

Investigating the impact of a clinical pharmacist on the health outcomes of paediatric patients

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Background/Aims: Recent fiscal scrutiny and changes in health care financing have necessitated that health care providers justify a clinical and economical basis for their involvement in patient care. Although clinical pharmacists have shown to enhance patient health outcomes and reduce costs among adult patients, the impact of a pharmacist in paediatric patient care has not been extensively documented. **Methods:** A team of pharmacists was established to conduct a systematic review of the literature. A title scan of papers in 5 databases was performed by 14 pharmacists using the MeSH terms pharmacists, medical intervention, paediatrics and cost-benefit analysis. The underpinning research question was: "How do the professional activities of a clinical pharmacist impact the health outcomes of paediatric in-patients?" The abstracts of suitable titles were scanned and articles read to assess relevance. Relevant articles were then evaluated independently by at least two members of the team, using critical appraisal tools suitable for quantitative, qualitative or systematic review studies. **Results:** The initial search identified 327 citations, which after full text review and application of the scoring tool, resulted in 10 studies being included in the systematic review. The average number of interventions reported varied from study to study. Dosing recommendations, pharmacokinetics and drug allergy alerts were the most commonly recorded interventions by pharmacists for a paediatric population. Evidence from this review will be used to formulate improvements to in-patient paediatric care. **Conclusion:** Clinical pharmacists have a positive impact on inpatient paediatric care which included both health and economic benefits.

My Story: engaging Aboriginal and Torres Strait Islander Australians in rehabilitation

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Background/Aims: Fourteen percent of people accessing community-based neurological rehabilitation at Community Rehab northern Queensland (CRnQ) in 2014/15 identified as Aboriginal and/or Torres Strait Islander. The aim of this project was to assist Indigenous clients to be comfortable within the CRnQ setting and engage in meaningful rehabilitation with goals relevant to their needs. **Methods:** The My Story Program was implemented at CRnQ in 2013, after development of the program based on rehabilitation guidelines, narrative therapy and the use of My Story cards. Consultation with stakeholders and Indigenous participants also occurred. The program is led by the CRnQ Indigenous Rehabilitation Assistant, is goal-focussed and includes reducing cultural barriers, using strength-based client centred approaches, and assistance in the establishment of meaningful and challenging, but achievable, goals. Outcomes have been assessed through examination of service records. **Results:** Twenty-seven Indigenous clients with neurological conditions have participated in the My Story Program since its inception. Participants have reported enjoying meeting and talking with others in similar situations, listening to stories and preparing a creative journal documenting their story. Benefits noted by program leaders include the identification and clarification of key motivators and rehabilitation goals through improved self-awareness and empowerment, improved mood and increased sense of belonging through social engagement in a safe environment. These improvements are subsequently harnessed in other programs delivered by CRnQ, making positive rehabilitation outcomes more achievable for indigenous participants. **Conclusions:** The My Story Program has proved to be a

valuable component of the CRnQ service. Future plans include ongoing evaluation and integration with other CRnQ programs.

Queensland teacher sun survey: measurements and procedures for recording occupational UV exposures in Townsville and Toowoomba

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Background/Aims: Occupational exposure guidelines have been developed by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) which weight a UV source corresponding to its potential to cause harm to the skin or eye. When weighted across the incident UV spectrum this limit is expressed as 30 Jm⁻² per 8 hour working day. Local calibration procedures and UV exposure results were made on participating teachers in Townsville and Toowoomba to assess occupational UV exposure risk. **Methods:** Calibrated polysulphone dosimeter badges were distributed to 58 primary and secondary teachers employed in a range of teaching roles, and compared to self-reported exposure times during the Queensland teaching Term 4, November 2014 for teaching staff located in Townsville (18oS) and Toowoomba (27.5oS). **Results:** The calibration process required to measure site-specific personal UV exposures relative to the ICNIRP guidelines are presented for both participating teacher groups in the November 2014 survey. A total of 474 ICNIRP weighted daily UV exposures were collected, ranging from 0 to 279 Jm⁻². Of these, 109 exposures exceeded the ICNIRP daily exposure limit of 30 Jm⁻². **Conclusion:** In Queensland, the potential for harm as a result of exposure to solar UV in an outdoor occupational setting is high. The influence of a high UV climate and the requirement of teaching staff to spend time outdoors supervising children during lunch breaks and sporting activities can result in exposures greater than the ICNIRP occupational UVR exposure guidelines.

Lymphoedema education: are patients listening?

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Background/Aims: Lymphoedema cannot be prevented. Best practice recommends education to all patients at risk of lymphoedema after cancer treatment and is common clinical practice. Education may help patients recognise early signs and symptoms thereby seeking treatment earlier when it is most effective. However, several studies indicate many women post-breast cancer report not receiving adequate information at the time of surgery. This study will evaluate lymphoedema patient education to determine if one-off education is effective for information retention and also to determine if group or individual education is more effective for retention of information. **Methods:** This study is a randomised control trial in which patients are randomised to control (individual education) or intervention arms (group education). A researcher designed questionnaire with multiple choice, short answer responses and practical demonstration, was developed to assess patient knowledge and recall prior to initial intervention, immediately post-intervention and at 3-, 6- and 12-month follow up. **Results:** Preliminary analysis suggests after single education sessions patients do not have good recollection of risk reduction behaviours and the signs and symptoms of lymphoedema. Recall of self-management techniques is poor. Final results will determine if reiterative education over 12 months increases knowledge retention and self-management techniques. **Conclusion:** One-off education at the time of surgery is insufficient to transfer knowledge on early detection and self-management techniques. Poor retention may result in delays seeking treatment, poor uptake of risk reduction behaviours and ineffective self-management techniques.