

## 2003 Dissertations

### **An examination of registered nurses' willingness to become organ donors. An analysis of the Public Health Model of behaviour change**

**Candidate: Katherine Gillett**

Framed by the Public Health Model of behaviour change this study examined registered nurses' level of knowledge, belief and attitude about organ donation and the utilisation of a set of public health promotion strategies designed to increase organ donation awareness. A sample of 54 registered nurses was randomly assigned to either the control or treatment intervention group to receive a package of health promotion materials. All participants completed the Matten (1991) Nurses' Knowledge, Beliefs and Attitudes Regarding Organ and Tissue Transplantation Questionnaire. The only significant result was that nurses who held strong positive beliefs about organ donation were found to have higher level of commitment to register as an organ donor than nurses who held more negative beliefs. The implications of the results are discussed in relation to the efficacy of the Public Health Model of behaviour change.

### **Adolescents' reproductive and sexual health program in Queensland: Is there room for improvements?**

**Candidate: Manuel Novela**

The objectives of this study were to describe the public health significance of adolescents' reproductive and sexual health issues; to describe the nature of existing approaches to address these issues; to examine the views of Queensland's managers of the program as to the effectiveness of existing approaches and' to identify service gaps and propose improvements that may be implemented.

The study concluded that the main hindrance to the implementation of the sexual health program was weak community acceptance and support. This limits adolescents' access to sexual health services and to a comprehensive sexual health education. Furthermore, the lack of a national or state sexual health strategy has resulted in a lack of uniformity and inconsistencies in the strategies adopted, making it difficult to evaluate the effectiveness of a sexual health program against a policy framework.

Recommendations arising from this study include wider community education and involvement in design and implementation of such a program. The undertaking of more extensive research involving a representative sample of Queensland wide stakeholders (including managers, parents, adolescents, GPs) was also recommended.

### **A study examining the factors that influence the effectiveness of health care interventions, delivered by generalist nurses in rural and remote settings to patients with mental illness**

**Candidate: Chanelle Clark**

The purpose of this study was to examine the effectiveness of therapeutic interventions by generalist nurses in rural and remote areas when caring for people with mental illness. The study utilised a theoretical model of therapeutic commitment, that proposes the willingness and ability to utilise therapeutic qualities in health care interventions is a function of therapeutic commitment. It is further proposed that therapeutic commitment is influenced by one's self-

perceived role competency and role support. One hundred and sixty three generalist nurses from two South West Queensland Health Service Districts completed a self-administered questionnaire. The results revealed that respondents had reasonably low levels of therapeutic commitment, role competency and role support. From these findings it can be inferred that nurses who participated in the study have less than adequate knowledge, skills and support to deliver effective health care interventions to patients with mental illness. Such inadequacies including a lack of understanding of people with mental illness could have negative influences on nurse attitudes towards patients with mental illness, thus potentially reducing the capacity of these nurses to engage in therapeutic relationships with mental health clients.

### **An analysis of the impact of safe farm practices on farming injuries in Victoria**

**Candidate: Angela Wallace**

Given the increasing high social and economic costs of injury to the Australian farming community, identification of initiatives to reduce injury burden is urgently required. The primary aim of this study was to examine the association between safe practices and injury in Victorian farmers. Logistic regression analyses identified two characteristics associated with risk for injury on farms: role ( $p=.005$ ) and frequency in which people operating tractors climb on/off before the machine comes to a complete stop ( $p=.001$ ). These findings can be used by other agricultural and health stakeholders to provide direction in the development of farm injury prevention strategies.

### **Pre-natal care access and utilization by pregnant women in Luong Son, Hoa Binh, Viet Nam**

**Candidate: Pham Thi Quynh Nga**

The objective is to identify utilization and accessibility of Pre-Natal Care (PNC) of minority women in Luong Son, Hoa Binh, Vietnam. Quantitative and qualitative research methods are combined in this study. A total of 199 interviews were completed. Among which 85 interviews were with women in remote areas and 114 interviews were in non remote areas. Seven in-depth interviews with health staff and 6 focus group discussions were conducted. The utilization rate of PNC in remote areas is much lower. Pre-natal care attendance was influenced by factors such as distance to the healthcare centre, mothers' education and knowledge of PNC, mothers' age, economic conditions, and customs and habits of PNC. The findings suggested that health promotion programs using many kinds of communication and involving people throughout the community, are needed for women in Vietnam and their primary health carers.

### **Prevalence and risk factors for Hepatitis C Virus among Queensland female prisoners.**

**Candidate: Jillanne Homewood**

This study sought to determine the prevalence and risk factors for hepatitis C virus (HCV) in female prisoners in Queensland. The study also sought to determine the extent of risk behaviours for HCV transmission in prison, such as injecting in prison, sharing of injecting equipment, tattooing and body piercing.

The data was a component of a voluntary cross-sectional health survey of female prisoners in Queensland in 2002. From 275 available prisoners 212 participated (77.1%). Of the 212 prisoners who participated, HCV results were obtained for 202 women. The prevalence of hepatitis C was 45%. Those with a history of injecting drug use comprised 55.7% of the population. The prevalence of hepatitis C among injecting drug users (IDU) was 73%. Of injecting drug users, 28.8% gave a history of injecting in prison and 78.2% of prison injectors had shared needles and syringes. The prevalence of tattoos and body piercing was high with

72% of prisoners having tattoos and 57% of prisoners had three or more body piercings. Thirteen percent of inmates had these done in prison. New equipment was frequently not used and methods of cleaning varied. Multivariate analysis of all prisoners identified that injecting use was overwhelmingly dominant as a risk factor for HCV. A history of injecting in the community had an odds ratio of 27.9 (95% CI 8.7-89).

### **The role of exercise-related social support in a telephone and print intervention to increase physical activity in adults aged 45 years and older.**

**Candidate: Lorian Taylor**

Sufficient physical activity in the Australian population would decrease the incidence and health complications of six of the seven National Health Priority Areas. These conditions are responsible for 70% of the burden of disease within the population. Adults aged 45 years and older are Australia's most inactive subgroup. It is estimated that some 49% of older men and 63% of older women do not meet physical activity guidelines to achieve a health benefit. Telephone-delivered interventions have effectively increased physical activity among adults, although the impact has varied between behavioural interventions.

This study aimed to define and quantify the relationship between exercise-related social support and changes in physical activity associated with participation in a telephone- and print-delivered physical activity intervention trial. More research is needed in order to reach more definitive conclusions about the possible mediating role of social support on physical activity behaviour change. The findings from this study can be used to guide future research on the role of mediators of change in physical activity interventions. Mediator research has the potential to progress the current evidence base on the effective ingredients of programs to promote physical activity. Given the importance to public health of physical activity in chronic disease prevention, such research should be a high priority.

### **Diagnosis of skin lesions in primary care.**

**Candidate: Cameron Moffatt**

This project examined the impact of a relatively new phenomenon, the primary care skin cancer clinic, on the management of skin disease in Australia. Diagnostic accuracy was assessed and reasons for excision and the impact of patient pressure to treat lesions surgically were examined. Common acquired naevi were the most frequently treated lesions, closely followed by basal cell carcinoma. Numbers of squamous cell carcinomas being managed were lower than rates seen in general practice settings. Diagnostic accuracy was high for melanoma, BCC or dysplastic naevi, but lower for SCCs and solar keratoses. Positive predictive values for SCC and BCC compared favourably with rates reported for dermatologists in general population settings. The main reason for deciding to excise lesions was to exclude malignancy and GPs reported pressure to excise more than 50% of all lesions that were surgically managed.

### **Evaluation of the Outreach School Garden Project: Building the capacity of two Indigenous school communities to address nutrition.**

**Candidate: Antonietta Viola**

A nutrition based school intervention program, incorporating formal nutrition and gardening education lessons into the usual school curriculum, was evaluated. Data showed that nutrition had been integrated into the curriculum by school staff who were not required to have specific

prior nutrition knowledge or gardening skills, and that students increased their nutritional knowledge and gardening skills over the period. The project also had a flow-on effect to the school tuck-shop and local community. Despite support and enthusiasm for the project, a number of factors, including its short time frame and departure of staff, prevented long term sustainability. Nevertheless, the concept and development of school-based gardens provided an innovative way to integrate nutrition into the school curriculum.

### **The contraceptive behaviour of young women in Australia**

#### **Candidate: Samantha Hollingworth**

The Dissertation examines the socio-demographic factors and health-related behaviours associated with contraceptive use and contraceptive type use among young women in Australia, using a study sample of 14,779 participants in the 1996 baseline survey of the Women's Health Australia Project.

Results: 72% reported using contraception in 1996 and 77% in 2000. The oral contraceptive pill was the preferred method for 70% in 1996 and 73% in 2000, including almost one fifth of all women who used the pill in combination with other methods, including the condom. Between one in four (1996) and one in five (2000) women used condoms with or without other methods (but not the pill). Women who used methods other than the pill or condoms accounted for only about 5% of the sample. The Dissertation also provides information on sub-groups and their preferred choices.

Conclusion: Most young Australian women use contraception. The pill is the preferred method, with considerable use of dual methods. Despite wide use of contraception, about 10% experienced a termination, indicating a large number of unplanned pregnancies. Strategies to improve contraceptive protection could include: more choice of effective methods; education and provision of emergency contraception; and efforts by health professionals to improve compliance with currently used methods.

### **Physical activity and sun protection in a Queensland community.**

#### **Candidate: Cecilia Wilson**

This study formed part of a longitudinal study, the Nambour Skin Cancer Prevention Trial, and its primary aim was to assess physical activity practices of an adult community in a sub-tropical climate and to determine associations of sun protection with physical activity.

It is the first study to explore physical activity practices in a fixed cohort involved in a skin cancer prevention trial, and to examine the associations of sun protection practices with physical activity levels in adults, in the context of health benefits of physical activity and health risks associated with sun exposure. It found the proportion of those using sun protection was far from optimal and there was a low proportion of people undertaking sufficient physical activity for health benefits to accrue. The study clearly shows that greater public health efforts need to be directed to innovative policy initiatives.

### **Home-based post-discharge parental support to prevent morbidity in pre-term infants: A systematic review.**

#### **Candidate: Heidi Webster**

Pre-term delivery is a serious risk factor for the short and long-term developmental outcomes of children. With the increased survival of such infants and increased recognition of the risks, there has been more emphasis on early intervention programs, including home-visiting.

This systematic review of randomized controlled trials compared home-visiting interventions

providing parental education and support with standard medical care. Pooled analyses suggested a beneficial average effect of home-visiting interventions for some outcomes up to three years of age, the overall summary of individual trials failed to show beneficial effects long-term, at seven to nine years of age. However, substantial methodological limitations due to the use of different measures of child and family outcomes in individual trials, and insufficient publication of summary effect measures, precluded many trials from the meta-analysis.

### **General practitioners' familiarity with and practices Related to Haemochromatosis.**

#### **Candidate: Megan Young**

The aim of this study was to assess the educational needs of general practitioners (GPs) with regards to haemochromatosis and make recommendations for the continuing education of these practitioners to fulfil these needs. The study had two phases. The qualitative phase comprised of three focus groups with individuals who had been diagnosed with haemochromatosis (total participants=16), and individual semi structured interviews with five selected GPs. The quantitative phase involved a mailed questionnaire survey to all 216 GPs in the catchment area of the Brisbane Inner South Division of General Practice. During the qualitative phase, the following findings were common to the focus groups and the individual GP interviews: haemochromatosis was felt to be under-diagnosed in Australia; GPs knowledge about haemochromatosis appeared to be related to their experience with the condition in practical terms; and both knowledge and experience seemed to impact on GPs' self perceived ability to manage the condition. The specifics of management proved to be an area of educational need.

Dr Young concluded that an educational campaign targeting GPs with regards to at least the specifics of management of haemochromatosis is warranted. It would be prudent to incorporate a combination of journal articles, small group discussions and lectures or seminars into the format of the campaign, and to give due consideration to the competing priorities of GPs during campaign planning. Increasing GPs' exposure to haemochromatosis through close liaison with gastroenterologists is also recommended.