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Le 44e Assemblée Annuelle et Sessions Scientifiques de l’ACIIN

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Canadian Journal of Neuroscience Nursing

The Canadian Journal of Neuroscience Nursing is the peer-reviewed journal of the Canadian Association of Neuroscience Nurses (CANN)/Association canadienne des infirmières et infirmiers en neurosciences (ACIIN). The journal is published quarterly. We welcome the submission of original manuscripts in the areas of practice, research, theory, education, and policy, which are of interest to the neuroscience nursing community. The views, statements, and opinions expressed in the articles, editorials, and advertisements are those of the authors or advertisers. They do not necessarily represent the views and policies of CANN/ACIIN and the editors and publishers disclaim any responsibility or assumption of liability for these materials. The Canadian Journal of Neuroscience Nursing is indexed in the Cumulative Index to Nursing and Allied Health Literature, International Nursing Index (INI) and Nursing Citation Index ISSN #1913-7176.

Mission statement
The Canadian Association of Neuroscience Nurses (CANN) sets standards of practice and promotes continuing professional education and research. Members collaborate with individuals, families, interdisciplinary teams and communities to prevent illness and to improve health outcomes for people with, or at risk for, neurological disorders.

Le Journal canadien des infirmières et infirmiers en neurosciences


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Énoncé de mission
L’Association canadienne des infirmières et infirmiers en neurosciences (ACIIN) établit les standards de pratique de la profession et fait la promotion de l’éducation permanente et de la recherche. Les membres collaborent avec les individus, les familles, les équipes multidisciplinaires et la communauté en général dans le but de prévenir les maladies neurologiques et d’améliorer la santé des gens qui en sont atteints ou qui sont à risque d’en souffrir.

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Editorial

Welcome to spring! This edition of the Canadian Journal of Neuroscience Nursing (CJNN) focuses on the upcoming Canadian Association of Neuroscience Nurses (CANN) 44th Annual Meeting and Scientific Sessions, June 11–14, 2013, in Montreal, Quebec, Canada. The theme of this year’s conference is: Generating the Flow of Knowledge/Joigner le fleuve des connaissances. Abstracts for posters, oral presentations, and workshops are provided in this issue, along with the registration form and other details. We hope you will register and take in the wonder of Montreal and the scholarship of neuroscience nursing.

In keeping with CANN’s advancement of the practice of neuroscience nursing by publishing the first standards of practice for Neurological and Neurosurgical Nursing in the 1980s, promoting evidence-based clinical practice remains a key mandate of our organization. To that end, the CJNN is an international journal providing insight and advancement of knowledge in the field of neuroscience nursing. Manuscripts submitted to CJNN can relate to all aspects of neurological nursing care: acute and chronic patient care, adult and pediatric care, practice issues, organizational elements, research, and education. We also welcome articles with a focus on the pathophysiology of neurological disease, as well as pharmacological and epidemiological or psychological aspects of neurological nursing. We encourage all CANN presenters, whether oral, workshop or a poster, to submit a manuscript to CJNN for peer review and publication. Share with others the generation and flow of knowledge to be presented at this year’s CANN Scientific Sessions!

Theresa Green, Editor

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Preliminary program overview
Visit the website at www.cann.ca for the most up-to-date conference schedule and information!

Tuesday, June 11, 2013
0800–1600  Board of Directors’ meeting—Fairmont
Queen Elizabeth, Mackenzie Room, Convention Floor
1700–1800  Tours of the Montreal Neurological Institute and Hospital (Must sign-up: Space is limited)
1700–2000  Registration—Montreal Neurological Hospital/Institute, Jeanne Timmins Foyer
1800–2100  Welcome Reception—Montreal Neurological Hospital/Institute, Jeanne Timmins Foyer

Wednesday, June 12, 2013
0700–0800  Registration—Lobby
0800–0900  Welcome Breakfast and Greetings
0800–0900  Presidential Address—Sue Kadyschuk
Canadian Neurological Sciences Federation (CNSF) President
Canadian Nurses Association—Lucie Vachon
Scientific Co-Chairs—Rosa Sourial & Toni Vitale
Program Co-Chairs—Erik De Agostinis & Martha Stewart
0900–0940  Mary Glover Lecture: Nurse Physician Collaboration—Sean Clarke, RN, PhD,
Susan E. French Chair in Nursing Research & Innovative Practice, Ingram School of Nursing, McGill University
0950–1030  Harnessing the Mechanisms of Brain Plasticity to Improve Brain Function—
Etienne de Villers-Sidani, MD, FRCP(C), MNI Killam Scholar, Montreal Neurological Institute
1030–1050  Coffee Break—Saint-Francois Ballroom

Plenary sessions
1050–1135  Safety and Effectiveness of Intensive Risk Factor Management in the Elderly: Findings from the Secondary Prevention of Small Subcortical Stroke (SPS3) Trial—Carole L. White, PhD, RN, Jeff M. Szuchowski, PhD, Oscar R. Benavente, MD
1135–1200  Travel Grant Awards from Neuro Nursing Foundation (NNF)—President J.B. Meacham
1210–1315  Scientific Luncheon (choose 1):
Recent Advances in Clinical & Experimental Treatment of Glioblastomas—Dr. Richard Leblanc, Director, Brain Tumour Program MNH/I
OR Introducing the Post-Stroke Checklist (PSC): Improving Life After Stroke—Patrice Lindsay, RN, PhD, Director, Best Practices and Performance, Stroke; Heart and Stroke Foundation
1230–1330  Half day registration—Lobby

Workshops
1330–1430
A1 Managing neuropathic pain: Challenges and rewards—C. Nehmé
B1 Parkinson’s Disease: From Diagnosis to Middle Stage Care—L. Lachance
C1 How to Tell Us What They Cannot: Neurological Assessment of Neurologically/Cognitively Impaired Children—N. Thornton, T. Kent
D1 Reflective Practice Theory: Approaching Difficult Conversations in the Workplace with Confidence—L. Wardell, S. Koutsogiannopoulos, R. Sourial
1430–1515  Coffee Break
1515–1600  Workshops continued
1700–1900  Exhibitors Reception—Canadian Congress of Neurological Sciences, Convention level
1900  Nurses’ Social Night—Please sign up at registration desk if interested. Meet in Lobby at 1900 hrs
Thursday, June 13, 2013

0630–0730  Run for Research—Meet in Lobby at 0630 hr
0800–1000  Registration—Lobby
0800–0830  Continental breakfast for CANN registrants—Saint-Francois Ballroom
0830–1100  Plenary sessions with CNSF on Convention level
   A series of five lectures of 30 minutes each, including neurology, neurosurgery, neuro-radiology and nursing—Sean Clarke, PhD (http://congress.cnsfederation.org/program/days/day-2-thursday--june-13--2013/4/)
1215–1320  Scientific Luncheon: (choose 1)
   New and Emerging Evidence in MS Care—Diane Lowden, CNS, MUHC MS Program, OR Botox: Not just for Pretty Faces—Dr. Daniel Gendron
1330–1400  A2 Hope is NOT a Four-Letter Word—A. Meagher
   B2 Wave 2 “Transforming Care at the Bedside” TCAB on a Neurology Unit—K. Toye, L. Mai, S. Roussy, S. Lussier
   D2 Melatonin as a safe and efficacious agent to induce sleep in the neurophysiology lab—S. Padmanabhan, B. Chu, R. Sharma, Dr. S. Weiss
1405–1435  A3 Using Evidence-based Practice to Improve Stroke Care in the Acute Care Setting—J. Slade, E. Fahey
   B3 Creating a Culture of Change: A Strategy for Improving Health Services—J. Congram, J. Knox, L. Patel, T. Burley, P. Wright, L. Fritzke, B. Stalker, K. Ness
   C3 Challenges in Providing Culturally Sensitive Care to Patients with Metastatic Brain Tumours and their Families—L. Longo, S. Slater
   D3 How Identifying the Neuroscience Pediatric Patient at Risk has Evolved at BC Children’s Hospital—B. Won, A. Waddell, S. Steenburgh
1435–1500  Coffee Break
1500–1730  *CANN Annual General Meeting—Saint-Francois Ballroom*
1730–1815  Incoming and Outgoing Board of Directors’ Meeting
1700–1830  Digital Poster Author Standby sessions—Exhibit Hall
1830–2030  CANN & CNSF Social Night at the historic McGill Faculty Club: tickets required

Friday, June 14, 2013

0800–0850  Half Day Registration—Lobby
0800–0900  Breakfast Symposium:
   B4 Disorders of Consciousness: Re-examining Ethical Dilemmas—É. Racine
   C4 Along for the Journey: Nursing the Paediatric Patient with GRID—K. Fuerst, L. Duncan, C. Kennedy, A. Manicat-Emo
   D4 Dural Arteriovenous Fistulas—A Case-Based Review—K. R. Whelan, A. Gardner
0900–0930  A4 continued
   B4 continued
   C5 Pregnancy and an Unexpected Neurological Condition—S. Kettle
   D5 Nursing Care of Patients Following Functional Hemispherectomy—H. Yu, S. Lealess, K. Sebastien
0935–1005  A4 continued
   B4 continued
   C5 Pregnancy and an Unexpected Neurological Condition—S. Kettle
   D5 Nursing Care of Patients Following Functional Hemispherectomy—H. Yu, S. Lealess, K. Sebastien
1005–1020  Coffee Break
1020–1050  A6 Introduction of a “Bladder Bundle” to Reduce Catheter Associated Urinary Tract Infections (CAUTI) in Neurology Patients—S. Rachel, S. Lussier, M. Muntean
   B6 Formulaires de niveaux d’interventions médicales : Comment créer un environnement éthique en fin de vie—M. Frenette, K. Serri, J.C.-Evans, J. St-Arnaud
   C6 Progressive multifocal leukoencephalopathy associated with Natalizumab use: Case Study and Review—A. Meagher
   D6 Career Planning in Nursing—Do You Have a Five-Year Plan?—M. Hamakiotis
1130–1200  Hyponatremia in Neuroscience Nursing—A Review Article—S. Harrington
   A7 Hyponatremia in Neuroscience Nursing—A Review Article—S. Harrington
   B7 Les facteurs influençant les capacités d’apprentissage des personnes atteintes de dystrophie myotonique de type 1 (DM1) : une approche écologique—M. Lavoie, M.C. Chouinard, F. Gallagher, C. Gagnon
   C7 Interdisciplinary Collaboration to Improve Patient Outcomes: Facilitating Access to Intrathecal Trials for Chronic Pain and Spasticity Management—H. Quach, S. Do-Davoll, A. Ling, C. Bouchard, M. Stewart
1105–1125  A6 Introduction of a “Bladder Bundle” to Reduce Catheter Associated Urinary Tract Infections (CAUTI) in Neurology Patients—S. Rachel, S. Lussier, M. Muntean
   B6 Formulaires de niveaux d’interventions médicales : Comment créer un environnement éthique en fin de vie—M. Frenette, K. Serri, J.C.-Evans, J. St-Arnaud
   C6 Progressive multifocal leukoencephalopathy associated with Natalizumab use: Case Study and Review—A. Meagher
   D6 Career Planning in Nursing—Do You Have a Five-Year Plan?—M. Hamakiotis
   A7 Hyponatremia in Neuroscience Nursing—A Review Article—S. Harrington
   B7 Les facteurs influençant les capacités d’apprentissage des personnes atteintes de dystrophie myotonique de type 1 (DM1) : une approche écologique—M. Lavoie, M.C. Chouinard, F. Gallagher, C. Gagnon
   C7 Interdisciplinary Collaboration to Improve Patient Outcomes: Facilitating Access to Intrathecal Trials for Chronic Pain and Spasticity Management—H. Quach, S. Do-Davoll, A. Ling, C. Bouchard, M. Stewart
1130–1200  Closing remarks & onward to BANFF in 2014—Saint-Francois Ballroom

Carole L. White, PhD, RN, Jeff M. Szychowski, PhD, Oscar R. Benavente, MD

Background: Despite being at greatest risk for stroke, data from several studies suggest that older adults are less likely to receive the same level of vascular risk factor management as their younger counterparts. Our objective was to examine the safety and effectiveness of intensive risk factor management in the elderly cohort of the SPS3 trial.

Methods: SPS3 was an international trial examining effective therapies for secondary prevention in lacunar stroke patients. Elderly were defined as those ≥ 75 years at study entry and compared to patients < 75 years on adherence to therapies, presence of side effects, and risk of recurrent stroke, major vascular events, and deaths.

Results: Among the 3,020 participants, 494 (16%) were ≥ 75 years. There were no differences in adherence to therapies between the younger and older subgroups. There were no differences in outcomes of antiplatelet therapy (aspirin versus aspirin and clopidogrel) except for a higher rate of death in the aspirin and clopidogrel group for < 75 years subgroup (p=0.03).

Conclusions: These results provide evidence that elderly can safely tolerate intensive risk factor management, as delivered in the SPS3 trial. To decrease the growing stroke burden it is critical that age disparities in treatment are eliminated.
Managing Neuropathic Pain: Challenges and Rewards
Claire Nehmé, MSc

Chronic neuropathic pain (NP), generated by the peripheral and central nervous system, can be severe and disabling. Its management is still a challenge for health care professionals. Difficult to diagnose and to identify NP is often undertreated.

In Canada 3% of the adult population is estimated to have chronic neuropathic pain. It’s a stigmatic disease that is often invisible and for which the treatment is linked to many unwanted side effects.

Evidence-based literature has indicated that pain management is best treated by an interdisciplinary team. This workshop will highlight the best practice guidelines of NP assessment and management, the role of interdisciplinary team and the interaction with the patients. A review of the different types of NP and the therapies available (based on our team experience at MNH) will be discussed. The participants will be working on a real case situation with role play simulation.

La maladie de Parkinson: du diagnostic aux soins de la phase intermédiaire
Lucie Lachance, RN, MSc

A diagnosis of Parkinson’s disease is life altering, affecting the individual as much as the family unit. The disease is one of the most common progressive neurodegenerative diseases affecting physical, emotional and social well-being. The complexity of this disease—often involving lifestyle changes, multiple medications and numerous appointments with allied health professionals—can be daunting. Many patients with Parkinson’s disease are older and may have concomitant cognitive difficulties, which further add to their burden. The middle stage of Parkinson’s disease brings greater symptom impacts, which become more bothersome and interfere with day-by-day tasks, resulting in the need for assistance and less independence. The nurse expert in Parkinson’s disease is often the first point of encounter with patients and caregivers, as new problems arise.

The workshop will focus on nursing assessment and intervention during middle stage PD, identifying symptoms and utilizing interventions for motor fluctuations, non-motor symptoms and autonomic changes. Medication regimens will be assessed for response and appropriateness. The nursing role in relation to triaging phone calls and referral to appropriate allied discipline will also be discussed.

B1

Parkinson’s Disease: From Diagnosis to Middle Stage Care
Lucie Lachance, RN, MSc

Managing Neuropathic Pain: Challenges and Rewards
Claire Nehmé, MSc inf.

Les douleurs neuropathiques chroniques (DNC) générées par le système nerveux central et périphérique, peuvent s’avérer aigus et handicapantes. Leur gestion est encore un défi pour les professionnels de la santé. Parce qu'elles sont difficiles à diagnostiquer et à identifier, les DNC sont souvent insuffisamment traitées.

Au Canada, on estime que 3% de la population souffre de douleurs neuropathiques chroniques. C’est une maladie stigmatisante qui est souvent invisible et dont le traitement est lié à de nombreux effets secondaires.

On trouve dans la documentation plusieurs preuves que les douleurs sont plus efficacement traitées par une équipe interdisciplinaire. Cet atelier traitera des lignes directrices concernant les meilleures pratiques de gestion et d’évaluation des DNC, le rôle d’une équipe interdisciplinaire et l’interaction avec les patients. Nous discuterons des différents types de DNC et des thérapies possibles (tels que nous les avons observés au cours de nos expériences à l’HNM). Les participants travailleront sur une situation réelle durant laquelle ils se livreront à des jeux de rôles.

La maladie de Parkinson constitue souvent le premier point de rencontre avec les patients et les soignants lorsque de nouveaux problèmes apparaissent. Cet atelier portera sur les évaluations et les interventions infirmières au cours de la phase intermédiaire de la MP, l’identification des symptômes et le recours à des interventions visant les variations motrices, les symptômes non-moteurs et les changements au niveau du système nerveux autonome. Nous évaluerons diverses médications afin de vérifier les réactions qu’elles provoquent et si elles sont convenables. Nous discuterons également du rôle des infirmiers(-ières) en ce qui concerne le triage des appels téléphoniques ainsi que du fait de diriger les patients vers d’autres disciplines appropriées.
How to Tell Us What They Cannot: Neurological Assessment of Neurologically/Cognitively Impaired Children

Nancy Thornton, RN, MScN, CNN(C), Tiffany Rent, RN, BN

Assessing changes in level of consciousness is critical to the identification of life-threatening neurological deterioration. The Glasgow Coma Scale (GCS) is commonly used to monitor changes in neurological status in hospitalized children and adults. The GCS was originally developed to measure the depth and duration of impaired consciousness and coma, and is regarded as a strong predictor of severity of brain injury (Alverzo, 2006). Despite the reason for its creation, the Glasgow Coma Scale has become the accepted (and believed to be reliable) method of measurement and documentation of acute changes in the neurological status of adults in clinical practice (Cohen, 2009; Reilly, Simpson, Sprod, & Thomas, 1988). Most paediatric hospitals in Canada have a neurological assessment document of some sort that incorporates the GCS.

Other tools have been tailored to assess the neurological status of infants and very young children. Examples include the Paediatric Glasgow Coma Scale, the Starship Infant Neurological Assessment Tool, and the Children's Hospital of Philadelphia's Infant Coma Scale. We were unable to find a neurological assessment tool in the literature specifically designed to evaluate neurological status in children who, at baseline, are neurologically and cognitively impaired.

The purpose of this workshop is to discuss and seek feedback about an assessment tool designed for this particular patient population. This tool is based on other paediatric neurological assessment tools and incorporates measures used to assess pain in infants and children who cannot communicate with us in usual ways. This tool is currently being piloted in several settings in a paediatric tertiary care hospital.

Comment nous dire ce qu’ils ne peuvent pas: les évaluations neurologiques pour les enfants atteints de déficiences neurologiques/cognitives

Nancy Thornton, IA, MSc.inf., CSIN(C), Tiffany Rent, IA, BSc.inf.

Évaluer les changements de niveau de conscience est essentiel pour identifier les détériorations neurologiques susceptibles de menacer la vie des patients. On recourt habituellement à l’échelle de Glasgow (EG) pour surveiller les changements au niveau de l’état neurologique des enfants et adultes hospitalisés. L’EG devait au départ servir à mesurer la gravité et la durée des comas et des troubles de la conscience, et on la considère comme un instrument efficace pour prédire la sévérité de lésions cérébrales (Alverzo, 2006). Malgré les raisons derrière sa création, l’échelle de Glasgow est devenue le moyen de mesure et de documentation reconnu (et apparemment fiable) pour évaluer les altérations neurologiques graves chez les adultes dans la pratique clinique (Cohen, 2009; Reilly, Simpson, Sprod, & Thomas, 1988). La plupart des hôpitaux canadiens pour enfants utilisent l’EG d’une façon ou d’une autre dans leurs divers documents d’évaluation neurologique.

D’autres outils ont été créés afin d’évaluer l’état neurologique de nourrissons et de très jeunes enfants. On compte notamment l’échelle de Glasgow pédiatrique, le Starship Infant Neurological Assessment Tool (Outil d’évaluation neurologique pour nourrisson starship) et le Children’s Hospital of Philadelphia’s Infant Coma Scale (Échelle de coma pour nourrisson de l’hôpital pour enfants malades de Philadelphia). Nous n’avons pas été en mesure de trouver dans la documentation un outil d’évaluation neurologique pour les enfants qui souffrent initialement de troubles neurologiques et cognitifs.

L’objectif de cet atelier est de discuter et de fournir des retours au sujet d’un outil d’évaluation conçu spécifiquement pour cette population de patients. Cet outil s’appuie sur d’autres outils d’évaluation neurologique pédiatrique et comprend des mesures visant à évaluer le niveau de douleur chez les nourrissons et les enfants qui ne peuvent pas communiquer avec nous d’une façon normale. Cet outil est actuellement l’objet d’un projet pilote dans plusieurs unités d’un hôpital pédiatrique de soins tertiaires.

Reflective Practice Theory: Approaching Difficult Conversations in the Workplace with Confidence!

Lucy Wardell, N, MSc(A), Sheila Koutsogiannopoulos, N, BSc, CNN(C), Rosa Sourial, N, MSc(A), CNN(C)

Communicating effectively can sometimes be risky business! In the context of an increasingly complex health care environment fraught with limited resources, multiple demands, and competing agendas, nurses are often faced with having to engage in challenging conversations with others. These high-stakes conversations require unique interpersonal competencies in order to get problems solved without compromising future relationships. Reflective Practice Theory offers an approach to increase interpersonal communication skills to avoid getting stuck not knowing what to say or how to deliver a message effectively. The theory’s core values of curiosity, transparency, compassion, accountability, and informed choice, as well as some of the ground rules will be reviewed and further illustrated through the use of interactive role play. We will demonstrate how conversations can go wrong and what you can do to right them by incorporating these values into your practice.

La théorie de la pratique réfléctive : aborder avec confiance les discussions difficiles sur le lieu de travail!

Lucy Wardell, I, MSc(A), Sheila Koutsogiannopoulos, N, BSc., CSIN(C), Rosa Sourial, N, MSc(A), CSIN(C)

Communiquer efficacement peut parfois s’avérer une entreprise risquée! Dans le contexte de plus en plus complexe du milieu des soins de santé, où le manque de ressources, les multiples
Transition après la résection d’un méningiome : des connaissances infirmières

C. Dallaire, C. Balg, M. Dallaire, I. Juneau

Corps du Résumé : Des patients sont opérés pour un méningiome. L’expérience des patients est parfois assombrie par la survenue de déficits cognitifs, sensitifs ou moteurs (Akagami, 2002; Schielstel & Ryan, 2009) et par un manque de préparation pour leur retour à domicile, situation confirmée par les infirmières pivots en oncologie (IPO). Selon Meleis (2000), le retour au domicile constitue une transition que l’on peut influencer positivement à l’aide d’approches répondant aux besoins des personnes.

Objectif : Évaluer les effets d’interventions visant à faciliter la transition entre l’hôpital et le domicile chez les personnes ayant subi une résection d’un méningiome.

Méthode : Devis prospectif pré-post avec deux groupes : suivi habituel des infirmières pour le groupe 1 et pour le groupe 2, un enseignement sur les façons de composer avec les symptômes résiduels. La collecte de données s’effectue avec des questionnaires mesurant : Le sentiment d’être prêt pour le retour à domicile, la qualité de vie, la qualité de l’enseignement et la difficulté d’adaptation.

Résultats : Les comparaisons intra et interindividuelles soulignent des éléments-clés de la transition à la lumière des processus utilisés et permettent de bonifier les protocoles établis.

Recommandations : Optimiser la contribution des infirmières avec des interventions appuyées sur des résultats de recherche.

Post-meningioma resection transition: Nursing lessons

C. Dallaire, C. Balg, M. Dallaire, I. Juneau

Abstract: Patients undergo surgery for menigioma. Patients’ experiences are sometimes clouded by cognitive, sensory or motor impairment (Akagami, 2002; Schielstel & Ryan, 2009) and lack of preparation for their return home, which was confirmed by nurse navigators in oncology (NNO). According to Meleis (2000), returning home is a transition that can be positively influenced using a patient-centred approach.

Goal: Assessing the effects of interventions aiming at facilitating hospital-to-home transitions for post-meningioma resection patients.

Method: Pre-post prospective estimate with two groups: usual nurse follow-up for group 1 and education on how to deal with residual symptoms for group 2. Data were collected using a survey measuring: feeling of readiness for discharge, quality of life, quality of education and adaptation difficulties.

Results: Intra and interindividual comparisons underline key elements of transition in light of the undertaken processes and allow to improve established protocols.

Recommendations: Optimizing nurses’ contribution using research-based interventions.

Concurrent sessions

B2

Wave 2 “Transforming Care at the Bedside” (TCAB) on a Neurology Unit

Kitty Toye, BSc(N), Linh Mai, BSc(N), Shannon Roussy, RN, Sylvie Lussier, BSc(N), CNN(C)

Transforming Care at the Bedside (TCAB) is an innovative program initiated in the U.S. in 2002 by Robert Wood Johnson Foundation (RWJF) and the Institute for Healthcare Improvement (IHI) that engage frontline staff in reshaping care processes that respond to patient needs, thus improving safety, access and work environment. TCAB increases nurse time in direct patient care eliminating waste and duplication. The program was modified by McGill University Health Centre (MUHC) to deeply engage patient representatives in the project and understand inpatient experience through the eyes of patients and families. Five pilot units were part of the first wave and they completed their program in two years.

In August 2012 wave 2 units were chosen to implement the TCAB program for the next 10 months. The program was divided into four modules. Module 1 focused on testing changes on the unit by following the PDSA (Plan, Do, Study, Act) rapid cycle process. Module 2 focused on redesigning the physical environment by using the 5S process (Sort, Set, Shine, Standardize, Sustain). Module 3 focused on patients’ experience of care through the use of whiteboards and intentional rounds. Module 4 focused on improving admission and discharge processes.

The goal of the presentation is to demonstrate how the TCAB program can impact positively on the care provided to patients and families through the implementation of the four modules.
La seconde vague de
« Transforming Care at the Bedside »
(« La transformation des soins au
chevet du malade ») (TCAB) dans
une unité de neurologie

Kitty Toye, BSc.inf.; Linh Mai BSc.inf., Shannon Roussy, IA,
Sylvie Lussier, BSc.inf., IACN(C)

Transforming Care at the Bedside (TCAB) est un programme
innovateur qui a été initié aux États-Unis en 2002 par la Fonda-
tion Robert Wood Johnson (FRWJ) et l’Institut pour l’améliora-
tion des soins de santé (Institute for Healthcare Improvement,
on IHI), et qui vise à engager le personnel de première ligne
da réformer les procédés de soins afin qu’ils correspondent
aux besoins des patients, améliorant ainsi la sécurité, l’accès
aux soins et le milieu de travail. TCAB accroît le temps que le
personnel infirmier passe en contact direct avec les patients,
ce qui évite de perdre du temps et de reproduire des soins déjà
effectués. Le programme a été modifié par le Centre universi-
taire de santé McGill (CUSM) afin de profondément impliquer
les représentants des patients dans le projet et de comprendre
le vécu des patients hospitalisés à travers leurs yeux et ceux
de leurs familles. Cinq unités pilotes ont constitué une partie
de la première vague. Celles-ci ont achevé leur programme en
deux ans.

En août 2012, les unités de la seconde vague ont été choisies
afin de mettre en œuvre le programme TCAB durant les 10
mois suivants. Le programme a été divisé en 4 modules. Le
module 1 portait sur les changements dans les tests que menait
l’unité en suivant le PDSA (Plan, Do, Study, Act - Planifier, faire,
etudier, agir). Le module 2 visait à récréer le milieu physique
tru l’aide du procédé 5S (Sort, Set, Shine, Standardize, Sustain—
Trier, aménager, exceller, normaliser, maintenir). Le module
3 portait sur le vécu des patients au niveau des soins à l’aide
de tableaux blancs et de rondes intentionnelles. Le module
4 portait sur l’amélioration des processus d’admissions et de
sorties d’hôpital.

Le but de cette présentation est de démontrer en quoi le TCAB
peut influencer positivement les soins fournis aux patients et à
leurs familles à travers la mise en œuvre des 4 modules.

C2

Sexual Health Education after Spinal
Cord Injury: Everyone is Talking About it

Raj Parmar, Dan McGowan, Odette Pettem, Cheryl Oga,
Jennifer Stodler, Paul Wright

Sexual expression is an important element of one’s identity.
Although it is commonly believed that sexual desires diminish
with Spinal Cord Injury (SCI), several researchers have iden-
tified that sexual patterns persist throughout the lifespan. At
the core, rehabilitation has the goal of assisting individuals to
achieve the highest quality of life possible regardless of their
disability. For rehabilitation services to be truly holistic, oppor-
tunities to address sexual health must be included.

Nurses are often approached by patients with questions sur-
rounding this sensitive topic. Nurses’ body language, affect,
and attitude during this initial encounter is critical for the
education and progress of patients with regards to their sex-
uality. Consequently, a team of SCI clinicians in the Foot-
hills Medical Centre Tertiary Neurorehabilitation Program
developed a program to remove potential barriers to good
quality sexual rehabilitation. The main goals were to improve
the comfort of staff to broach the topic of sexual health with
their patients, to teach staff how to normalize patients’ fears
and to improve access to accurate information. Presentations
were developed and regularly delivered to staff and patients
to accomplish these goals. Emphasis remains on making patients
comfortable, normalizing fears and giving accurate information
to inform decision-making.

L’éducation sexuelle à la suite d’une
lésion de la moelle épineure: tout le
monde en parle

Raj Parmar, Dan McGowan, Odette Pettem, Cheryl Oga,
Jennifer Stodler, Paul Wright

L’expression de la sexualité constitue une partie importante
de l’identité de chacun. Bien que de nombreuses personnes
pensent que le désir sexuel diminue après une lésion de la
moelle épineure, (LME), plusieurs chercheurs ont découvert
que les comportements sexuels persistent durant le reste de
la vie. Le but principal de la reéducation est d’aider les indivi-
dus à obtenir la qualité de vie la plus élevée possible en dépit
de leur handicap. Pour que les services de reéducation soient
considérés comme réellement holistiques, le thème de la santé
sexuelle doit être abordé.

On pose souvent au personnel infirmier des questions en rap-
port à ce sujet délicat. Le langage corporel, l’affect et l’attitude
du personnel infirmier durant cette rencontre initiale sont
esentiels afin d’aider les patients à apprendre et faire progresser
leur sexualité. Par conséquent, une équipe de cliniciens spé-
cialisés dans les LMEs appartenant au Programme de neuroré-
adaptation tertiaire du Centre médical des Foothills (Foothills
Medical Centre Tertiary Neurorehabilitation Program) a créé
un programme visant à éliminer les barrières pouvant entraver
une bonne réadaptation sexuelle. Les buts principaux étaient
de rendre le personnel plus à l’aise d’aborder le sujet de la santé
sexuelle avec leurs patients, d’enseigner au personnel comment
normaliser les peurs des patients et d’améliorer l’accès à des
informations exactes. On a élaboré des présentations qui ont
ensuite été faites au personnel afin d’accomplir ces objectifs. Le
but principal reste de mettre le patient à l’aise, de normaliser ses
peurs et de lui donner des informations exactes afin de l’aider
à prendre des décisions.
Melatonin as a Safe and Efficacious Agent to Induce Sleep in the Neurophysiology Lab

Seetha Padmanabhan, RN, Bill Chu, Roy Sharma, Shelly Weiss, MD

Background: EEG is a common non-invasive procedure. However, many children are often fearful and uncooperative during this procedure and require deep sedation to induce sleep. Currently, two types of sedations are used in the neurophysiology lab at the Hospital for Sick Children: oral chloral hydrate or intramuscular Nembutal. However, hospital guidelines limit the maximum dosage allowable and, therefore, older patients greater than 40 kg cannot be adequately sedated.

Melatonin is a non-prescription, synthetic hormone used to induce sleep that has no effect on EEG recordings. A quality improvement project was introduced to assess the effectiveness of oral melatonin for sedation for children undergoing EEG who are uncooperative with the procedure.

Methods: Melatonin was offered as an option for patients who require sedation for EEG. Patients were assessed 30 to 60 minutes after taking Melatonin. If the Melatonin induced sleep, the EEG was done without administration of conventional sedation.

Results: A total of 28 patients participated and were given Melatonin as follows: <20 kg=3 mg and >20 kg=6 mg. All patients were sleep deprived prior to their EEG. Twenty-five out of 28 patients fell asleep within an average time of 31.4 minutes. The children woke more quickly and required less nursing monitoring after the EEG, as compared to historical records of children sedated by conventional sedation.

Conclusions: Melatonin was able to induce sleep in this quality improvement project trial. A formal study may allow further data collection and analyses to confirm safety and efficacy for the use of Melatonin for sedation. As well, the findings will be presented to the hospital sedation committee and may be expanded for use for other clinical procedures.

La mélatonine: un agent sûr et efficace afin d’induire le sommeil dans un laboratoire de neurophysiologie

Seetha Padmanabhan, IA, Bill Chu, Roy Sharma, Shelly Weiss, DM

Contexte : L’EEG est une procédure non-invasive commune; toutefois, de nombreux enfants en ont souvent peur et ne se montrent pas coopératifs durant cette procédure. On doit donc les endormir à l’aide de sédatifs. Actuellement, on utilise deux types de sédatifs au laboratoire de neurophysiologie du Hospital for Sick Children : de l’hydrate de chloral, administré par voie orale, ou du Nembutal, en intramusculaire. Cependant, les directives de l’hôpital limitent le dosage maximum autorisé et de ce fait, les patients plus vieux et pesant plus de 40kg ne peuvent pas recevoir la quantité de sédatif adéquate.

La Mélatonine est une hormone synthétique et non-soumise à prescription que l’on utilise afin d’induire le sommeil et qui n’en-traine aucun effet sur les résultats de l’EEG. Un projet d’amé-élioration de la qualité a été initié afin d’évaluer l’efficacité de la Mélatonine administrée par voie orale en tant que sédatif pour les enfants qui doivent subir une EEG et ne se montrent pas coopératifs avec la procédure.

Méthodes : On a proposé de la mélatonine comme alternative aux patients qui nécessitent un sédatif pour leur EEG. Les patients ont été évalués 30 à 60 minutes après avoir reçu de la Mélatonine. Si la Mélatonine induisait le sommeil, l’EEG était effectué sans avoir à administrer un sédatif conventionnel.

Résultats : Au total, 28 patients ont participé et ont reçu de la Mélatonine: 20 kg=3 mg et > 20 kg=6 mg. Tous les patients manquaient de sommeil avant leur EEG. Sur les 28 patients, 25 se sont endormis en moyenne avant 31,4 minutes. Les enfants se sont réveillés plus rapidement et ont nécessité moins de surveillance de la part d’un(e) infirmier(-ière) à la suite de l’EEG que les enfants qui ont été endormis au moyen de sédatifs conventionnels.

Conclusions : Au cours de cet essai d’amélioration de la qualité, la Mélatonine a réussi à induire le sommeil. Une étude formelle pourrait permettre de collecter de plus amples données et des analyses permettraient de confirmer la sécurité et l’efficacité de l’utilisation de la Mélatonine en tant que sédatif. D’autre part, ces découvertes seront présentées au comité pour les sédatifs de l’hôpital, et il se pourrait que leur utilisation se répande à d’autres procédures cliniques.

Using Evidence-Based Practice to Improve Stroke Care in the Acute Care Setting

Jenny Slade, RN, BN, Eileen Fahey, RN, BN

Every year in Canada there are more than 50,000 people who suffer from stroke, with most requiring hospitalization. Due to our growing elderly population and high-risk behaviours, that number is only expected to increase. Organized stroke care units in acute care settings provide superior treatment outcomes compared to general medicine units. They offer improved client survival rates, increased client independence and reduced costs. The stroke care unit on 7 West at the St. Clare’s site of Eastern Health is a reflection of what is being accomplished across Canada—a designated area that features vital components to optimize stroke care. The contributions made by nurses on this unit have been centred on a variety of aspects relating to stroke care.

This involves the nurses receiving specialized education pertaining to stroke care, using the Canadian Stroke Best Practice Recommendations (2010) in daily practice and participating in regular meetings to discuss both successes and challenges surrounding client care. This presentation serves as a description of a stroke unit in Newfoundland, with a focus on nursing, to help contribute to the understanding of the benefits associated with its implementation.
Creating a Culture of Change:
A Strategy for Improving Health Services
Jill Congram, Jason Knox, Lisa Patel, Tyler Burley, Paul Wright, Lynnette Fritzke, Brian Stalker, Kendra Ness

The only thing constant in health care is change. Organizations strive to implement best practices, improve patient flow, and design efficient models for service delivery in their thirst for providing the highest quality of patient care possible. Often times the direction for change is driven from the top down. An alternative is the bottom-up, frontline-led, clinician-empowering, and patient-engaging approach undertaken in designing the Calgary Brain Injury Strategy. This presentation will share the many successful outcomes, processes and clinical tools implemented, innovative means, and far-reaching benefits experienced as a frontline hospital inpatient nurse is supported in her development into the lead for a strategy to change services not only on her unit, but across an entire continuum of care.

This improved care. This changed culture. This even improved patient-engaging approach undertaken in designing the Calgary Brain Injury Strategy. This presentation will share the many successful outcomes, processes and clinical tools implemented, innovative means, and far-reaching benefits experienced as a frontline hospital inpatient nurse is supported in her development into the lead for a strategy to change services not only on her unit, but across an entire continuum of care. This improved care. This changed culture. This even improved clinical and leadership skills for nurses across the continuum, engaged nurses and other frontline clinicians in designing change, produced rewarding outcomes, and developed innovative roles for her own advancement, as a nurse leader.

Though this was specific to one patient population in neurosciences, the learnings are applicable system-wide and will inspire nurses everywhere to get involved, to be leaders, and to be the profession to change the face of health care.

How Identifying the Neuroscience Pediatric Patient at Risk has Evolved at BC Children’s Hospital
B. Won, BA, BScN, A. Waddell, BScN, S. Steenburgh, BScN, MN

Risk can be identified as the possibility that something unwelcomed, undesired or unwanted might occur. B.C. Children’s Hospital has recently implemented a system to help practitioners identify a patient at immediate risk. Identifying the neurologically deteriorating patient can present with its challenges—cues may not be captured with typical pediatric advanced warning scores. In an effort to better capture all of our patients at risk in the inpatient settings, a tool (modelled
Implementation of an Oral Health Assessment Tool

Lynda Ryall-Henke, RN, Penney Letsos, MClSc, Reg CASLPO

Poor oral care is linked to increased pneumonia rates and prolonged stays in hospital, and can negatively affect quality of life for the patient. The Clinical Neurological Sciences (CNS) Unit at University Hospital (UH) wanted a tool to assess the oral health of the acute care patients and to develop a policy for staff implementing oral care. This important initiative was identified by the CNS Continuous Quality Improvement (CQI) Council, a team of inter-professional health care providers.

A review of best practices and a survey of the current oral care practices were undertaken following which an assessment tool was launched. In June 2012, after extensive education and training sessions for all members of the health care team, the Oral Health Care Assessment Tool (OHAT) was launched. Every patient is to have this completed within 24 hours of admission.

To date, there has been an improvement in the frequency and quality of oral care. Bedside reviews show that oral health tools are conveniently located at the patient’s bedside. Monthly data collection continues in the form of chart audits and intended comparison of hospital-acquired infection rates using pre- and post-implementation data are being undertaken.

We are excited to share the results of our experience as an example of inter-professional collaboration to improve patient outcomes in the acute neuroscience patient population.
Disorders of Consciousness: Re-examining Ethical Dilemmas

Eric Racine, PhD

The context of severe brain injury carries forth important clinical decisions, which involve nursing and other clinical practices. Important ethical questions for families and health care providers surface when patients evolve to a disorder of consciousness such as the vegetative state or the minimally conscious state. In this talk, I will present and discuss some of the major ethical questions surfacing in a rapidly evolving neuroscience context (e.g., neuroimaging studies suggesting awareness in vegetative patients; continuous misunderstanding of different aspects of disorders of consciousness and conflation with brain death by families and the public). This discussion will be based on recent work carried out at the Neuroethics Research Unit, as well as recent relevant literature. I will then review briefly the impact of recent findings on practice recommendations. An open discussion period will allow sharing perspectives and experiences with respect to ethical challenges in nursing and clinical care for patients with disorders of consciousness. I hope to launch a conversation to engage nurses regarding this emerging body of neuroscience research and the ethical dilemmas associated with disorders of consciousness more generally.

Les troubles de la conscience : des dilemmes éthiques réexaminés

Eric Racine, PhD

Le contexte des graves lésions cérébrales comporte de nombreuses décisions cliniques, ce qui implique des soins infirmiers et d’autres pratiques. D’importantes questions éthiques apparaissent pour les familles et les fournisseurs de soins de santé lorsque des patients développent des troubles de la conscience tels qu’un état végétatif ou un état de conscience minimal. Au cours de cette conférence, je présenterai et discuterai des plus importantes questions éthiques apparaissant dans le contexte des neurosciences, sujet à une rapide évolution (par exemple, des études en neuro-imagerie qui suggèrent un état de conscience chez un patient dans un état végétatif, une mauvaise compréhension constante des différents aspects des troubles de la conscience, et la confusion avec la mort cérébrale par les familles et le grand public). Cette discussion s’appuiera sur les récents travaux menés au sein de l’Unité de recherche en neuroéthique ainsi que sur la documentation récente et pertinente. Je passerai ensuite rapidement en revue les effets des découvertes récentes sur les recommandations de pratiques. Une période de discussion ouverte permettra enfin de partager ses perspectives et ses expériences en termes de défis éthiques dans le domaine des soins infirmiers cliniques pour les patients souffrant de troubles de la conscience. J’espère lancer une conversation afin de motiver les infirmiers(-ières) au sujet des travaux de recherche en neuroscience et des dilemmes éthiques liés aux troubles de la conscience en général.

L’accompagnement tout au long du parcours : les soins infirmiers pour les patients en pédiatrie avec une grille (GRID)

Katanya Fuerst, RN, Lori Duncan, RN, Catherine Kennedy, RN, Arbelle Manicat-Emo, RN(EC), NP-Paeds

Patients with GRID are a highly specialized neurosciences population cared for at The Hospital for Sick Children. These patients undergo invasive video electrocorticography monitoring through the placement of a grid and/or strip electrodes on the subdural surface of the brain to map the focus of the patient’s seizures. The grid remains in place intracranially for up to two weeks and necessitates 1:1 nursing care for observation and management of seizure activity. To care for these patients nurses must possess specialized expertise in neurosurgery, neurology and epilepsy. Unlike the unexpected nature of traumatic brain injuries or tumours, GRID surgeries are elective. For these families, their journey consists of years of medication attempts and extensive investigations to determine the patient’s surgical candidacy. Thehope isfor improved quality of life. However, the outcomes may be unpredictable and, at times, unfavourable. During this extended hospitalization, nurses develop close relationships with these patients and their families, as they are present during the crucial brain mapping and resective surgery, if operable. Utilizing case studies, the lived experience of nursing paediatric patients with GRID will be discussed, as well as some of the strategies that can be incorporated to manage the stressors experienced by nurses.

Along for the Journey: Nursing the Paediatric Patient with GRID

Katanya Fuerst, RN, Lori Duncan, RN, Catherine Kennedy, RN, Arbelle Manicat-Emo, RN(EC), NP-Paeds

Les patients avec une grille constituent une population très spécialisée dans le domaine des neurosciences, population que l’on traite au Hospital for Sick Children. Ces patients font l’objet d’une surveillance invasive à l’aide d’une électrocorticographie vidéo que l’on effectue en plaçant une grille et/ou une ligne d’électrodes sur la surface sous-durale du cerveau afin d’identifier le siège des crises. La grille reste à l’intérieur du crâne pour une durée allant jusqu’à deux semaines et nécessite des soins infirmiers de 1:1 afin d’observer et de gérer les crises. Le personnel infirmier responsable de ces patients doit posséder des connaissances approfondies en neurochirurgie, en neurologie, et sur l’épilepsie. Contrairement à la nature inattendue des lésions cérébrales traumatiques ou des tumeurs, les chirurgies de grille sont électives. Pour ces familles, le parcours consiste dans des années de tentatives de médication et de recherches approfondies afin de déterminer si le patient peut être candidat à une intervention chirurgicale. Elles espèrent obtenir une meilleure qualité de vie ; toutefois les résultats sont imprévisibles et parfois défavorables. Durant cette longue période d’hospitalisation, les infirmiers(-ières) développent un étroite relation avec ces patients et leurs familles car ils/elles sont présent(e)
s durant l’étape cruciale de cartographie cérébrale et durant la résection chirurgicale, s’ils sont opérables. À l’aide d’une étude de cas, nous discuterons des expériences vécues au cours des soins infirmiers menés sur des patients en pédiatrie portant une grille, et également de certaines stratégies que l’on peut incorporer dans sa pratique afin de gérer les facteurs de stress de l’équipe infirmière.

D4

Dural Arteriovenous Fistulas—A Case-Based Review

K. Ruth Whelan, RN, BSN, MN, CNN(C), Aaron Gardner, RN, BSN, CNN(C)

Cerebral vascular malformations represent some of the most complex of all human medical conditions. Dural arteriovenous fistulas (DAVF) are acquired, as opposed to cerebral arteriovenous malformations (AVMs), which are congenital. DAVFs are abnormal connections between the scalp and dural arteries and the venous sinuses of the brain. The pathophysiology can be related to trauma, infection, coagulation disorders or, most often, idiopathic. Patients with DAVFs can present with headache, tinnitus, cranial nerve palsies, intracerebral haemorrhage or be asymptomatic. Treatment can be observation, endovascular embolization, open neurosurgery or combination treatment.

The intent of this concurrent presentation is to provide all interested participants with a complete overview of these complex patients. This will include a review of pathophysiology, risk factors, patient presentation, diagnostic tests and neurosurgical treatment options, including those offered at the Saskatchewan Cerebrovascular Centre, as well as follow-up care. Finally, participants will be encouraged to apply new learning to patient-based case studies and explore how nursing plays a critical role in assisting their patient through this experience.

Les fistules artério-veineuses durales – Une étude fondée sur des cas

K. Ruth Whelan, IA, BSc inf., MSc inf., IACN(C), Aaron Gardner, IA, BSc inf., IACN(C)

Les malformations vasculaires cérébrales représentent une partie des troubles médicaux humains les plus complexes. On contracte les fistules artério-veineuses durales (FAVD), contrairement aux malformations artério-veineuses cérébrales (MAV), qui sont congénitales. Les FAVDs sont des connexions anormales entre le cuir chevelu et les artères durales et les sinus veineux du cerveau. On peut relier la pathophysiologie aux traumatismes, aux infections, aux troubles de la coagulation, et le plus souvent à des troubles idiopathiques. Les patients atteints de FAVDs peuvent souffrir de maux de tête, d’acouphènes, de paralysies des nerfs crâniens, d’hémorragies intracrâniennes, ou être asymptomatiques. Le traitement peut être une observation, une embolisation endovasculaire, de la neurochirurgie ouverte ou une combinaison de divers traitements.

Le but de cette présentation concomitante est de fournir aux participants intéressés une vue d’ensemble complète de ces patients complexes. Elle présentera la pathophysiologie, les facteurs de risque, la présentation des patients, les tests de diagnostic et les choix de traitement à l’aide de la neurochirurgie, dont ceux que l’on propose au Saskatchewan Cerebrovascular Center, ainsi que des soins de suivi. Enfin, on encouragera les participants à appliquer leurs nouvelles connaissances aux études de cas fondées sur des patients et d’explorer en quoi le personnel infirmier joue un rôle critique dans l’aide qu’il apporte aux patients devant traverser cette expérience.

C5

Pregnancy and an Unexpected Neurological Condition

Sonia Kettle

Transverse myelitis is a neurological disorder caused by acute inflammation generally restricted to one or two segments of the spinal cord. The exact etiology remains unclear. The incidence of transverse myelitis is estimated between one and eight new cases per million annually. There are approximately 1,400 new cases of transverse myelitis diagnosed each year in the United States.

The development of acute transverse myelitis during pregnancy has rarely been documented in a review of the literature. This oral presentation will use a case study approach. It will discuss the diagnosis, treatment and management of a patient nearing the end of the first trimester of pregnancy with a suspected diagnosis of acute transverse myelitis.

As neuroscience nurses, it is important that we are advocates for patients and current on the latest practice and treatment of patients with non-traumatic spinal cord injury. The ultimate goal in caring for these patients would be the prevention and management of complications in the journey to recovery.

La grossesse et un trouble neurologique inattendu

Sonia Kettle

La myélite transverse est un trouble neurologique causé par une inflammation aiguë qui provient généralement de seulement un ou deux segments de la moelle épinière. L’étiologie exacte reste à être déterminée. On estime la fréquence de la myélite transverse à environ 1 à 8 nouveaux cas par million annuellement. On diagnostique approximativement 1 400 nouveaux cas de myélite transverse chaque année aux États-Unis.

En étudiant la documentation existante, on retrouve peu de cas de développement d’une myélite transverse au cours d’une grossesse. Cette présentation orale se fera à l’aide d’une étude de cas. Elle traitera du diagnostic, du traitement et de la gestion d’une patiente à la fin de son premier trimestre de grossesse que l’on soupçonnait de souffrir d’une myélite transverse aiguë.

En tant que qu’infirmiers/infirmières en neurosciences, il est important de donner ce qu’il y a de meilleur à nos patients et d’être au courant des dernières pratiques et traitements pour les patients atteints de lésions non-traumatiques de la moelle épinière. L’ultime objectif des soins prodigués à ces patients réside dans la prévention et la gestion des complications au cours de la convalescence.
Nursing Care of Patients Following Functional Hemispherectomy

Herta Yu, RN(EC), Stacey Lealess, RN(EC), Kathryn Sebastien, RN

Functional hemispherectomy is a surgical procedure that has gained popularity in the treatment of disabling refractory epilepsy resulting from widespread, diffused, unilateral hemispheric pathology. The literature documents fairly favourable outcomes, but this is largely dependent on careful patient selection. During the immediate post-operative period, children may present with infection, persistent low grade fever, irritability and other conditions, all over a varying period of time. For any family who has a child with intractable epilepsy, parents are desperate to find any treatment that may alleviate the disabling seizures. Children undergoing functional hemispherectomy are both a source of stress, as well as hope for these families.

Nursing has a pivotal role in educating and supporting the families of children undergoing this procedure. This presentation will review the common postoperative conditions identified from a case series of patients who underwent functional hemispherectomy over the past five to 10 years at the Hospital for Sick Children. The results of the case series will assist the nurses to formulate more precise care for the postoperative care of these patients. In addition, nurses will be better equipped to provide the appropriate information to help the families prepare and cope when these conditions occur.

Les soins infirmiers pour les patients ayant subi une hémisphérectomie fonctionnelle

Herta Yu, IA(CS), Stacey Lealess, IA(CS), Kathryn Sebastien, IA

L’hémisphérectomie fonctionnelle est une opération chirurgicale dont la popularité s’est accrue dans le traitement de l’épilepsie fonctionnelle invalidante provenant d’une pathologie hémisphérique unilatérale large et diffuse. La documentation présente des résultats assez favorables, mais ils dépendent en grande partie de la sélection des patients. Durant la période postopératoire immédiate, les enfants peuvent présenter des signes d’infection, une fièvre peu élevée et persistante, de l’irritabilité ainsi que d’autres troubles au cours d’une période de temps dont la durée peut varier. Dans toutes les familles où un enfant est atteint d’épilepsie incurable, les parents désespèrent de trouver un traitement qui pourrait calmer les crises invalidantes. L’opération d’hémisphérectomie fonctionnelle pour ces enfants constitue à la fois un facteur de stress mais aussi d’espoir pour ces familles.

Les soins infirmiers jouent un rôle pivot dans l’éducation et l’aide aux familles des enfants qui subissent cette procédure. Cette présentation traitera des troubles survenant communément à la suite de l’opération, tels qu’identifiés dans une série de cas de patients ayant subi une hémisphérectomie fonctionnelle au cours des 5 à 10 dernières années au Hospital for Sick Children. Les résultats de cette série de cas aideront les infirmiers(-ières) à formuler des soins postopératoires plus précis pour ces patients. De plus, les infirmiers(-ières) seront plus aptes à fournir des informations appropriées afin d’aider les familles à se préparer et à faire face lorsque ces troubles se présentent.

Introduction of a “Bladder Bundle” to Reduce Catheter-Associated Urinary Tract Infections (CAUTI) in Neurology Patients

Susan Rachel, RN, CNN(C), Sylvie Lussier, BSc(N), CNN(C), Mariana Muntean, RN

Patients with a neurological disease often cannot maintain normal urinary elimination patterns because of dysfunction at the brain-stem, spinal or cerebral levels. Communication difficulties and the unreliability of fever may complicate the diagnosis of infection.

Surveillance data for CAUTI on a neurology unit of a large urban teaching hospital demonstrated significant inappropriate catheter use and lack of physician follow-up leading to long dwell times. The mean catheter dwell time on the unit was 11.2 days, although the literature stated that catheterization beyond six days poses significant risk for CAUTI.

Nursing staff agreed to try a “nurse-initiated reminder sheet” to decrease the number of catheter days. This was one tool from our toolkit of several evidence-based practices that was introduced as the “5 A’s Bladder Bundle”.

The rate of inappropriate catheter use dropped from 69.3% in the first four weeks to zero for the last five weeks of the implementation phase of the bundle. Quarterly audits show that results have been sustained. The CAUTI rate also decreased by one third resulting in improved patient safety and an estimated $7,612 savings in the first six months of implementation and practice change.

This presentation will highlight the process of the practice change and lessons learned.

L’introduction d’une « trousse pour la vessie » afin de réduire les infections urinaires associées à l’utilisation de cathéters (IUAUC) chez les patients en neurologie

Susan Rachel, IA, IACN(C), Sylvie Lussier, BSc.inf., IACN(C), Mariana Muntean, IA

Les patients atteints de maladies neurologiques ne peuvent souvent pas continuer à uriner normalement à cause de dysfonctionnements aux niveaux du tronc cérébral, du cerveau et de la moelle épinière. Les difficultés à communiquer ainsi que le caractère peu fiable des fièvres peuvent compliquer le diagnostic de l’infection.
Formulaires de niveaux d’interventions médicales: Comment créer un environnement éthique en fin de vie?

M. Frenette, K. Serri, J.-C. Evans, J. St-Arnaud

Au Canada, 65% des décès ont lieu en centre hospitalier. Les nombreux enjeux éthiques qui y sont liés font partie des préoccupations quotidiennes des infirmières. Dans le but de faciliter le processus décisionnel en fin de vie, plusieurs centres hospitaliers ont instauré des politiques de niveaux d’interventions médicales (NIM). Quoiqu’essentielles, les NIM soulèvent des problèmes éthiques complexes pour les professionnels de la santé qui les utilisent et les appliquent. Une étude rétrospective de dossiers médicaux portant sur leur utilisation fut entrepris à travers différents centres hospitaliers du Québec. Cette enquête a permis de mieux comprendre les pratiques associées aux NIM. Cette démarche est un premier pas crucial afin de faciliter décisionnel en fin de vie. Les résultats ont été analysés dans un cadre éthique afin de saisir l’impact qu’ils ont sur les soins en fin de vie. Les résultats ont été analysés sous un cadre éthique à l’aide d’une approche par principe. Une conception plus éclairée des enjeux associés aux NIM permettra aux infirmières d’être mieux outillées pour contribuer en tant qu’acteurs clés et pour faire face aux défis auxquels toute l’équipe de soin, de même que le patient et sa famille, feront face.

Cette présentation a pour but d’éclairer les infirmières sur le contexte actuel de prise de décision en fin de vie en centre hospitalier et se veut propice aux discussions afin d’encourager une pratique réflexive.

Level of Medical Intervention Forms: How to Create an Ethical Environment at the End of Life?

M. Frenette, K. Serri, J.-C. Evans, J. St-Arnaud

In Canada, 65% of deaths occur in an inpatient setting. Many ethical issues pertain to this and are a part of nurses’ daily concerns. Many hospitals have implemented levels of medical intervention (LMI) policies in order to facilitate decision-making processes at the end of life. Though essential, LMIs have raised complex ethical concerns for health care professionals who use and apply them. A retrospective review of medical files pertaining to their use was undertaken across different hospitals in Quebec. This survey allowed a better understanding of LMI practices. This initiative is a crucial first step towards understanding the effect they have on care at the end of life. Results were analyzed within an ethical frame using a principle approach. A better conception of LMIs’ stakes will allow nurses to be more prepared in order to contribute as key actors and face the challenges that also await the health care team, the patient and the family.

This presentation will help nurses understand the current decision-making background at the end of life in an inpatient setting and will encourage discussions to foster reflexive practices.

Progressive Multifocal Leukoencephalopathy Associated with Natalizumab Use—Case Study and Review

Angela Meagher, RN-NP

Natalizumab is an effective drug used for treatment of selected patients with relapsing remitting multiple sclerosis (RRMS). Progressive multifocal leukoencephalopathy (PML) is a rare, but potential complication of natalizumab use. PML is a potentially fatal neurologic disease caused by reactivation of the JC virus in immunocompromised patients.

Historically, natalizumab was withdrawn from the market in early 2005 after two patients with RRMS developed confirmed PML. The reintroduction of natalizumab has been accompanied by the development of specific guidelines and a risk management program. By February 2012, a total of 212 cases of PML associated with natalizumab therapy had been reported worldwide.

In this presentation we will review the indications for natalizumab use and the history behind its initial removal from the market. We will outline the current monitoring program. Finally, we will present the story of the first patient in Nova Scotia to develop PML associated with natalizumab use. We will also describe what is currently known about treatment approaches for this condition. Implications for nursing care include gaining knowledge of the signs and symptoms of PML that you should be aware of when caring for patients on natalizumab, as well as learning about the potential treatments for this condition.
La planification de votre carrière comme infirmier(-ière) – Avez-vous un plan sur cinq ans?

Maria Hamakiotis, MScA

Selon le Bureau des statistiques du travail d’États Unis, le domaine des infirmiers(-ières) autorisé(e)s est celui qui a enregistré la plus forte expansion. On estime qu’entre 2006 et 2016, 587 000 nouveaux postes d’infirmiers(-ières) autorisé(e)s s’ouvriront. Il existe de nombreuses opportunités de travail dans différents environnements, dont les hôpitaux, les cliniques et à domicile. Afin de profiter de cette demande en essor, il est important pour les futur(e)s infirmiers(-ières) ainsi que pour les infirmiers(-ières) diplômé(e)s d’élaborer un plan de carrière efficace afin d’avancer.

Que vous commenciez à peine ou que vous ayez déjà plusieurs années d’expérience, l’élaboration d’un plan de carrière peut souvent se révéler être un processus intimidant. Cette session vous fournira des points-clés en rapport à votre épanouissement professionnel, des habiletés cruciales afin de préparer et de passer des entrevues, ainsi que des astuces générales pour planifier votre carrière.

A7

Hyponatremia and Assessment in Neuroscience Nursing: A Review Article

Shannon Harrington

Hyponatremia is an electrolyte disturbance that can have serious implications for patient outcome. Nurses should be aware of the potential for hyponatremia in neurological and neurosurgical conditions such as traumatic brain injury (TBI), subarachnoid hemorrhage (SAH), and post-pituitary gland resection, as well as the presentation of decreased serum sodium in non-neurological disease states. This presentation outlines the key points of hyponatremia in neuroscience nursing with a focus on patient assessment, as well as the risk of osmotic demyelination syndrome (ODS) with rapid sodium correction.

L’hyponatrémie et son évaluation dans les soins infirmiers en neurosciences : un rapport de synthèse

Shannon Harrington

L’hyponatrémie est une perturbation électrolytique pouvant entraîner de sérieuses complications pour le patient. Le personnel infirmier devrait connaître la possibilité d’hyponatrémie lors de troubles neurologiques et neurochirurgicaux, comme une lésion traumatique cérébrale (LCT) ou une hémorragie sous-arachnoidienne (HSA), à la suite d’une résection de la glande pituitaire, ou encore s’il se produit une diminution du taux de sodium sérique pendant des états maladifs non-neurologiques. Cette présentation indiquera les points-clés de l’hyponatrémie dans le contexte des soins infirmiers et se concentrera sur l’évaluation des patients, ainsi que sur les risques d’apparition du syndrome de démêlénisation osmotique (SDO) avec une correction rapide du sodium.
Les facteurs influençant les capacités d’apprentissage des personnes atteintes de dystrophie myotonique de type 1 (DM1) : une approche écologique

Mélanie Lavoie, inf., MSc, Maud-Christine Chouinard, inf., Ph.D., Frances Gallagher, inf., Ph.D., Cynthia Gagnon, erg., Ph.D.

La DM1 est une maladie neuromusculaire dégénérative multisystémique (Harper, 2001). Elle a été observée chez les personnes qui en sont atteintes plusieurs comportements non favorables à la santé (Gagnon et al., 2001) et une autogestion de leurs symptômes souvent inadéquate. Les infirmières effectuant auprès de cette population plusieurs interventions éducatives afin de la rendre apte à gérer au mieux leur condition de santé. Cependant, les objectifs visés par ces interventions sont rarement atteints. Les facteurs influençant leurs capacités d’apprentissage sont partiellement connus.

Objectif : Décrire les facteurs influençant les capacités d’apprentissage des personnes atteintes de DM1 selon une approche écologique (Bronfenbrenner, 1979). Les facteurs ont été identifiés à partir d’une recherche descriptive. Les résultats démontrent que l’efficacité des interventions repose sur la reconnaissance des interactions entre les personnes atteintes de DM1 et leurs différents environnements (systèmes). Les caractéristiques personnelles sont des facteurs qui influencent et compromettent de manière importante l’ensemble des environnements de la personne laissant entrevoir, chez elles, un pouvoir d’agir (empowerment) plus limité à la fois sur elles-mêmes et leurs environnements. Les interventions éducatives entreprises auprès de cette population doivent être adaptées et fondées sur la reconnaissance ainsi que le développement de leur pouvoir d’agir.

Factors Affecting Learning Abilities for Type 1 Myotonic Dystrophy Patients: An Ecological Approach

Mélanie Lavoie, RN, MScN, Maud-Christine Chouinard, RN, PhD, Frances Gallagher, RN, PhD, Cynthia Gagnon, Erg, PhD

MD1 is a multisystemic degenerative neuromuscular condition (Harper, 2001). Patients with this condition have been found to display unhealthy behaviours (Gagnon et al., in press) and inadequate symptoms self-management. Nurses perform a number of education interventions with this population to allow them to manage their health. However, they found these interventions’ goals are rarely achieved. Factors affecting their learning abilities are only partially known.

Goal: Describing the factors affecting learning abilities for MD1 patients according to an ecological approach (Bronfenbrenner, 1979). Factors were identified according to a descriptive research. Results show that the efficacy of these interventions is based on recognizing interactions between MD1 patients and their environments (systems). Personal characteristics are highly affecting and compromising factors on patients’ environments, which shows the limited empowerment of patients on themselves and their environments. Education interventions with this population must be adapted and based on recognizing and developing their empowerment.

Interdisciplinary Collaboration to Improve Patient Outcomes: Facilitating Access to Intrathecal Trials for Chronic Pain and Spasticity Management

Ha Quach, Suzanne Do-Davoll, Amanda Ung, Christine Bouchard, Martha Stewart

Patients with chronic pain and spasticity often endure long wait times for intrathecal treatments in Quebec. Intrathecal therapy is an advanced technique used to deliver opioid analgesics or antispasmodics directly into the cerebrospinal fluid, which is very effective in reducing symptoms, as well as minimizing systemic side effects. This therapy is offered to people whose pain has been refractory to conventional treatments.

To address this issue, we reorganized our neurosurgical in-patient unit to develop a pilot program that would facilitate patients’ access to an intrathecal trial. Managerial support, tool development and a fully staffed unit have made it possible for neuroscience nurses to participate in this learning opportunity.

This pilot program is the outcome of close interdisciplinary collaboration between three teams: the neurological day centre, the neurosurgical in-patient unit and the pain program. This teamwork has led to improved patient outcomes in terms of accelerating the process of becoming a surgical candidate. Patients who experience a successful intrathecal trial are then offered surgical implantation of an intrathecal drug delivery system.

This presentation will include preliminary results and lessons learned from patients and nurses. A clinical pathway will also be included.

La collaboration interdisciplinaire afin d’améliorer les résultats des patients : faciliter l’accès à des tests intrathécaux pour les douleurs chroniques et la gestion de la spasticité

Ha Quach, Suzanne Do-Davoll, Amanda Ung, Christine Bouchard, Martha Stewart

Au Québec, les patients qui souffrent de douleurs chroniques et de spasticité doivent souvent endurer de longues périodes d’attente avant de recevoir des traitements intrathécaux. La thérapie intrathécale est une technique avancée à laquelle on recourt afin d’administrer des analgésiques opioïdes ou des anti-spasmodiques dans le liquide céphalorachidien, ce qui s’avère très efficace pour réduire les symptômes et diminuer les effets systémiques secondaires. Cette thérapie est proposée aux gens dont les douleurs ont résisté aux traitements conventionnels.

Afin de régler ce problème, nous avons réorganisé notre unité de neurochirurgie afin de créer un programme pilote qui faciliterait l’accès des patients aux tests intrathécaux. L’appui administratif, la création d’outils et une unité complète ont rendu possible la participation d’infirmiers(-ières) en neurochirurgie à cette possibilité d’apprentissage.
The Development of “Road to You”: A Co-Led Young Adult MS Support Group

Jennifer Doran, BN, CNN(C), Pamela Ng, MSc, Stanley Hum, BSc, MSc, PhD (Candidate), Tristan Williams, Co-founder

Background: The unpredictable nature of multiple sclerosis (MS) can disrupt life goals. Support groups may help address fears or concerns, and positively impact those looking to connect with others coping with a stressful experience, such as living with MS.

Rationale/Purpose: Within the MS Program of the Montreal Neurological Hospital, a gap was identified for an English support/education group targeting the young MS population. The Road to You (TRY) was created as a collaboratively-run support group, administered by friends/family) have enrolled, with more women than men (2:1).

Results: Since April 2011, 57 members (51 patients and six friends/family) have enrolled, with more women than men (2:1). Additional demographics and level of disability will be obtained.

Conclusion: The development of TRY provides insight useful in the formation of similar collaboratively-run groups.

D7

The MUHC Glioma Module: An Innovative Approach to Patient Education

Heather Perkins, Nancy Posel, Julia Thomas, Catherine-Anne Miller

This presentation will review the MUHC Glioma Module, an online-teaching tool that uses highly visual multimedia graphics and minimal text to deliver comprehensive, effective content to newly diagnosed glioma patients and their families. This approach ensures that patients and families are informed, prepared for treatments and procedures, able to manage at home, know when to call a clinician, when to return to the hospital, and why adherence to care regimens is critical.

The module is based on best practices and addresses patients’ information needs while respecting requirements for health literacy, and acknowledging the stress of diagnosis. The module was developed using the perspectives of various disciplines in collaboration with the patient education office. It can be easily updated in response to feedback and changes in practice. The module can also be used to support student and staff learning, to clarify knowledge in newly learned areas and to highlight the responsibility that all clinicians have to learn to teach.

The glioma module is available through the Internet. Due to the highly visual nature of the material and plans to translate the minimal text into multiple languages, this approach could be used globally.

Le module sur le gliome du CUSM : une démarche innovatrice pour éduquer les patients

Heather Perkins, Nancy Posel, Julia Thomas, Catherine-Anne Miller

Cette présentation traitera du module sur le gliome du CUSM, un outil d’apprentissage en ligne qui utilise des graphiques multimédias particulièrement visuels et peu de texte afin de transmettre des informations complètes et efficaces aux patients que l’on a récemment diagnostiqué avec un gliome ainsi qu’à leurs familles. Cette démarche garantit que les patients et leurs familles sont informés, prêts pour les traitements et les procédures et capables de s’organiser à leur domicile, qu’ils savent quand appeler un(e) clinicien(ne), quand retourner à l’hôpital, et pourquoi l’adhésion aux programmes de soin est cruciale.

Le module s’appuie sur les pratiques optimales et touche le besoin des patients d’être informé, tout en respectant les besoins en termes de littératie de la santé et en reconnaissant le stress du diagnostic. Le module a été développé à l’aide des perspectives offertes par différentes disciplines et créé en collaboration avec le bureau de formation des patients. On peut facilement le mettre à jour en fonction des retours et des changements de pratiques. On peut aussi l’utiliser dans la formation des étudiants et des membres du personnel pour clarifier les connaissances dans de nouveaux domaines et pour souligner le fait que tous les cliniciens ont la responsabilité d’apprendre à enseigner.

Le module sur le gliome est disponible sur Internet. Grâce à la nature particulièrement visuelle de cet outil ainsi qu’aux intentions de traduire le peu de texte dans plusieurs langues, cette démarche pourrait être utilisée dans le reste du monde.
La création de « Road to you » (« Une route vers vous ») : Un groupe de soutien contre la SP mené par de jeunes adultes

Jennifer Doran, BSc.Inf., IACN(C), Pamela Ng, MSc., Stanley Ham, BSc., MSc., PhD (Candidate), Tristan Williams, Co-fondateur

Contexte : La nature imprévisible de la sclérose en plaques (SP) peut poser des obstacles aux buts que l’on s’était fixés au cours de sa vie. Des groupes de soutien peuvent aider à traiter des peurs ou des préoccupations, et toucher de façon positive ceux qui cherchent à communiquer avec d’autres personnes faisant face aux mêmes situations stressantes, comme le fait de vivre avec une SP.

But : Au sein du Programme contre la SP de l’Hôpital neurologique de Montréal, on a relevé un écart chez le groupe de soutien et de formation qui cible les jeunes populations atteintes de SP dans la région de Montréal. Road to you (TRY) a été créé en tant que groupe de soutien géré collectivement et dirigé à la fois par une personne atteinte de SP et par un(e) infirmier(-ière) clinicien(ne). Cette affiche décrit la création de TRY. Nous discuterons de l’évaluation des indicateurs de qualité visant à améliorer le programme.

Méthodes : Les participants ont été recrutés durant des visites cliniques et à la branche locale de la Société de la sclérose en plaques. Les critères d’inclusion des patients étaient l’âge (18-35) et la langue; aucune exclusion ne se fondait sur des handicaps. Les sessions comprennent des présentations données par des invités, des activités ainsi que des rencontres ouvertes pour les discussions en tête-à-tête. Une évaluation transversale des indicateurs de qualité sera effectuée.

Résultats : Depuis avril 2011, 57 membres (51 patients et 6 amis/membres de la famille) se sont joints au groupe. Ce dernier contient plus de femmes que d’hommes (2 pour 1). De plus amples informations démographiques et niveaux de handicap peuvent être obtenus.

Conclusion : Le développement de TRY fournit des informations utiles en ce qui concerne la formation de groupes gérés collectivement du même acabit.

Partnering with Patients to Transform Care at the Bedside

M. Frenette, J. Gauthier, R. Sanchez, M. Villamor, C. Bouchard, M. Stewart

Have you ever wondered how we, as nurses, can change the environment in which we work to better meet the needs of patients and families? Nursing research has proven that partnering with our patients and their families is key to more effective patient-centred care.

Transforming Care at the Bedside (TCAB), an innovative and dynamic project, was launched in 2010 at the McGill University Health Centre (MUHC). It was initiated in the U.S. by the Institute for Healthcare Improvement (IHI) and the Robert Wood Johnson Foundation (RWJF). The aim of TCAB is to empower frontline staff to become leaders in modifying the environment and the work processes that affect patient care, with an emphasis on engaging patients and families. Our neurosurgical unit was one of five pilot units.

Over two years the frontline staff, together with our patient representatives, collaborated closely to implement creative projects by means of diverse work processes. This new partnership through TCAB allowed us to open our eyes to patients’ perspectives, which, ultimately, helped us to improve interdisciplinary communication and to more effectively organize the environment.

This presentation will highlight the unit changes, as well as our experiences in creating and promoting the sustainability phase of TCAB in the neurosurgical setting.

Un partenariat avec les patients afin de transformer les soins de chevet

M. Frenette, J. Gauthier, R. Sanchez, M. Villamor, C. Bouchard, M. Stewart

Vous êtes-vous jamais demandé comment nous, infirmiers et infirmières, pouvons transformer notre milieu de travail afin de répondre plus efficacement aux besoins des patients et des familles? Les recherches en soins infirmiers ont démontré qu’un partenariat avec nos patients et leurs familles est un facteur-clé dans l’augmentation de soins efficaces prodigués aux patients.

Transforming Care at the Bedside (TCAB) (Transformer les soins de chevet) est un projet dynamique et innovateur qui a été lancé en 2010 au Centre universitaire de santé McGill (CUSM). Il a été mis sur pied aux États-Unis par l’Institut pour l’amélioration des soins de santé (Institute for Healthcare Improvement, ou IHI) et la Fondation Robert Wood Johnson (FRWJ). L’objectif de TCAB est de donner au personnel de première ligne le pouvoir d’agir afin de devenir des leaders en ce qui concerne les modifications du milieu et les méthodes de travail qui touchent les soins aux patients, tout en mettant l’accent sur l’engagement des patients et des familles. Notre unité de neurochirurgie était l’une des cinq unités pilotes.

Sur une période de deux ans, le personnel de première ligne et les représentants des patients ont étroitement collaboré afin de mettre en œuvre des projets créatifs à l’aide de diverses méthodes de travail. Cette nouvelle collaboration rendue possible par TCAB nous a permis d’ouvrir les yeux sur les perspectives des patients, ce qui nous a aidé à améliorer la communication interdisciplinaire et à organiser le milieu plus efficacement.

Cette présentation mettra l’accent sur les changements survenus dans l’unité, ainsi que sur nos expériences au cours de la création et de la promotion de la phase de durabilité de TCAB dans un contexte de neurochirurgie.

Nurse Champions: A Modified Program-Based Nursing Initiative

Raj Parmar, Deanna Latimer, Nicole McKenzie, Chester Ho, Jason Knox, Paul Wright, and the Nurse Champions Team

Nurses often look for innovative methods of delivering the best patient care in the most efficient way. Our neuro rehabilitation nurses saw an opportunity to improve patient outcomes and advance the nursing scope of practice. A team of nurses voluntarily initiated a LEAN-based approach to create a modified
Nurse Champions (infirmières[-ières] champions[-ionnes]) : Une démarche infirmière fondée sur un programme modifié

Raj Parmar, Deanna Latimer, Nicole McKenzie, Chester Ho, Jason Knox, Paul Wright et l'équipe des Nurse Champions

Les infirmières(-ières) recherchent souvent des façons nouvelles de prodiguer les meilleurs soins aux patients, et le plus efficacement possible. Nos infirmières(-ières) en neuro-rééducation ont remarqué une chance d'améliorer les résultats des patients et de faire progresser le cadre de pratique des soins infirmiers. Une équipe d'infirmières(-ières) a bénéficiellement débuté une démarche basée sur le concept LEAN afin de créer une structure de soins infirmiers fondée sur un programme modifié (modified program based nursing ou MPBN). Une démarche basée sur le concept LEAN est un processus qui comprend des activités telles qu’une analyse de l’écart, un affinage, de la priorisation et des essais. Le modèle MPBN est une combinaison de démarches de soins infirmiers d’équipe et primaires qui a pour but d’obtenir des meilleurs résultats chez les patients. On reconnaît comme champion(ne) un(e) infirmier(-ière) qui démontre un grand intérêt pour une population de patients en particulier, qui a la volonté de faire progresser ses connaissances dans un domaine en particulier tout en mettant en œuvre des pratiques de soins infirmiers fondées sur des faits afin de mobiliser ces connaissances au cours de la pratique. L’objectif du MPBN est de parfaire la traduction des connaissances, de faciliter la mise en œuvre des pratiques optimales, d’améliorer la confiance des patients dans les soins infirmiers, d’accroître la fierté dans le rôle d’infirmier(-ière) et d’aider à améliorer la communication interprofessionnelle et les pratiques collaboratives entre les autres membres d’équipes de fournisseurs de soins de santé. On endosse le rôle de champion lorsque l’on connaît les besoins en matière de soins aux patients et que l’on prend des décisions après s’être concerté avec le patient ou sa famille, les infirmier(-ières) ainsi que les autres membres d’autres équipes interdisciplinaires afin de maximiser l’implication du patient dans les résultats des soins.

Improving Oral Care to Reduce Hospital Acquired Pneumonia (HAP) in Acute, Non-Intubated, Neurologically Impaired Patients

Trudy Robertson, RN, MSN, CNN(C), Dulcie Carter, RSLP, MMedSci

Background: HAP is a common nosocomial infection and a significant cause of morbidity and mortality, leading to increased length of stay, increased costs, and decreased quality of life. The acute, care dependent, neurologically-impaired patient is susceptible to acquiring HAP due to an increased risk of oral colonization, decreased cognitive status, impaired swallowing and cough, immobility, and dependency on care. Current standards for oral care on medical/surgical and neurosurgical units are variable and research limited to critical care units.

Methods: The purpose of this study was to test the efficacy of an evidence-informed, oral care nursing protocol in reducing HAP events in this patient population on an acute neurosurgical unit outside of the critical care environment. This quasi-experimental, time series study compares retrospective and prospective data on HAP rates. An evidence-informed oral care protocol was defined and implemented in the prospective study period.

Results: This study demonstrated a statistically significant decrease in the rate of HAP (p = 0.039, Fishers Exact Test, 2-sided) in the experimental group receiving an enhanced oral care protocol (n = 32) when compared with the retrospective group who received standard care (n = 51).

Conclusions: This study demonstrated an enhanced oral care protocol was beneficial to improving oral hygiene, reducing incidences of HAP, averting pneumonia-related health care costs, and improving the overall health of care dependent neurosurgical patients. Nurses play a vital role in identifying vulnerable patients and implementing regular oral care regimes in the prevention of HAP. Nurses need to be aware of the connection between oral bacteria in precipitating HAP, and the importance of diligent oral care. Foundational practices such as regular oral hygiene remain important aspects of nursing care in preventing nosocomial infections, optimizing health, and promoting quality patient care.

L’amélioration des soins bucco-dentaires afin de réduire les pneumonies nosocomiales (PN) chez les patients non-intubés souffrant d’une déficience neurologique et hospitalisés dans une unité de soins de courte durée

Trudy Robertson, IA, MSc.inf., IACN(C), Dulcie Carter, RSLP, MSc.med

Contexte : La pneumonie nosocomiale est une infection commune et une cause importante de morbidité et de mortalité qui entraine des séjours plus longs, des coûts accrus et une qualité de vie moindre. Les patients souffrant de déficiences neurologiques et dépendant de soins à courte durée sont...
suscetibles de contracter une PN à cause de risques accrus de colonisation orale, d'états cognitifs aînés, de difficultés à avaler et à tousser, de leur immobilité, et de leur dépendance aux soins. Les normes de soins bucco-dentaires actuelles dans les unités médicales/chirurgicales et neurologiques varient, et les recherches sont limitées aux unités de soins intensifs.

Méthodes : L'objectif de cette étude était de tester l'efficacité d'un protocole de soins bucco-dentaires fondé sur des faits afin de réduire la fréquence des PN chez cette population de patients, hospitalisés dans une unité de soins neurologiques de courte durée située à l'extérieur d'un environnement de soins intensifs. Cette étude de séries chronologiques quasi-experimentale compare des données rétrospectives et prospectives sur les taux de PN. Un protocole de soins bucco-dentaires fondé sur des faits a été défini et mis en œuvre au cours de la période d'étude prospective.

Résultats : Cette étude a démontré une baisse statistique conséquente du taux de PN (p = 0,039, Test exact de Fishers, bilatéral) chez le groupe expérimental qui a bénéficié du protocole de soins bucco-dentaires amélioré (n=32) en comparaison avec le groupe rétrospectif qui a reçu des soins normaux (n=51).

Conclusions : Cette étude a démontré qu'un protocole de soins bucco-dentaires amélioré a contribué à parfaire l'hygiène bucco-dentaire, réduisant ainsi la fréquence des PN, évitant les coûts liés aux soins de santé contre la pneumonie, et améliorant la santé générale des patients en neurochirurgie qui dépendent de soins. Le personnel infirmier joue un rôle essentiel dans l'identification de patients vulnérables et la mise en œuvre de régimes de soins de santé bucco-dentaires réguliers afin d'empêcher les PN. Le personnel infirmier doit se montrer conscient de la relation entre les bactéries orales, qui provoquent des PN, et l'importance de soins bucco-dentaires assidus. Des pratiques fondamentales telles qu'une hygiène bucco-dentaire régulière constituent toujours un aspect important des soins infirmiers dans la prévention d'infections nosocomiales, optimisant ainsi la santé des patients et encourageant des soins de qualité à leur attention.

Acute Care to Rehabilitation: Striving for a Seamless Transition
Yuting Ding, Tamra Wright, Jemini Abraham, Arlene Vasconcelos

Stroke is the third leading cause of death in Canada and the leading cause for transfer to long-term care facilities. Timely access to stroke care and appropriate interventions are imperative for best possible clinical outcomes. Best Practice Guidelines (BPGs) provide up-to-date evidence-based recommendations for the management and prevention of stroke.

Evidence strongly suggests that a coordinated interprofessional team approach and care on a specialized, geographically defined stroke unit reduces post-stroke complications including death and disability, as well as improves patient outcomes. Interprofessional collaboration (IPC) accelerates early mobilization and earlier access to rehabilitation services.

The focus of this poster is to demonstrate to all health care providers the process flow of the patient’s journey while highlighting:
Démêler le Web pour nos patients et leurs familles

Suzanne Steenburgh, BSc.inf., MSc.inf., Naomi Evans, BSc.inf.

L’Internet est devenu la plus large bibliothèque médicale du monde, et les professionnels de la santé ne sont pas les seuls à avoir accès à ces informations. C’est un fait largement reconnu dans la documentation que la majorité des patients et des membres de leurs familles recourent à l’Internet afin d’obtenir des informations, de l’aide, et de se mettre en relation avec des gens en fonction de leurs besoins en soins de santé. Toutefois, ce moyen de communication possède ses avantages et ses défauts. Une enquête menée en 2010 sur les patients du programme de neuro-oncologie de l’Hôpital pour enfants malades de la Colombie-Britannique a clairement révélé que les familles désirent l’assistance des professionnels de la santé pour y naviguer à travers.

Cette affiche examinera les résultats de l’enquête, donnant ainsi un aperçu des pratiques actuelles et passées auxquelles recourent les familles, des attentes des familles envers leurs fournisseurs de soins de santé, et des outils pratiques qu’ils utilisent afin de s’attaquer à la tâche apparemment déconcertante de sensibilisation et de soutien de cette pratique. Nous partagerons les moyens que nous avons utilisés afin d’améliorer notre page web et les ressources dont on peut se servir afin de mieux répondre aux besoins et aux attentes de nos familles sans réinventer la roue. Bien que cet article se fonde essentiellement sur les soins pédiatriques, nos discussions peuvent aisément s’appliquer à d’autres domaines des soins de santé.

Promoting Excellence in Patient Care: Engaging the Neuroscience Nurse in the Coaching Process

Jacqueline Joy, RN, MN, Joanna Pierazzo, RN, PhD(c), Joseph Pasia, RN, BScN

A community hospital in Ontario implemented a number of approaches and care models to improve patient safety and the reliability of patient care. As a result of this initiative, a new nursing leadership role was created, known as Clinical Quality Care Leader (CQCL). The role provides mentorship and education at the bedside and role models teamwork, communication, autonomous clinical practice, clinical judgment, best practice for neuroscience patients, and standards of quality and safety.

To support the integration of this role, initial education occurred to introduce role expectations and responsibilities. The CQCLs have identified, post implementation, a need for further opportunity in role development, specific to enhancing leadership skill and competency. As a result, it was agreed a coaching program would be implemented to provide more specific tools and knowledge for these nurses to positively engage with their peers. The principles of this coaching program were adapted from exemplars in the literature and included the following content areas: leadership self-awareness, conflict management, collaboration techniques, communication competencies and enhanced skill in providing feedback.

The purpose of this presentation is to provide an overview of one neurosurgical unit’s experience in implementing a coaching program to strengthen nursing leadership and enhance excellence in neurosurgical patient care.

Encourager l’excellence dans les soins aux patients : impliquer les infirmiers(-ières) dans un processus d’accompagnement

Jacqueline Joy, IA, MSc.inf., Joanna Pierazzo, IA, PhD(c), Joseph Pasia, IA, BSc.inf.

Un hôpital communautaire ontarien a mis en œuvre plusieurs démarches et structures de soins afin d’améliorer la sécurité des patients et la fiabilité des soins qu’on leur prodigue. Il a résulté de cette démarche un nouveau rôle de leadership chez les infirmières et infirmiers, que l’on a nommé Clinical Quality Care Leader (leader pour la qualité des soins cliniques) ou CQCL. Ce rôle consiste à offrir des services de mentorat et de formation au chevet des patients ainsi qu’un travail d’équipe incluant des modèles, de la communication, des pratiques cliniques autonomes, des jugements cliniques, des pratiques optimales destinées aux patients en neurochirurgie et des normes de qualité et de sécurité.

Afin de soutenir l’intégration de ce rôle, une formation initiale a été faite afin d’en présenter les caractéristiques et les responsabilités. Suite à sa mise en œuvre, les CQCL ont identifié le besoin de créer de plus nombreuses occasions de développer ce rôle, particulièrement afin d’affiner les habiletés de leadership et les compétences. Par conséquent, il a été convenu qu’un programme d’accompagnement serait mis en œuvre afin de fournir aux infirmières et infirmiers des connaissances plus précis pour ces infirmiers(-ières) afin qu’ils/elles s’impliquent de façon positive avec leurs collègues. Les principes de ce programme d’accompagnement ont été créés à partir d’exemples que l’on a adaptés et traitent des points suivants : prise de conscience de son rôle de leader, gestion des conflits, techniques de collaboration, compétences en communication, et de meilleures capacités à fournir un retour.

Le but de cette présentation est de donner un aperçu de l’expérience d’une unité en neurochirurgie dans la mise en œuvre d’un programme d’accompagnement, créé afin de renforcer le leadership des infirmiers(-ières) et de encourager l’excellence dans les soins aux patients en neurochirurgie.

Dimensions of Uncertainty after Stroke from the Perspectives of the Stroke Survivor and Family Caregiver

Carole L. White, PhD, RN, Rosalinda Barrientos, BSN, Kelly Dunn, PhD, RN

Background: There has been limited examination of uncertainty after stroke. The effects of stroke extend beyond the stroke survivor to impact on the family and, thus, an exploration of uncertainty with the stroke survivor/caregiver dyad is important to gain a fuller understanding.

Methods: Stroke survivors and their family caregivers (n=33) participated in eight focus groups. Transcripts from the focus
groups were examined for recurrent themes using content analysis. Mishel’s theory of uncertainty was used as a framework to classify the themes.

Results: Participants reported: i) uncertainty about future events, in particular recurrent stroke; ii) uncertainty about signs and symptoms of stroke; iii) uncertainty about stroke risk factor management; and iv) uncertainty about resources for poststroke care. The uncertainty was brought on by the lack of predictability of these future events, lack of information, and the complexity of poststroke care and corresponded to Mishel’s four key factors of ambiguity, complexity, deficient information, and unpredictability.

Conclusions: The fear of recurrent stroke may represent a window of opportunity to work actively with stroke survivors in managing their risk factors. Although certain aspects of uncertainty after stroke cannot be eliminated, we can assist stroke survivors and caregivers in reframing their responses to uncertainty.

L’étendue des incertitudes à la suite d’un AVC, de la perspective des survivants à un AVC et des soignants familiaux

Carole L. White, PhD, IA, Rosalinda Barrientos, BSc.inf., Kelly Dunn, PhD, IA

Contexte: On s’est peu penché sur les incertitudes qui surviennent à la suite d’un AVC. Les effets d’un AVC ont des ramifications qui vont au-delà du survivant à un AVC et qui touchent la famille. C’est pourquoi il est important d’examiner les incertitudes des survivants à un AVC et de leurs soignants afin de bien comprendre la situation.

Méthodes: Les survivants à un AVC et leurs soignants familiaux (n=33) ont pris part à 8 groupes de discussion. Les transcriptions ont été examinées à l’aide d’une analyse du contenu afin d’y découvrir des thèmes récurrents. La théorie de l’incertitude de Mishel constituait le cadre de classification des thèmes.

Résultats: Les participants ont déclaré ressentir: i) une incertitude au sujet des événements futurs, en particulier au sujet des AVC récurrents; ii) une incertitude au sujet des signes et des symptômes d’un AVC; iii) une incertitude au sujet de la gestion des facteurs de risques de l’AVC; et iv) une incertitude au sujet des ressources pour des soins post-AVC. L’incertitude est provoquée par le manque de prévisibilité de ces événements futurs, le manque d’informations ainsi que la complexité des soins post-AVC. Elle correspondait aux quatre facteurs-clé de Mishel : l’ambigüité, la complexité, des données lacunaires et l’imprévisibilité.

Conclusions: La peur d’un AVC récurrent peut représenter une occasion de travailler activement avec les survivants à un AVC afin de gérer leurs facteurs de risque. Bien que certains aspects de cette incertitude post-AVC ne puissent pas être éliminés, nous pouvons aider les survivants à un AVC et leurs soignants à redéfinir leurs réponses à l’incertitude.

Marlene Reimer Research Award guidelines

1. Research funds will be allocated yearly based on number of requests.
2. Application deadline is November 30 each year.
3. Award is to be a base amount of $2,000 plus monetary value equal to funds raised by the Run for Research in the prior year; determined annually at midyear by the BOD.
4. Fundable projects will focus directly on neuroscience patient care issues.
5. Projects will focus on issues within the scope of nursing practice in Canada.
6. The primary investigator must be a nurse and an active member of CANN in the preceding year.
7. A letter of request plus the proposal shall be sent to the chairperson of the research committee (may be sent electronically).
8. An additional two copies of the proposal will be mailed electronically to the research chairperson; one copy includes identifying information (research team members, health care setting) and the second copy does not include this information.
9. A letter of support from management/clinical or academic supervisor describing the contribution of this neuroscience nursing research study proposal should accompany the application.
10. The research proposal shall include the following:
   • Title of project
   • Names and qualifications of the principal and co-investigators
   • Purpose of the project
   • Methodology (including study design, sample, procedures and data analysis plan)
   • Budget and timeframe
   • Amount of money requested from CANN
11. The proposed budget should include the following headings:
   • Personnel services
   • Supplies
   • Services
   • Travel
   • Equipment
12. Proposal should also include details about other funding sources, including those confirmed and those pending.
13. The Research Committee will review proposals and notify the Board of Directors on decisions about funding awards:
   i. The award will be given to the recipient at the time the decision is made and official recognition will be given at the annual meeting luncheon.
   ii. Following successful nomination for the award and prior to receiving funds, ethics approval must be sought, if applicable, and documentation provided.
   iii. Those who receive funding shall provide progress reports to the Research Committee upon request.
   iv. The deadline for applications for research funds will be November 30 each year and will be published in CJNN.
   v. Researchers are expected to publish their results in CJNN and present them at the Annual Meeting.
   vi. Researchers must submit a report of their research to the Research Committee.
Tailored interventions to improve hypertension management after stroke or TIA—Phase II (TIMS II)

Gail MacKenzie, MScN, RN, Sandra Ireland, PhD, RN, Stacey Moore, MN, RN(EC), Irene Heinz, MN, RN(EC), Rosemary Johnson, BScN, RN, CDE, W. Oczkowski, MD, FRCP(C), D. Sahlas, MSc, MD, FRCP(C)

Abstract

**Background:** Reduction of blood pressure (BP) after stroke or TIA decreases stroke recurrence and is a major goal of Secondary Stroke Prevention Clinics (SPCs). Health care providers need effective screening processes to identify those clients at highest risk of not achieving BP targets and those clients at highest risk of non-adherence to medication.

**Methods:** This multicentred, randomized controlled study used a screening process to identify SPC patients with psychosocial/cognitive deficits (e.g., lack of confidence in the utility of medications, poor memory, mild cognitive impairment) who were experiencing difficulty managing their BP to target values and evaluated whether a model of nurse-led case management program (monthly telephone calls, motivational interviewing for lifestyle change, plus home BP monitoring and use of dosettes for medication administration) would improve BP measures and adherence to medications.

**Results:** Both intervention (n=29) and usual care groups (n=27) showed a trend for reduced BP at six months (Median q1–q3, Systolic BP, p=0.46; Diastolic BP, p=0.37). Diabetic patients, irrespective of the group to which they were randomized, were less likely to meet Best Practice Guideline targets than those without diabetes (Chi Square test, p=0.0001).

**Conclusion:** Stroke and TIA patients with diabetes may require additional resources and support in order to reach BP target values.

**Key words:** stroke, transient ischemic attack, prevention, hypertension, nurse case management, self-efficacy, adherence

Introduction

Hypertension is the most important modifiable risk factor for primary prevention of both ischemic and hemorrhagic stroke (O’Donnell et al., 2010). Moreover, reducing blood pressure (BP) after stroke or Transient Ischemic Attack (TIA) decreases stroke recurrence (Friday, Alter & Lai, 2002). A meta-analysis of 61 studies and more than one million participants with an average of 12-year follow-up showed that each 2 mmHg reduction in systolic BP was associated with a 10% reduction in mortality from stroke (Lewington et al., 2002). Therefore, a major goal of secondary Stroke Prevention Clinics (SPCs) is to treat client blood pressures to achieve best practice guideline targets (Canadian Stroke Strategy, 2010). Antihypertensive medication therapy and modifying lifestyle factors, such as limiting dietary sodium, increasing physical activity, and reducing weight, work synergistically to lower BP and prevent stroke.
Adherence to prescribed medications to lower BP is reported to be less than 50% in the general population (Haynes et al., 2005). Studies of adherence reveal difficulties in continuation of prescribed medications. In the AVAIL study (Bushnell et al., 2011), as many as one-third of patients with ischemic stroke or TIA discontinued one or more secondary prevention medications within one year of discharge from hospitals in the United States. Haynes et al. (2005) recommended a combination of interventions to improve adherence: simplification of medication dosing regimens, adherence counselling, providing memory cues, home self-monitoring devices, and nurse-led supportive follow-up care. Health care providers need effective screening processes to identify those clients at highest risk of non-achieving blood pressure targets and non-adherence to medication since high client volumes coupled with limited health provider resources prohibit intensive follow-up monitoring and counselling for all stroke and TIA clients attending SPCs.

As cognitive losses associated with vascular and other dementias are both precursors to, and outcomes of stroke (Ballard, et al. 2003; Barba et al., 2002), problems with memory and understanding purposes of medication therapy may negatively impact medication adherence. Focusing prevention resources on outpatients at highest risk of non-achievement of BP management targets and medication continuance has the potential to assist with allocating scarce SPC behavioural modification resources to those with the poorest risk factor control. The design of this current study is based on two previous studies that identified predictors of achievement of BP targets such as psycho-social deficits that have been linked to non-adherence (Ireland, Arthur, et al., 2010), and a prospective, cohort study, which established the feasibility and preliminary effectiveness of an interprofessional case management model in reducing BP—TIMS (Ireland, MacKenzie, et al., 2010).

Concepts from self-efficacy and self-managed care theories supplied the framework for TIMS and TIMS II (Bandura, 1998; McGowan, 2005). Self-efficacy is described as “a person's belief in his or her ability to carry out and succeed with a specific task” (Miller & Rollnick, 2002, p. 40); or, in other words, the confidence that a person has in the ability to change their behaviour and achieve goals. In this study, medication self-efficacy refers to a person’s perception that taking medications can help prevent stroke recurrence. Motivational Interviewing is an approach that facilitates self-management by helping the person identify discrepancies between beliefs and actions, and plan health care goals (Rollnick & Miller, 1995). Successful experiences, learning by observing others, physiological feedback, and verbal persuasion (e.g., praise for a behaviour) may promote behavioural change (Bandura, 1998). Home BP monitoring was viewed as an intervention that could provide objective feedback on achievement of BP targets and promote participant perceptions of success. Higher self-efficacy ratings have predicted improved self-management of risk factors and been associated with improved outcomes in cardiovascular and other older adult populations (DeBusk et al., 1994; Houston Miller, Warren & Myers, 1996).

The objectives of this multicentred, randomized controlled study were thus, to: 1) use a screening process to identify SPC patients with psychosocial/cognitive deficits (such as, lack of confidence in the utility of medications, poor memory and problem solving ability) placing them at risk for difficulty managing their BP to target values, and 2) to evaluate whether a model of nurse-led case management (i.e., monthly telephone calls, motivational interviewing for lifestyle change, plus home BP monitoring and use of dosettes for medication administration) would improve BP management and adherence to medications.

Research questions
Primary outcome:
Does a cluster of nurse case management interventions result in lowered BP (≥ 6 mmHg systolic) between baseline and six-month follow-up?

Secondary outcomes:
1. Is there a change in self-reported confidence in medications preventing stroke (self-efficacy scores) between baseline and six-month follow-up?
2. Is there a change in self-reported adherence to medication between baseline and six-month follow-up?
3. Is there a change in community pharmacist reported compliance with medication prescription refill times between baseline and six-month follow-up?

Methods
This randomized controlled trial was conducted at four urban SPCs in southern Ontario from April 2010 to October 2011. The four participating sites comprised two nurse practitioner (NP)-led clinics and two clinical nurse specialist (CNS)-led clinics. The NPs and CNSs had prior education related to Motivational Interviewing and acted as the case managers for the intervention groups. In addition, the principal investigator, a CNS in one SPC, developed sample Motivational Interviewing scripts to assist case managers in applying a consistent approach to the monthly follow-up calls. Five investigator team meetings were held to facilitate consistency in recruitment and follow-up processes. Study approval was received from the research ethics boards of each of the four sites. Clients with hypertension and probable TIA or confirmed stroke (as diagnosed by a stroke prevention clinic physician) in addition to deficits in cognition (defined as MoCA score below 26), or less than 100% medication self-efficacy, and/or any self-reported non-adherence to medication were recruited after informed consent was provided. Based on the pilot TIMS study blood pressure results (Ireland, MacKenzie, et al., 2010), a minimum sample size of 54 was calculated as necessary to detect a minimum of 6 mmHg systolic BP difference (SD 7.8) (α = 0.05, β = 0.8). A six-month follow-up period was selected because a six- to 12-month follow-up period was commonly reported in the literature, and six months allowed the four sites to complete the study within the timeframe identified in the grant application.

Participant selection and randomization
Participants older than 18 years of age and with a diagnosis of probable TIA or confirmed stroke, as determined by a stroke specialist, and evidence of uncontrolled hypertension, as measured by a BPTtru automated blood pressure machine at first SPC visit, were screened for inclusion criteria related to cognitive deficits, Montreal Cognitive Assessment (MoCA; Nasreddine et al., 2005) score less than 26, medication self-efficacy rating less than
100%, and/or any self-report of missed pills. Exclusion criteria included inability to speak or read English, living in a retirement or nursing facility where caregivers administered medications, and inability to provide informed consent. A centralized telephone randomization system was initiated with the assistance of the David Braley Research Institute* that developed random blocking tables to provide even distribution of intervention and usual care subject assignment at each of the four sites. Staff at the research institute kept a quality control log of site phone calls from the authorized study coordinators, identified participant numbers, and monitored data at midpoint and final phases of the study to determine if any irregularities in allocation occurred.*

*The David Braley Institute is a Cardiac, Vascular and Stroke research institute opened in 2010. It is located at the Hamilton General Hospital, Hamilton Health Sciences, and is an academic partner of McMaster University in Hamilton, ON.

Screening and outcome measures

Cognitive function: A MoCA test was administered to potential participants by neurologists or nurses. Scores ≥ 26 were considered normal. If a person reported an education level of less than 12 years, then one point was added to the score (Nasreddine et al., 2005).

Blood pressure: BP measurements were obtained using BPTru automated equipment. The first measurement was discarded, following which an average of the next five measurements taken at one-minute intervals was calculated to obtain the baseline and six-month follow-up visit BP values. The BPTru average better predicts 24 Ambulatory Blood Pressure Monitoring, the gold standard for hypertension determination, than does the average of the BP pressures recorded on patient charts from recent clinic visits (Beckett & Godwin, 2005). Hypertension was defined as BPTru reading > 140/90 mmHg or > 130/80 mmHg if the person had Diabetes or Chronic Renal Insufficiency (Canadian Stroke Strategy, 2010).

Medication self-efficacy was based on the participant rating on a seven-point Likert scale in response to the researcher designed standardized question used in two previous studies (Ireland, Arthur, et al., 2010; Ireland, MacKenzie, et al., 2010): “How confident are you that taking medications will prevent another stroke or TIA? Rate your level of confidence using the following scale: 1 represents having no confidence at all, and 7 represents having high confidence.”

Medication adherence was measured by two methods:

Self-report of number of missed pills in response to the question: “Most people have trouble remembering to take their pills all of the time. In an average week, how many pills would you miss for one reason or another?” (Craig, 1985) and

Community pharmacist review of participant prescription renewal patterns. Pharmacists were asked: “Based on a review of the participant’s past six-month prescription renewal pattern for the following three medications, please provide your opinion on whether he/she has been compliant with medication prescription renewals 80% or more of the time”—yes or no response required. 20% flexibility allowed for individual variance in medication renewal rates. Percentage compliance for one to three medications was calculated.

Recurrence of probable TIA or stroke was based on SPC and hospital re-admission documentation.

Participants in the intervention group received stroke physician specialist assessment, treatment of hypertension with simplification of medication regimens where indicated, medication adherence counselling, home BP monitoring equipment, medication dosettes, and a minimum of monthly telephone follow-up by advanced practice nurses using motivational interviewing techniques to promote risk factor reduction over a period of six months. These interventions are based on best practices (Canadian Stroke Strategy, 2010; Haynes et al., 2005). The usual care control group received stroke physician specialist assessment, initiation and titration of BP medication, adherence and risk factor counselling at clinic visits and follow-up by family physicians. The usual care group also had “as needed access” to SPC services upon their request or a referral from their family physician during the study period. Community pharmacists were contacted via fax to request their comments on prescription renewal patterns in the prior six months.

Six months following recruitment, research assistants at each site visited the participants either at their home or at the clinic to measure post intervention BP using BPTru automated equipment, self-efficacy and self-reported adherence. Participants were questioned about hospitalizations for recurrence of stroke symptoms and health records were reviewed for re-admission for probable TIA or stroke during the six months of follow-up. Community pharmacists were contacted via fax again to obtain comment on the participants’ prescription renewal pattern for the prior six-month period.

Sample size was calculated to determine a reduction in BP of equal to or greater than 6 mmHg (SD 7.8 mmHg) (α = 0.05; β = 0.8) based on results from the pilot TIMS study, which achieved mean systolic BP changes from 150 SD 8.9 mmHg (baseline) to 134 SD 7.8 mmHg at six-month follow-up. Data were analyzed using SAS 9.1 Version, Unix environment.

Participant confidentiality was maintained through use of code numbers only on all study documents. Only anonymized study record forms were faxed to the principal investigator for compilation of a central database and subsequent analysis. Nurse case management was directed to supportive care to enhance adherence to treatment and complement, not replace, family practitioner care. Family physicians were notified of any outstanding concerns.

Results

Fifty-six clients who met the study inclusion criteria were recruited from the SPC populations of the four urban SPCs. All 56 participants completed the study. Two intervention participants (included in the sample for analysis) had recurrent stroke events requiring emergency department care or hospital admission. No usual care participants required emergency care or hospitalization. Comparisons of the participant samples at the four sites showed similar demographics (see Table 1). However, more participants in the usual care group had MoCA scores < 26 compared to the intervention group (n=23 versus n=16, or 85.2% vs. 55.2%, p=0.01). Mean MoCA scores were similar

continued on page 32...
Table 1: Sample demographics

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<th></th>
<th>Overall</th>
<th>Oshawa LH</th>
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<th>Barrie RVH</th>
<th>Hamilton SJHH</th>
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<td>5</td>
<td>17</td>
<td>5</td>
<td>2</td>
<td>0.59</td>
</tr>
<tr>
<td>Intervention</td>
<td>29</td>
<td>7</td>
<td>14</td>
<td>7</td>
<td>1</td>
<td>0.33</td>
</tr>
</tbody>
</table>

Table 2: Baseline cognition and adherence

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>Oshawa – LH</th>
<th>Hamilton HGH</th>
<th>Barrie – RVH</th>
<th>Hamilton SJHH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=56</td>
<td>N=14</td>
<td>N=26</td>
<td>N=13</td>
<td>N=3</td>
</tr>
<tr>
<td>MoCA Score</td>
<td>23.3</td>
<td>23.6</td>
<td>22.2</td>
<td>25.1</td>
<td>24.7</td>
</tr>
</tbody>
</table>

Table 3: Change in BP between baseline and six-month follow-up

<table>
<thead>
<tr>
<th></th>
<th>Overall=56</th>
<th>Intervention=29</th>
<th>Usual care=27</th>
<th>t test P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
<td>Mean(SD)</td>
<td>Median(q1–q3)</td>
<td>Mean(SD)</td>
<td></td>
</tr>
<tr>
<td>Baseline SBP</td>
<td>157.1(15.1)</td>
<td>154.0 (145.0–166.5)</td>
<td>154.0 (144.0–168.0)</td>
<td>0.8812</td>
</tr>
<tr>
<td>Followup SBP</td>
<td>152.7(116.3)</td>
<td>136.5 (125.5–146.0)</td>
<td>135.0 (125.0–143.0)</td>
<td>0.4573</td>
</tr>
<tr>
<td>Decrease in SBP (mmHg)</td>
<td>4.4 (119.1)</td>
<td>13.0 (3.0–35.0)</td>
<td>-7.2 (165.0)</td>
<td>0.4565</td>
</tr>
<tr>
<td>Baseline DBP</td>
<td>85.3(12.0)</td>
<td>85.5 (76.0–92.5)</td>
<td>84.7 (13.4)</td>
<td>0.7117</td>
</tr>
<tr>
<td>Followup DBP</td>
<td>92.9(123.7)</td>
<td>77.0 (68.0–84.0)</td>
<td>76.0 (68.0–84.0)</td>
<td>0.3844</td>
</tr>
<tr>
<td>Decrease in DBP (mmHg)</td>
<td>-7.6 (123.8)</td>
<td>7.5 (0.0–17.0)</td>
<td>-22.2 (171.8)</td>
<td>0.3651</td>
</tr>
</tbody>
</table>
Table 4: Met best practice guideline BP targets at six-month follow-up

<table>
<thead>
<tr>
<th>Overall N</th>
<th>%</th>
<th>INTERVENTION</th>
<th>%</th>
<th>USUAL CARE</th>
<th>%</th>
<th>P Chi Square test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met BPG targets</td>
<td>27/56</td>
<td>48.2</td>
<td>17/29</td>
<td>58.6</td>
<td>10/27</td>
<td>37.0</td>
</tr>
</tbody>
</table>

*trend to INT group meeting BPG targets, but not significant

Table 5: Effect of diabetes on meeting best practice guideline BP targets at six months follow-up

<table>
<thead>
<tr>
<th>Overall N</th>
<th>%</th>
<th>Without diabetes</th>
<th>%</th>
<th>With diabetes</th>
<th>%</th>
<th>P Chi Square test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met BPG Targets</td>
<td>27/56</td>
<td>48.2</td>
<td>25/38</td>
<td>65.8</td>
<td>2/18</td>
<td>11.1</td>
</tr>
</tbody>
</table>

Relative Risk analysis = 0.17 (11.1/65.8 = 0.17) (RR CI 95%, p=0.016) also showed those without DM significantly more likely to meet BPG BP targets than those with DM

Table 6: Secondary outcomes

<table>
<thead>
<tr>
<th>Variables</th>
<th>Overall=56</th>
<th>INT=29</th>
<th>UC=27</th>
<th>t test</th>
<th>Non-parametric p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (SD)</td>
<td>Median (q1–q3)</td>
<td>Mean (SD)</td>
<td>Median (q1–q3)</td>
<td>Mean (SD)</td>
<td>Median (q1–q3)</td>
</tr>
<tr>
<td>Baseline Self-Efficacy</td>
<td>5.4 (1.3)</td>
<td>6.0 (4.0–6.0)</td>
<td>5.3 (1.1)</td>
<td>5.0 (4.0–6.0)</td>
<td>5.5 (1.6)</td>
</tr>
<tr>
<td>Follow-up Self-Efficacy</td>
<td>76.7 (258.1)</td>
<td>6.0 (5.0–7.0)</td>
<td>40.1 (184.4)</td>
<td>6.0 (5.0–7.0)</td>
<td>116.0 (318.1)</td>
</tr>
<tr>
<td>Change in Self-Efficacy</td>
<td>-71.3 (258.0)</td>
<td>0.0 (-1.0–0.0)</td>
<td>-34.8 (184.7)</td>
<td>0.0 (-1.0–0.0)</td>
<td>-110.5 (317.8)</td>
</tr>
<tr>
<td>Baseline % Adherence</td>
<td>99.9 (136.8)</td>
<td>100.0 (66.0–100.0)</td>
<td>80.5 (35.0)</td>
<td>100.0 (66.0–100.0)</td>
<td>119.3 (190.4)</td>
</tr>
<tr>
<td>Follow-up % Adherence</td>
<td>104.4 (135.6)</td>
<td>100.0 (100–100)</td>
<td>125.6 (188.4)</td>
<td>100.0 (100–100)</td>
<td>83.3 (34.1)</td>
</tr>
<tr>
<td>Change in % Adherence</td>
<td>-4.5 (194.2)</td>
<td>0.0 (-34.0–0.0)</td>
<td>-45.1 (185.4)</td>
<td>0.0 (-34.0–0.0)</td>
<td>36.0 (198.2)</td>
</tr>
<tr>
<td>Baseline # Missed Pills</td>
<td>0.6 (1.2)</td>
<td>0.0 (0–1.0)</td>
<td>0.5 (0.9)</td>
<td>0.0 (0–1.0)</td>
<td>0.7 (1.5)</td>
</tr>
<tr>
<td>Follow-up # Missed Pills</td>
<td>36.0 (187.0)</td>
<td>0.0 (0–0)</td>
<td>34.5 (185.5)</td>
<td>0.0 (0–0)</td>
<td>37.6 (192.1)</td>
</tr>
<tr>
<td>Change in # Missed Pills</td>
<td>-35.4 (187.1)</td>
<td>0.0 (0.0–0.5)</td>
<td>-34.0 (185.6)</td>
<td>0.0 (0.0–1.0)</td>
<td>-36.9 (192.3)</td>
</tr>
</tbody>
</table>

Table 7: Correlation between self-reported adherence to medication and pharmacist report

<table>
<thead>
<tr>
<th>Variable 1</th>
<th>Variable 2</th>
<th>Pearson correlation</th>
<th>Sample size</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacist report at baseline</td>
<td>Self-reported adherence to medications/missed pills at baseline</td>
<td>-0.19</td>
<td>48</td>
<td>0.20</td>
</tr>
<tr>
<td>Pharmacist report at follow-up</td>
<td>Self-reported adherence to medications/missed pills at follow-up</td>
<td>0.69</td>
<td>56</td>
<td>&lt;0.0001</td>
</tr>
</tbody>
</table>
across sites (see Table 2). More participants were diagnosed with stroke than TIA although typically clients attending SPCs have only mild to moderate stroke disease. There was a predominance of males in the sample (M=67.9%) and the majority of participants lived with someone who may have provided cues to participants for medication adherence (only 21% lived alone).

T-test analysis demonstrated that participants in both groups had lowered BP at six-month follow-up when comparing median (q1–q3) measures for systolic and diastolic pressures although the difference was not significant between groups (SBP, p=0.46; DBP, p=0.37) (see Table 3). There was an overall trend for the intervention group (58.6%) to meet best practice BP guideline targets more often than usual care group participants (37.0%), but the difference was likewise not significant (see Table 4). However, those participants with diabetes melitus were less likely to meet best practice guideline targets than those without diabetes (Chi Square test, p=0.0001) (see Table 5). Relative risk analysis confirmed the result (RR. p=0.016/ Odds Ratio p=0.0001). Overall, 48.2% participants (n=27) met BP targets, 58.6% of the intervention group (n=17) and 37% of the usual care group (n=10).

The intervention and usual care groups did not differ at the six-month follow-up in medication self-efficacy scores (p=0.28, t test; p=0.78 Wilcoxon rank test), self-reported number of any missed pills (p=0.95, t test; p=0.2 Wilcoxon rank test), or percentage adherence to pills, as reported by community pharmacists (p=0.1, t test; p=0.36 Wilcoxon rank test) (see Table 6). Medication compliance showed a strong correlation (p<0.0001) at six-month follow-up between pharmacist reported rate of compliance and participant self-reported adherence/missed pills (see Table 7). Anecdotally, participants in both groups reported multiple positive lifestyle changes at six months, such as, quitting smoking, increasing activity, checking BP frequently, reducing sodium intake and reading food labels. Participants (n=10) in the intervention group reported experiencing health and personal stressors during the monthly follow-up contacts (for example, death of a spouse, depression, cancer recurrence, surgery, new heart arrhythmias, and stress caring for an ill family member), which may have negatively impacted on hypertension management and medication adherence.

Discussion

In this study, both the intervention and usual care groups had reduced BP following conventional or enhanced SPC care. Results from recent studies about the effectiveness of case management and telephone follow-up approaches in lowering BP for stroke populations have been contradictory and inconclusive. The Tailored Interventions to Improve Management in Stroke or TIA (TIMS study) was a pilot study conducted at one urban SPC in which selected participants with uncontrolled BP, plus evidence of cognitive deficits defined as MoCA scores below 26, medication self-efficacy scores less than 100%, or any self-report of missed pills were examined (Ireland, MacKenzie, et al., 2010). Outcomes at six months suggested that a cluster of nurse-led interventions tailored to support self-management, and promote medication adherence and lifestyle changes had the potential to reduce BP significantly in this population of SPC clients diagnosed with mild stroke or TIA. A mean reduction in systolic BP of 16.75 mmHg (p=0.000), and in diastolic blood pressure of 5.025 mmHg (p=0.004) was observed in the pilot TIMS study (Ireland, MacKenzie, et al., 2010). Results further indicated that telephone follow-up did not require major nursing time commitments (Ireland, MacKenzie, et al., 2010). The large Hypertension Intervention Nurse Telemedicine Study (HINTS) followed 591 participants randomized to 1) nurse administered behavioural management, or 2) nurse and physician administered medication management, or 3) a combination of both 1 and 2, or 4) usual care similarly showed a trend toward lower BP at six months in both the behaviour management and medication management groups. Home blood pressure values transmitted via tele-monitoring devices demonstrated significantly improved BP control at 12 months for the behavioural management group and medication management group at 12.8% (95% CI, 1.6% to 24.1%; p=0.03) and 12.5% (95% CI, 1.3% to 23.6%; p=0.03) respectively. However, this finding was not sustained at 18 months (Bosworth et al., 2011). Our study likewise showed a trend toward lower BP at six months for the intervention group for whom case managers provided education and counselling, monitored home BP measurements and adjusted medications, as needed.

Wakefield et al. (2011) studied a group of 302 patients randomly assigned to three treatment arms: high-intensity group (daily BP measurements transmitted to nurses who used a treatment management algorithm based on best practices), a low-intensity group (who measured BP daily and reported on medication taking daily); and a usual care group, interventions similar to this study. These investigators also found a home tele-health device and nurse case management over six months significantly improved BP (p=0.001) in the high-intensity group and approached significance in the low-intensity group. A prospective, observational study conducted in Alberta that followed 112 clients recruited from a SPC for one year post stroke or TIA demonstrated a 20% improvement in hypertension (p=0.001) and lipid management (p=0.001) (Mouradian et al., 2002). In a systematic review and meta-analysis of 11 studies comparing nursing interventions to manage hypertension in patients with diabetes with usual doctor-led care, Clark (2011) concluded there was some evidence for improved BP outcomes with nurse-led interventions when an algorithm for treatment or nurse prescribing of antihypertensive therapy was implemented. In contrast, a randomized controlled trial in 56 hypertensive patients with stroke or TIA from a neurovascular clinic or discharged from a stroke unit (Adie & James, 2010) demonstrated that telephone follow-up alone was insufficient to achieve significant lowering of BP. Likewise, a randomized, controlled study of 349 patients with stroke or TIA assigned to four home visits by nurses for lifestyle counselling and BP checks compared to usual care failed to demonstrate reduction in hypertension at one year (Hommes, Larsen & Boysen, 2011). The authors suggested that telephone support and counselling may not be sufficient to significantly lower BP if there is not aggressive pharmacological treatment to targets by family physicians or other health care providers.
In the TIMS II study we did not measure or control for stress. Real life stressors (such as, cancer recurrence) may have negatively influenced medication adherence and BP management. Lack of significant differences between baseline and six-month follow-up may also be due to an inadequate sample size for determining smaller but significant changes in systolic and diastolic BP. Variation in case management practice, physician training, or BP treatment protocols were not measured.

In this study, more study participants had diabetes mellitus (32.1%) as a risk factor than the general SPC population (approximately, 20% identified in the SPIRIT database, Hamilton Health Sciences—L. Gould, personal communication, 2010). The participants with diabetes may represent a subgroup of SPC clients with very difficult-to-control hypertension and, thus, the condition of diabetes may be a red flag criterion to the SPC health care team that the client requires more intensive monitoring and follow-up to red BP to targets. Metabolic abnormalities that are often present in diabetic hypertensive clients (for example, elevated lipoproteins, insulin resistance, insulin-like growth factor-1) accelerate atherosclerosis (Grossman & Messerli, 2008, pp. 85–86). The more insulin resistant the individual, the more likely he or she will be to retain salt and water, with volume expansion and changes in atrial natriuretic peptide (ANP), plasma renin activity, and a decrease in aldosterone concentration (Reaven, 2011).

Medication self-efficacy and report of any missed pills between the groups were not significantly different at six-month follow-up. The AVAIL study (Bushnell et al., 2011) identified predictors of medication persistence at one-year follow-up: fewer medications prescribed at discharge, having an adequate income, having an appointment with a primary care provider, and greater understanding of why medications were prescribed and their side effects. Using a dosette or other tool to track medications was associated with better persistence and adherence. The current study did not control for dosette usage or number of medications. Some participants from the usual care group identified at baseline indicated they used dosettes. One unique finding was that community pharmacist evaluation of prescription renewal patterns correlated significantly with participant self-report of missed medications at six-month follow-up. Pharmacist comment on patient compliance with prescription renewals may be a useful corroborating mechanism for medication adherence in future studies.

The sample size was calculated to identify a > 6 mmHg change in BP, but may have been inadequate to identify smaller but significant changes in systolic or diastolic BP. Only three participants were recruited at one site because of loss of a study coordinator soon after the study began. Nevertheless, the target sample size of 54 or more was reached. A six-month follow-up period may have been too short to detect significant differences between baseline and follow-up, or to allow participants to develop sustainable behaviour change. To improve the statistical power of the study, a design using serial BP measures (for example, at two, four, and six months) may have shown significant differences between groups. The study was based on the assumption that medical management of BP would adhere to best practice guidelines (Canadian Stroke Strategy, 2010). The study design examined the effect of a cluster of interventions, and did not permit analysis of the effectiveness of one intervention (that is, telephone counselling versus home BP monitoring versus use of dosettes).

The lack of significant findings related to the impact of expanded follow-up and behavioural counselling on improving BP management in this study may reflect improvements in overall hypertension management for clients attending SPCs and neurovascular clinics. A 2011 report from the Registry of the Canadian Stroke Network for Ontario Stroke Centres found a 26% reduction in one-year mortality (HR, 0.74; 95% CI, 0.65–0.84) for patients with TIA or ischemic stroke seen at an SPC (n=16,468) (Webster et al., 2011). It is possible that as the Ontario Stroke System has developed over the past 12 years, increased family practitioner knowledge of stroke, hypertension treatment goals and strategies have improved so that there is better community management of hypertension for patients at risk for stroke.

**Implications for research and practice**

Several implications for clinical practice emerged from the data. The interventions implemented at the SPC study sites appear to have been successful in reducing BP for participants without diabetes, as 65.8% met BP target values. Overall 48.2% of participants met BP target values. These results suggest the effectiveness of BP management may be increased for clients with diabetes by providing additional support and resources. This support might include more frequent monitoring and adjustment of BP medications, and longer follow-up in order for their BP measurements to reach best practice guideline targets. Future research with a larger sample size, serial BP measurements, and longer term follow-up to determine whether BP reduction is sustained is recommended. Implementation of a treatment algorithm or nurse prescribing of antihypertensive therapy may have facilitated consistency in treatment for the intervention group and resulted in more aggressive BP lowering. Community pharmacist report of compliance correlated well with self-report and may be a valuable tool for future research and clinical practice as a measure of medication adherence.

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References

Adie, K., & James, M.A. (2010). Does telephone follow-up improve blood pressure after minor stroke or TIA? Age and Ageing, 39, 598–603.


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1. The Canadian Journal of Neuroscience Nursing (CJNN) is a peer-reviewed journal.


3. Papers must be word processed and submitted in Word format. A hard copy and disk may be sent by mail or the paper may be submitted by e-mail attachment to Theresa Green, RN, PhD, Assistant Professor, University of Calgary, Faculty of Nursing, Room 2210, Professional Faculties Building, University of Calgary, 2500 University Dr. NW Calgary, AB T2N 1N4, Canada or cjnn@cann.ca.

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5. Manuscript guidelines
   - Maximum length is 6,000 words or 20 pages
   - Margins 1", double spaced, Times New Roman, 12-point font size
   - Title page with full title, name, and institutional affiliation
   - Abstract of fewer than 200 words
   - Left justified, paragraphs indented 5 spaces
   - Headings typically include: Introduction; Review of the literature (conceptual and data based); Research question/Objectives/Hypotheses/Clinical concern; Methodology and method; Analysis/Findings; Discussion including specific Clinical implications/recommendations; Summary/Conclusions; and References. (Please note, not all of these headings are needed or may apply to all papers).
   - Abbreviations should always be preceded by the full term. An example would be Traumatic Brain Injury (TBI).
   - Drug citations include the generic name in lowercase letters and brand names in parentheses.
Assistant Professor in Early Childhood Health Promotion and Illness Prevention

The Faculty of Nursing, University of Calgary, invites applications for a tenure-track appointment at the rank of Assistant Professor, in the area of Early Childhood Health Promotion and Illness Prevention. This position results from the University of Calgary’s strategic vision, Eyes High, inspired by the university’s Gaelic motto, which translates as ‘I will lift up my eyes’. Increasing scholarly capacity will help the University of Calgary meet its strategic goal to become one of Canada’s top five research universities by 2016, where innovative teaching and groundbreaking research go hand in hand, and where we fully engage the communities we both serve and lead.

An inter-faculty initiative on Child and Youth Mental Health promises to provide a dynamic collaborative research environment and a novel resource for policy makers, front-line clinicians and the public for expertise in important questions about child and youth health. Desired applicants will be early career academics who are establishing research programs that align with and support the area of Early Childhood Health Promotion and Illness Prevention. Preference will be given to candidates who will be able to add to the critical mass of interdisciplinary academics who are exploring healthy child development, risk identification, and development and evaluation of early child and family parenting and supportive interventions. The appointment will preferably commence on July 1, 2013.

Candidates must have a doctorate in Nursing or another health-related discipline (or will have doctorate completed by no later than June 2013); previous professional and/or academic experience in the area of Early Childhood Health Promotion and Illness Prevention; evidence of early-stage research and publication record; and demonstrated capability in undergraduate and graduate-level teaching and supervision. Key elements of the position include teaching within the undergraduate and graduate programs, advising and supervision of graduate student research, and working with colleagues in support and development of priority Faculty initiatives. Preferred candidates must also be either currently registered with the College and Association of Registered Nurses of Alberta (CARNA), or be fully eligible for such registration.

Applicants are invited to submit a curriculum vitae, a statement outlining their proposed program of research, a brief description of previous university teaching experience and present/aspiring contributions to the field, reprints of two (2) representative academic publications, and employment eligibility Canada.

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Applications should be sent via email in a pdf format and addressed to:
Dr. Dianne Tapp, Dean, Faculty of Nursing,
c/o nursingu@ucalgary.ca
University of Calgary
Professional Faculties Bldg, PF2268
2500 University Drive N.W.
Calgary, Alberta T2N 1N4

Consideration of applications will begin March 1, 2013, and will continue until the position is filled.

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June 11–14, 2013, Montreal, QC

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Credentials: _______________________ Facility: _____________________________________ CANN Membership Number:  _______________________

Mailing Address ( home work) _________________________________________________________________________________________________ Postal Code: ____________ Daytime phone ( home work) (_____) _____ - __________ E-mail: ____________________________________________

☐ Check here if this will be your first CANN Conference

Please note dietary restrictions here: ______________________________________________

Conference Registration June 11–14, 2013

Early Registration Deadline is May 3, 2013.
Register by May 1, 2013, to ensure conference materials will be available to you.

<table>
<thead>
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<th>Full Conference</th>
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<th>Half Day</th>
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<tr>
<td>CANN Member</td>
<td>Early</td>
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<td>After May 3</td>
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Conference Fee Total $__________

CNA Certification Specialty ___________________ Number _____________ Subtract $25__________

Subtotal A $__________

Concurrent Track Sessions
(See the program schedule for session titles and codes. Please indicate your selections below)

Wednesday, June 12
1330–1600 A1 ☐ B1 ☐ C1 ☐ D1 ☐

Please check box if planning to attend
☐ Wednesday, June 12, 0800: Welcome Breakfast

Thursday, June 13
1330–1400 A2 ☐ B2 ☐ C2 ☐ D2 ☐
1405–1435 A3 ☐ B3 ☐ C3 ☐ D3 ☐

☑ Recent Advances in Clinical & Experimental Treatment of Glioblastomas OR

☑ Introducing the Post-Stroke Checklist (PSC): Improving Life After Stroke

Friday, June 14
0900–0930 A4 ☐ B4 ☐ C4 ☐ D4 ☐
0935–1005 A5 ☐ B5 ☐ C5 ☐ D5 ☐
1020–1050 A6 ☐ B6 ☐ C6 ☐ D6 ☐
1055–1125 A7 ☐ B7 ☐ C7 ☐ D7 ☐

☑ Thursday, June 13, 06:30 Run/Walk for Nursing Research

☐ Thursday, June 13, Annual Luncheon, choose ONE:
☐ MS Update OR

☑ BOTOX: Not Just for Pretty Faces (session full)

☐ Friday, June 14, 0800: Breakfast

Note: CANN registration enables you to attend CNSF sessions FREE, except the reception. You must show your registration identification.

Welcome Reception
Tuesday, June 11, FREE to registrants

☑ Guests #_____ × $25.00 = $________ Payable with registration

Free tour of the Montreal Neurological Hospital: Tuesday, June 11, 1700–1800

☐ will attend tour

CNSF Exhibitors’ Reception
Wednesday, June 12, 1700

Ticket: $70.00 (incl. tax & gratuities)

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Thursday, June 13, 1930

Join us for a drink or two…

Nurses’ Pub Night
Wednesday, June 12, 1930

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March 22, 2013

Dear CANN Conference Participants,

I would like to invite you to participate in our 10th annual CANN Race/Run/Walk for Nursing Research to be held in Montreal on June 13, 2013. Funds generated from the event will be used towards the Dr. Marlene Reimer Nursing Research Award. To date, we have raised over $14,200, which goes towards funding Nursing Research. Unfortunately, we are unable to issue tax receipts.

An invitation has been sent to the CNSF Conference participants to join us. We want to encourage you to participate by either collecting sponsors or by challenging a physician colleague to run with you.

This year we are having a Chapter Challenge!

Whichever Chapter raises the most money per capita wins!

PLACE: Leaving from the Queen Elizabeth Hotel Lobby
DATE/TIME: Thursday, June 13, 2013. Meet in the lobby at 6:15 a.m.
DISTANCE: 5 km run/ 3–5 km walk

For further information, please contact: Janet.warner@albertahealthservices.ca. We hope to see you there!

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CANN 44th Annual Meeting and Scientific Sessions Pledge Forms

Neuroscience Nursing Research Run/Walk
Thursday, June 13, 2013 @ 6:30 a.m. (meet in lobby at 6:15 a.m.)

- Leaping out of bed to run with all other neuroscience nurses
- Crawling out of bed to walk for what I know is a good cause
- Sleeping in with a good conscience because I am sponsoring

___________________________________ (fill in name of runner or leave blank)
for $5 $10 $20

Name: ______________________________________________________

Home Institution ____________________________________________ $ _____________

Waiver (must be signed)

Please Print:

_____________________________   ____________________________   _______________________________  ____________
First Name Last Name City Province

I hereby release CANN, and all government and municipal agencies, whose property and/or personnel are involved, and other co-sponsoring company(ies) or individual(s) from responsibility from any injuries or damage I may suffer as result of my participation in the CANN Fun Run/Walk. I hereby certify that I am in good condition and am able to safely participate in this event. I have read the entry information provided for the event and certify my compliance by signature below.

____________________________________________________  _______________________________________
Signature of Participant Date
## CANN 44th Annual Meeting and Scientific Sessions Pledge Form

**June 11–14, 2013, Montreal, QC**

### NEUROSCIENCE NURSING RESEARCH RUN/WALK

**Thursday, June 13, 2013 at 6:30 a.m.**
(meet in lobby at 6:15 a.m.)

I am sponsoring ____________________________ (fill in name of runner)

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Unfortunately, we are unable to issue tax receipts

**TOTAL $ ________**