

The information-seeking behaviour of antidepressant consumers

Candidate: Kellie A. Taylor

There is evidence to indicate that the Australian health care system does not fulfil the informational needs of antidepressant consumers, and this failure may adversely affect therapeutic outcomes. This is the first analysis of the information-seeking behaviour of a subset of consumers that contacted the National Prescribing Service Medicines Line. It provides clear insight to the information-seeking behaviour of antidepressant consumers.

Antidepressant consumers were frequently prompted to call because their information needs were not met by other sources, indicating that current patient education practices in Australia do not meet informational needs. The analysis suggests that Medicines Line may have a substantial impact on the public health of Australians in identifying and managing medical and medicines-related problems amongst antidepressant consumers. The extent of this impact could be more fully assessed with analysis of other consumer populations and an assessment of consumer satisfaction with the information provided by the service.

Predictors of non-participation in a study of patients with chronic illness, and implications for public health research

Candidate: Libby Holden

The Priority Health Care Program (PHCP) Evaluation was conducted to measure whether the PHCP improved the health outcomes and the quality of life of patients with chronic illness. This sub-study used the data obtained for the evaluation to determine whether bias from non-participation had occurred.

The non-participation sub-study found the following variables were associated with non-participation: being aged over 65 years, not cohabiting with a partner, being discharged at risk, and having a diagnosis of cancer or heart failure compared to respiratory disease.

A study's internal validity is threatened whenever subjects who do and do not participate differ in some way. External validity is threatened if some groups are under-represented in the study sample, as was the case for the PHCP evaluation. This sub-study provides valuable insights into potential predictors of non-participation or non-response for studies involving older and chronically ill people; it provides an Australian context to these phenomena. This information can assist future researchers to tailor study designs to actively enhance efforts to involve groups identified as being at increased risk or non-participation.

Queensland paediatric in-hospital deaths in 2001: A review of preventable factors

Candidate: Julie McEniery

Queensland's paediatric death rate is high, and the reasons for this are not known. A two part study was undertaken using audit and descriptive epidemiology methodologies to identify opportunities for primary, secondary and tertiary prevention of deaths of children who died in Queensland hospitals in 2001. In particular this

study sought to review the accuracy of cause-of-death documentation, to identify adverse events in the hospital care of children who die in hospital, and to identify the contribution of underlying socio-demographic distribution of deaths of children who died in Queensland to aid effort at primary prevention.

The key study findings were: there were 144 in-hospital deaths in Queensland in 2001; the current mechanisms for registering underlying cause of in-hospital deaths have acceptable accuracy (93% retained the same major category of death post review); adverse events in hospital care are unacceptably high (detected in the care of 27% of children who died, likely to have contributed to death in 9.4%); that many of the underlying causes of death are preventable (37%); and finally, that some demographic subgroups in the population are at greater risk of death (Indigenous children and children who reside in remote areas, irrespective of Indigenous status).

Anthropometric and nutrition related health indices in Indonesia

Candidate: Sarah Holmes

This dissertation aims to contribute to the current research base surrounding the nutrition transition within Indonesia with respect to anthropometric and nutrition-related health indicators within different age, sex and geographical groups within the population using data from the 1993 and 2000 Indonesian Family Life Surveys.

Results suggest that Indonesia is experiencing a nutritional shift, facing increases in the levels of overweight and obesity in the context of persistent undernutrition in many groups within the population. The impact of the transition appears greatest amongst 40-59 year old women, with observed increases in overweight and obesity of 6.6 and 3.7 percentage points in this group. People living in urban areas historically appear to have been more affected by a nutritional shift than those living in rural areas; however, there are some signs of this gap closing in younger adults. There was strong evidence of differences in the nutritional trends between regional areas both in terms of BMI as well as other nutrition-related health indices. Therefore, while the results showed definite trends of overall nutritional change within Indonesia, there were also indications of considerable diversity existing between various groups within the country.

The study reinforces the need for policy makers to consider the short and long-term health impact of such a transition.

A pilot study to estimate the effectiveness of lipid lowering therapy on aortic sclerosis and appraise the design of the ACLASC trial

Candidate: Yi Liu

A randomised control trial (RCT) has been planned to measure “the effectiveness of the aggressive lipid lowering therapy on the progression of aortic valve sclerosis” (the ACLASC trial). This pilot study was conducted to improve the quality of the study design of the ACLASC trial with respect to the CONSORT statement.

It was concluded that it was reasonable and justifiable to conduct the ACLASC trial to measure the effectiveness of a statin on the progression of aortic valve sclerosis. The previous literature supported the rationale for the ACLASC trial. The retrospective

analysis in this pilot study presented further evidence to demonstrate that the proposed size of the treatment effect result of the ACLASC trial could be achievable with a statin. In addition, the study design of the ACLASC trial is reasonable and practical according to the standards for RCTs.

Analysis of risk indicators and caries experience in mothers of young children and the early acquisition of streptococcus mutans in their children

Candidate: Aneurin R Thomas

The overall purpose of this longitudinal study was to identify infants at risk of Early Childhood Caries (ECC) based on consideration of maternal caries risk indicators. This report describes the methodology and analyses of maternal and infant data collected at baseline.

This study confirmed associations between smoking, high salivary levels of *Streptococcus mutans* and consumption of sweets/chocolates and the presence of untreated dental caries in a sample of mothers of young infants from a low socioeconomic background. While relatively few six month-old infants in the sample had high levels of *Streptococcus mutans* at the time of the initial examination, strong associations were found between high maternal levels for *Streptococcus mutans* colonisation and high levels of colonisation in their infants.

There are public health implications in developing preventative management strategies required to reduce the potential risk of ECC in children of mothers with high caries experience and high levels of *Streptococcus mutans* infection.

Binge drinking amongst university students in Queensland and the DrinkSmart intervention

Candidate: Mandeep Benipal

The dissertation explores prior research on alcohol use and abuse in Australian and international settings with a particular focus on alcohol abuse prevention programs and studies conducted in university and college settings. The perceptions of campus key informants were sought on issues of alcohol consumption patterns, binge drinking and prevention programs.

The DrinkSmart program is a responsible drinking promotion strategy that has been developed, trialed and evaluated in a number of settings in Queensland over several years. The Queensland Health, Alcohol Tobacco and Other Drugs (ATODS) unit trains DrinkSmart coordinators and funds related activities for each of the universities in Queensland. A survey was sent to the university Drink Smart coordinators with the support of Queensland Health to gather data for this report. There were 15 respondents from 8 universities throughout Queensland.

The results showed a wide variation in availability of alcohol across campuses along with a variation in perceived levels of binge drinking and concern for impact of this behaviour. A relationship between the availability of alcohol and perceived levels of binge drinking and perceived levels of alcohol related “incidents” was suggested. Survey respondents also provided information on other alcohol related health

promotion programs and gave suggestions for future research and prevention programs.

The experience of Korean registered nurses in Queensland, Australia: A grounded theory approach
Candidate: Eun-Young Kim

This research addresses the area of potentially important development of NESB and foreign nurses' adjustment to Australia through examining the experiences of Korean registered nurses in Queensland. The findings in this research have potential to contribute to the improvement of support services for these nurses in their adjustment to Australia.

A grounded theory methodology was used to explore the experiences and social and psychological processes of Korean registered nurses making the transition into nursing practice within an Australian context. Findings showed that the Korean nurses initially experienced significant difficulties in achieving nursing registration and in developing adequate English language skills in the initial period. Nurses in the intercultural adjustment phase were determined to find support and learn about Australia. During this process, their individual attitudes, behaviours and thoughts changed to create a new perceived reality to allow them to interpret their new surroundings. From the interviews, it was clear that participants saw themselves differently within a reshaped self-concept.

The effects of air pollution from a small industry commune on school children's respiratory function in a north province – Vietnam
Candidate: Thang Nguyen Huu

There is epidemiological evidence from some studies that respiratory symptoms and pulmonary function are considered good indexes for estimating the impact of air pollution on children. Based on those indexes, this study assessed the effects of air pollution from industrial activities on children in Yen Phong district, Bac Ninh province, VietNam.

Spirometric measures were taken of 307 school children in two hamlets (Van Mon – exposed commune and Yen Phu – unexposed commune) attending randomly selected schools of hamlets. The prevalence of school children suffering from respiratory symptoms was studied using a questionnaire to interview children's caregivers.

Variations in the spirometric indices and the prevalence of school children suffering from respiratory symptoms were observed across the exposed commune as compared with the unexposed commune. These results suggest that the children in the exposed hamlet were more likely to be unhealthy than children in the unexposed hamlet. The cross-sectional data does not permit the conclusion of a certain cause for the unhealthy status of the children in the exposed commune.

Reliability of a dietary questionnaire
Candidate: Sanjoti Parekh

The study aimed to evaluate the reliability of a self-administered food frequency questionnaire used as an instrument to collect dietary data for the Australian Ovarian Cancer Study (AOCS) and Australian Cancer Study.

The 136 item food frequency questionnaire (FFQ) was self-administered at home to each control subject twice, with a period of approximately one year between two administrations. Reproducibility was tested by comparing responses from the two FFQs and was found to be comparable to that of other widely used food frequency questionnaires.

The study demonstrated that the FFQ seems to be reproducible and can be used for further investigations into the cancer-diet relationship. Recommendations for improving the FFQ with cross-check questions are also made.

The contribution of the Jump Rope for Heart program to physical activity levels of Australian School Children

Candidate: Susan Aspinall

The National Heart Foundation of Australia has implemented the Jump Rope for Heart (JRFH) program in Australian schools for over 21 years. Anecdotal evidence suggests that JRFH provides an important opportunity to increase children's level of physical activity. Benefits of JRFH were gathered using existing data from the JRFH database and a postal survey distributed to a stratified random sample of 230 teachers across Australia who had registered to coordinate JRFH in 2004. The results indicated that 1930 school groups and a total of approximately 295,051 children participated in JRFH during 2004. On average, they undertook 471 minutes (7.9 hours) of moderate to vigorous physical activity during the scheduled JRFH sessions and 52% of teachers reported that children were skipping during most breaks and before and after school on most days during the program. Eighty percent of teachers perceived an improvement in children's fitness during the running of the program. Teachers clearly valued the physical activity benefits of JRFH as well as the importance of teaching children about heart health. Further research to objectively measure the physical activity undertaken and improvement in fitness would enhance the evidence to support JRFH.

Pterygium and Mitomycin C: A systematic review

Candidate: Tu Khai Huynh

Pterygium is a common ocular disorder which affects between 1.2% and 25% of the world's population. Mitomycin C (MMC) is an antimetabolite adjuvant used to reduce the recurrence of pterygium after surgery. This review aimed to ascertain the role of MMC in reducing post-operative pterygium recurrence, its best method of delivery, optimal dosing and adverse effects.

The findings of the review support the use of MMC after simple excision of pterygium to reduce recurrence, especially intraoperative MMC compared to nothing or placebo. However, it cannot be quantified how much publication bias has affected these results; so these results must be accepted with caution. The benefit though is not as large as previous systematic reviews have found.

Although recurrence rates after MMC were found to be better than after beta-radiation and autoconjunctival grafting and intra-operative mitomycin was better than post-operative mitomycin at reducing recurrences, these results were not statistically significant. Further research is needed in this area to better define these relationships.

Development and assessment of a grading system for Ocular Surface Squamous Neoplasia

Candidate: Andrew Carroll

Ocular Surface Squamous Neoplasia (OSSN) is an uncommon condition affecting the eye that is associated with exposure to UV radiation. Surgical treatments for OSSN have had high rates of recurrence of disease, and newer medical therapies show promise in controlling this condition. A clinical grading system for OSSN would be of use in studying response to different topical medical therapies. However, at this time, there is no grading system for OSSN described in the reviewed literature.

Among the objectives of this study was to derive a clinical grading system for OSSN. The validity of this system was then tested with an inter-observer and intra-observer agreement study.

A complex detailed clinical grading system for OSSN was developed. This included visible features as assessed on viewing colour transparencies. The different categories in the grading system all showed moderate to substantial agreement in the assessment except for the extrinsic vascularisation category, which showed fair agreement. With small modifications to the poorly performing nil vascularisation seen descriptor, and the addition of tactile categories, this grading system can now be validated on live subjects in a prospective fashion. Once this is performed it will provide a useful tool to study OSSN, in both multicentre treatment studies and epidemiologic studies.