as the following additional members with experience in youth-based, school-based, tobacco-related and nursing backgrounds:

- Dr David Ryder, Edith Cowan University
- Professor Steve Sussman, University of Southern California, USA
- Associate Professor Suzanne Colby, Brown University, USA
- Associate Professor Karen Chalmers, University of Manitoba, Canada
- Dr Deborah Fritz, Maryville University, USA
- Dr Nyanda McBride, Curtin University
- Professor Cobie Rudd, Edith Cowan University
- Professor Ken Resnicow, University of Michigan, USA
- Mr Ron Borland, The Cancer Council, Victoria

Partnerships were also formed with the School of Nursing, Midwifery and Post-graduate Medicine with the participation of 3rd Year Practicum Nurses in the data collection phase.
10 DISSEMINATION

A systematic plan for dissemination of this project's findings will be developed in association with key collaborators in government and non-government agencies.

The results of the study will be disseminated nationally to all participating and other interested schools, as well as via public forums, local media, conference presentations, project reports and research papers in peer-review journals.

While beyond the scope of this project a dissemination trail will be key to investigating the diffusion of this innovative tobacco control program involving school nurses and will provide further opportunities to build researcher capacity in this area. Whereas diffusion is the manner in which a new idea, product, policy or program, is taken up and used by individuals, communities or organisations [56], dissemination refers to active efforts to influence or enhance the diffusion process [57]. The Principal investigators will attempt to secure further funding to investigate the effectiveness of the diffusion process employed by the Department of Health (and Education and Training) to increase awareness, adoption, implementation, and system level institutionalisation of the training program for school nurses and other pastoral care staff and the extent to which school nurses and other pastoral care staff institutionalise the recommended program in their schools (if found to be successful during the effectiveness trial).
11 REFERENCES


