Nursing Research Symposium
Monday, 14 October, 2013
12:30-4:30 pm (lunch from 12 pm)
Robert Douglas Auditorium, The Townsville Hospital

Diagnosis and Management of Obstructive Sleep Apnoea in Indigenous People in Central and Northern Australia

Cindy Woods1,2, Kim Usher1, Graeme Maguire2,3, Erik Tikoff1, and Karen McPherson4

1School of Nursing, Midwifery and Nutrition, James Cook University, Cairns Queensland
2School of Medicine and Dentistry, James Cook University, Cairns, Queensland
3Baker IDI Heart Diabetes Institute, Alice Springs, Northern Territory
4Alice Springs Hospital, Department of Health, Alice Springs, Northern Territory

Background / Aims: There is currently no literature regarding diagnosis and management of sleep-related breathing disorders, such as obstructive sleep apnoea (OSA), in Australian Aboriginal and Torres Strait Islander peoples. Anecdotal experience suggests sleep-related breathing disorders are under diagnosed and variably managed in Central and Northern Australia. This study aimed to investigate the nature, risk factors and outcomes of people with sleep-related breathing disorders, and to compare and contrast severity, risk factors and management in Indigenous and non-Indigenous Australian patients. Methods: A retrospective cohort study of 200 patients. Subjects were 50 consecutive Aboriginal and Torres Strait Islander patients and 50 consecutive non-Indigenous patients who attended a Northern Queensland and Central Australian sleep clinic and were diagnosed with a sleep disorder. Retrospective data collected from patients’ medical records included demographics, co-morbidities, BMI, fatigue score, referral source, diagnosis and severity, and management details for 12 months following diagnosis. Results: Aboriginal Australians in Central Australia were 2.3 times less likely to have a sleep disorder diagnosed compared with non-Indigenous Australians and Indigenous patients in Northern Australia were 2.9 times less likely to have a sleep disorder diagnosed compared with non-Indigenous patients. Indigenous patients were also twice as likely not to attend follow-up appointments in the 12 months following their diagnostic study (38%, 95% CI 27-49 compared with 19%, 11-30, p = 0.014). Conclusion: Sleep-related breathing disorders are a significant issue for regional and remote Aboriginal and Torres Strait Islander patients. Potential barriers and enablers to care in this setting will be discussed.

The Ideal of Family-Centred Care: What the Evidence Tells Us

Ryley Molloy1,2, Wendy Smyth2, Huaqiong Zhou3, and Linda Shields2

1The Townsville Hospital, Townsville, Queensland
2Tropical Health Research Unit for Nursing and Midwifery Practice, Townsville Hospital and Health Service and the School of Nursing, Midwifery and Nutrition, James Cook University, Townsville, Queensland
3School of Nursing and Midwifery, Curtin University, Western Australia

Background / Aims: Family-centred care is an ideal espoused widely in paediatrics. In family-centred care, when a child comes into hospital, care is planned around the whole family instead of restricting it to the individual child. This presentation explores the evidence about family-centred care for children in hospital. Methods: Three systematic reviews were undertaken and we summarise and present their findings. Results: The two reviews of quantitative studies (Cochrane and Johanna Briggs Institute) found only one quasi-experimental study for inclusion. That study provides insufficient evidence about the effectiveness of family-centred care within a hospital setting. A review of qualitative studies (Johanna Briggs Institute) included 14 studies which showed that family-centred care is poorly implemented around the world. Conclusion: Whilst family-centred care is regarded as the ideal, it remains difficult to articulate exactly what that means in practice. Further research is required to explore the complexities of implementing family-centred care.

Improving Chronic Condition Management for People Living with Mental Illness - An Evaluation of a Mental Health Collaborative

Rhonda Fleming1 and Tracey Cheffins

1Townsville-Mackay Medicare Local, Currajong, Townsville, Queensland

Background / Aims: Townsville-Mackay Medicare Local (TMML) employs mental health nurses to work with GPs to support patients with mental health conditions. A new resource was developed to assist them in assessing physical and oral health problems in people living with mental illness (co-morbidities). Collaboratives are quality improvement programs for general practice teams to develop better systems for patient care. The collaborative process was identified as an appropriate way to disseminate the new mental health resource and improve GP management of co-morbidities. Methods: The collaborative program was delivered to four practices in Townsville over a six month period. Medical record extraction software was used to create a register of patients with co-morbidities for each practice. A maximum of 20 patients per practice were randomly selected and screened to exclude any at psychological risk from participation. SF12 and Patient Assessment of Chronic Illness Care surveys were done at baseline and repeated during the month following the collaborative. The practice team also completed an Organisational Skills Analysis Tool - Chronic Disease Care to measure the effectiveness of their care before and after the program. Clinical data were collected from medical records before and after to measure the impact of the collaborative. Results: Improvements were made in the proportion of diabetic patients with HbA1C measured, the proportion with HbA1C <7, and the rate of smoking amongst people with diabetes. The proportion of people reporting their health as fair or poor on the SF12 remained unchanged. Conclusion: The mental health collaborative resulted in some improvements in the health outcome measures of people with diabetes. The results of the complete evaluation will inform future quality improvement programs at TMML.

Nurses’ Involvement in the Development of the Nuremberg Code for Research Ethics

Linda Shields1 and Susan Benedict2

1Tropical Health Research Unit for Nursing and Midwifery Practice, Townsville Hospital and Health Service and the School of Nursing, Midwifery and Nutrition, James Cook University, Townsville, Queensland
2Center for Medicine after the Holocaust, University of Texas, Houston, Texas, USA

Background / Aims: The Nuremberg Code for Research Ethics was developed after the egregious crimes committed by health personnel in experiments in the concentration camps of Nazi Germany. While doctors’ roles in these crimes have been widely studied, nurses have been ignored. However, they were equally culpable. This study aims to examine the role of nurses at Ravensbrück Concentration Camp. Methods: Using primary and secondary sources, including survivor testimonies, the mention of nurses and descriptions of their involvement were found. Results: Situated close to one of the main hospitals in Germany, Ravensbrück prisoners were used as subjects for medical experiments. They had no choice, and were killed if they refused; 74 women were used in experiments of surgical techniques such as bone and nerve transplants, and drugs, in particular sulphonamides. Five women were executed following the experiments, and five died. However, many lived and gave testimony at the Nuremberg Doctors Trials. As a direct result of the trials, the Nuremberg Code for Research Ethics was developed. Many more doctors than nurses were tried, but the experiments occurred in the camp hospital, where nurses constituted the major proportion of the workforce. Conclusion: This paper explains the experiments, how nurses were involved, and the subsequent development of
the Nuremberg Code with its emphasis on informed consent. Nurses today need an understanding of how nurses were drawn into the abstraction of their code of ethics.

**Final Year Student Nurses’ Readiness for Practice**

Cindy Woods¹, Kim Usher¹, Jane Mills¹, Caryl West¹, and Tanya Park¹

¹School of Nursing, Midwifery and Nutrition, James Cook University, Cairns Queensland

**Background / Aims:** Nursing students require access to relevant, quality clinical education and clinical placements to feel prepared, confident and ready to competently care for patients in a practice environment. This study aimed to examine factors that influence nursing students’ perceptions of preparedness for practice and to ascertain their level of confidence performing key practice skills independently. **Methods:** A cross-sectional study design. All third-year nursing students at a regional Australian university were emailed a link to an online version of the Casey-Fink Readiness for Practice Survey following their final practicum. Demographic data and survey items were summarised using descriptive statistics. Analysis of variance was performed to compare results with demographic data. Correlation analysis was performed to test relationships between continuous variables. **Results:** Overall, students reported a high level of confidence and preparedness for clinical practice. The areas in which students lacked confidence were: managing patient care assignments, independently performing venepuncture and assisting with intubation. The students did not feel simulation experiences adequately prepared them for clinical practice. The areas identified to enhance confidence and readiness for practice include: expanded practicum placements, more simulation or clinical skills practice, smaller clinical skills class sizes and the use of up-to-date equipment during training. **Conclusion:** The results highlighted that students perceive placements and clinical skills practice as keys for enhancing readiness for practice and to facilitate a successful transition into professional nursing practice. The marked difference in hours of clinical practice between Australian students and US students may explain differences in confidence levels upon graduation.

**Do Patients Receiving Radiation Treatment for Breast Cancer in a Tropical Setting Prefer to Use a Barrier Cream or a Moisturising Cream as Part of Their Skin Care Regimen? Results from a Randomised Controlled Trial**

Elizabeth Heyer¹,², Nadine Laffin³, Wendy Smyth³, Anne Gardner⁴, Gail Abernethy⁴, and Oyebola Fasugba⁴

¹Cancer Clinical Trials, Townsville Cancer Centre, Townsville, Queensland
²Tropical Health Research Unit for Nursing and Midwifery Practice, The Townsville Hospital and Health Service and School of Nursing, Midwifery and Nutrition, James Cook University, Townsville, Queensland
³Radiation Therapy Unit, Townsville Cancer Centre, Townsville, Queensland
⁴School of Nursing, Midwifery and Paramedicine (Signadou Campus) Australian Catholic University, Watson, Australian Capital Territory

**Background / Aims:** Radiation oncology nurses routinely recommend preventative skin care products to patients receiving treatment. Despite many trials related to acute radiation skin reactions, few have explored the patients’ acceptability of recommended products. A nurse-led randomised controlled trial comparing two products in patients receiving radiation treatment for breast cancer sought this perspective. The aim of this study was to ascertain if a barrier cream is more acceptable than a moisturising cream to patients receiving radiation treatment. **Methods:** Participants recruited to the Radiation Therapy Skin Care Trial (N=255) were randomised to receive either the moisturising cream or a barrier cream. Participants completed an Acceptability Survey each week during treatment, and one month after treatment ended. Acceptability was operationally defined as a score of at least 4 on five specific questions on the Acceptability Survey (ease of application, smell, whether the cream felt comfortable, built up on the skin or affected clothing). The patients’ perspective on additional attributes of the creams was also ascertained. **Results:** Participants preferred the barrier cream over the moisturiser (p=0.02); both creams were equally comfortable on the skin. Whilst the moisturiser was more likely to build up, it was better at relieving skin dryness. **Conclusion:** Although the barrier cream was preferred overall by the participants, both creams were highly acceptable and on this basis either product could be offered to patients. Future patients may need to consider other factors, such as the product cost, availability, and effectiveness in reducing the severity of acute radiation skin reactions when choosing skin care products.

**An Intensive Care Unit Admission During Pregnancy or in the Postnatal Period: an Integrative Review of the Literature**

Marie McAuliffe¹,², Kim Usher¹, Elizabeth McDonald³

¹Health and Wellbeing Service Group, The Townsville Hospital and Health Service, Townsville, Queensland
²School of Nursing, Midwifery and Nutrition, James Cook University, Townsville, Queensland
³School of Nursing, Midwifery and Nutrition, James Cook University, Cairns, Queensland

**Background / Aims:** While the need for critical care support in an intensive care unit during pregnancy or in the postnatal period is relatively uncommon in the developed world, recent epidemiological studies have reported rising rates of maternal morbidity. This morbidity is associated with obstetric complications of postpartum haemorrhage and pre-eclampsia along with other causes such as respiratory failure, cardiac disease and trauma. The aim of the integrative review is to explore the reasons for admission to an intensive care unit during pregnancy or in the postnatal period and the outcomes of the admission. **Methods:** An integrative literature review using the words antenatal, postnatal, perinatal, obstetric, intensive care unit, critical care unit, outcomes and quality of life in combination to search the data bases CINAHL, Medline, OvidSP, ProQuest and PsychINFO. **Results:** Fifteen journal articles met the review criteria: one systematic review, two population based cohort studies, seven case series reviews, two retrospective cohort studies, one comparative study, one metasynthesis and one literature review. **Conclusion:** Maternal outcomes are primarily described by morbidity and mortality rates. There is limited published research on outcomes other than biomedical outcomes. There is paucity of literature relating to critically ill women during the antenatal, intrapartum or postnatal period. More research is needed to explore and describe the outcomes of these women.

**Is a Barrier Cream More Effective than a Moisturiser in Preventing Moist Desquamation in Patients Receiving Radiation Treatment for Breast Cancer? Results of a Randomised Controlled Trial**

Nadine Laffin¹,², Wendy Smyth³, Elizabeth Heyer²,³, Anne Gardner⁴, Gail Abernethy⁴, and Oyebola Fasugba⁴

¹Radiation Therapy Unit, Townsville Cancer Centre, Townsville, Queensland
²Tropical Health Research Unit for Nursing and Midwifery Practice, The Townsville Hospital and Health Service and School of Nursing, Midwifery and Nutrition, James Cook University, Townsville, Queensland
³School of Nursing, Midwifery and Paramedicine (Signadou Campus) Australian Catholic University, Watson, Australian Capital Territory
⁴School of Nursing, Midwifery and Paramedicine (Signadou Campus) Australian Catholic University, Watson, Australian Capital Territory

**Background / Aims:** Patients receiving radiation for breast cancer potentially develop severe radiation dermatitis, most frequently manifested as moist desquamation. Internationally, there is inconsistency about what products patients are advised to use to prevent this. Additionally, there is no literature about skin care products and the development of moist desquamation in tropical climates. The aim of this study is to compare the effectiveness of two creams at minimising the incidence of moist desquamation in a tropical setting. **Methods:** A nurse-led randomised controlled trial recruited participants from the Townsville Radiation Therapy Unit between June 2010 and July 2012 (N=255). Participants were stratified according to breast or chest wall radiation treatment areas and randomly allocated to use a moisturising or barrier cream. Nursing staff scored radiation dermatitis weekly by using a standardised grading system, and patients were phoned one month after completing treatment for a final skin assessment. **Results:** At treatment completion, 15% of participants had moist