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Covenant Health Research

Issue 13, Spring / Summer 2009



A PICTURE IS WORTH A THOUSAND WORDS

More stories make it possible to imagine
the “what ifs” of the world.



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A Maternal-infant Child Health and Environment Program: Paediatric Environmental Health Specialty Unit (PEHSU) – by Dr. Irena Buka



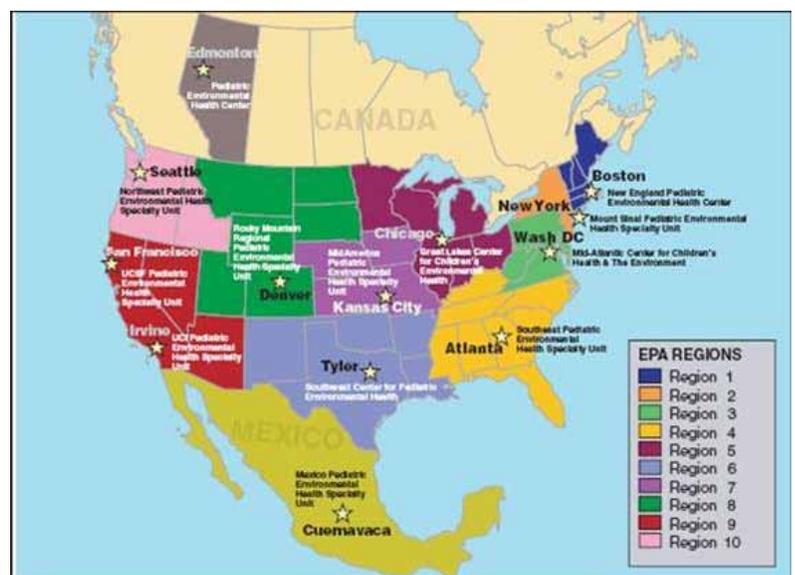
L-R: Dr. Irena Buka, Dr. Harold Hoffman, Lorie Grundy

In 1998 a small Paediatric Environmental Health Specialty Unit (PEHSU) began seeing patients at the Misericordia Community Hospital, sharing the resources of the ambulatory Paediatric program at the Child Health Centre. For the last 10 years Dr. Irena Buka and Dr. Harold Hoffman have worked collaboratively with the 11 Paediatric Environmental Health Specialty Units in each of the U.S.A. Environmental Protection Agency regions, as well as in 2 clinics located in Mexico. Expertise and information sharing on individual cases - as well as strategic planning - has kept the program alive in the absence of a dedicated Canadian integrated and collaborative program. The PEHSU remains the only clinic of its kind in Canada, addressing the needs of children from Edmonton and other parts of Alberta as well as nationally.

The PEHSU has recently expanded their clinical program with the addition of Clinical Nurse Specialist, Lorie Grundy. As clinic coordinator, Ms. Grundy will serve as a consistent and ongoing link between the patient and their family, members of the comprehensive care team, and the community and secondary service providers. Ms. Grundy will play a key role in patient care management and will provide care and education to the children, their families and those who care for them.

The Maternal-infant Child Health and the Environment program focuses on the World Health Organization (WHO) “recognized determinants of health” including social, physical and biological indicators, and looks to better understand the role of chemical and environmental contaminants on common childhood disorders, e.g. asthma

and respiratory conditions, neuro-developmental disorders, cancers, renal disorders, adverse reproductive outcomes, etc. Providing clinical care to children with identified environmentally related disorders or those with potential exposures to chemical contaminants is an emerging field for which scientific evidence is growing quickly. For those working in the field it is very clear that to make an impact on an individual child’s condition requires not only supporting scientific evidence but also the building of partnerships within health care, academia, government agencies, non-government agencies and the community. The clinical cases we are presented with are rarely isolated. At the very least they may involve other family members living within the home, e.g. indoor air issues. However, it is not unusual for a larger community to need investigation, e.g. a school, a town or city, or a region.



This invokes the need for a public health approach.

Furthermore an identified hazard can rarely be dealt with by identifying, diagnosing and treating individual children. Others need to be afforded protection from further exposures. Surveillance of the hazard, public health interventions and protective policy actions are generally called for. It is in this context that the Paediatric Environmental Health Specialty Unit at the Misericordia Hospital has developed partnerships not only within the clinical practice area but also with government and non-government agencies: e.g. the Commission for Environmental Cooperation, the World Health Organization, the Canadian Cancer Society, The Lung Association - Alberta and NWT, among others.

The Maternal-infant Child Health and the Environment Program, although built from a small clinical program, has identified the need for research to support evidence based practice and policy and therefore a research program is being built to address questions such as “is it in the environment?”, “is it in the body?”,

The Maternal-infant Child Health and the Environment Program through the Paediatric Environmental Health Specialty Unit has provided the following:

Research

- Survey of environmental concerns for children
- Health and environment data: GIS mapping
- Systematic Reviews
- Governance instruments and child health

Community Issues

- Smoking Bylaw
- Cosmetic Pesticide use
- Arsenic in playgrounds
- Lead water pipes in 5000 Edmonton homes
- Lead painted toy recall
- Bisphenol A declared dangerous substance

Clinical Care

- Assessment of children with known exposures – molds, carbon monoxide, benzene,

- industrial fluoride, lead, mercury, nickel.
- Assessment of children for environmental exposures with asthma, autism, attention deficit disorder, learning disabilities, neurodegenerative symptoms, behavioral concerns, failure to thrive, cancer.
- Integration of environmental assessment into regular paediatric care.

Education

- Creation of educational materials – pamphlets, articles in magazines, WHO training modules.
- Publication of review articles and book contributions.
- Delivery of seminars and lectures to health care professionals, government personnel, community groups and others.
- Media interviews – create awareness of current issues.

“is it causing a health affect?”, “is it causing my child’s problem?”. These questions are difficult to answer without local research evidence and laboratory access to investigate each child and contacts. An identified gap in Western Canada is the absence of a state-of-the-art environmental toxicology laboratory capable of processing human specimens relevant to potential local environmental exposures of chemical contaminants. It is because of this gap that the Department



of Paediatrics has engaged in a partnership with the University of Alberta - School of Public Health as well as the Department of Lab Medicine and Pathology, working with government partners to create a laboratory capable of developing relevant biomarkers and providing biomonitoring on a research basis as well as eventually for clinical service. Collaboration with national and international research programs and especially through the annual conferences supported financially by Health Canada, Alberta Heritage Foundation for Medical Research (AHFMR), and including Alberta Health and Wellness, Alberta Environment, and Alberta Centre for Child Family and Community Research (ACCFCR) on the advisory board.

A steering committee including Mary-Ann Clarkes with the Covenant Health Research Centre



(CHRC) and Irena Buka with the Paediatric Environmental Health Specialty Unit worked together to organize the recent Maternal-infant Child Health and the Environment Research Symposium “How Science can Influence Policy and Practice”. This event brought together researchers, practitioners and representatives from government and non-government organizations to share information and discuss a path forwards with respect to relevant local child protective policy applicable research in Alberta. This well attended, thought provoking and thoroughly stimulating event included presentations by researchers with recommendations for practice and policy, and broad discussions that encompassed issues related to regulation of environmental contaminants, societal re-adaptation to alternate energy/transport, ethical conflicts between privacy of individual health information and actions to protect populations, children’s right to a clean environment and political decision making balancing economic and health positive outcomes. An un-coached panel of academia and government personnel made strong public commitments for specific actions within their departments to promote the issue of Maternal-infant Child Health and the Environment recognizing decisions made today will affect future generations.

So why are we taking this approach?

Adequate assessment management and prevention of environmentally related disorders through education, regulation, and legislation positively

impacts budgets for health, social programs, education, judiciary systems, etc. The Emotional burden is more difficult to quantify

What are the implications in a Maternal-infant Child Health and the Environment Program?

Using clinical observations and research data to identify environmental influences on common children’s disorders can help to prioritize legislative and regulatory actions to better protect children from environmental threats. This partnership between academia and government can lead to better clinical care, education leading to improved responsibility for health, protective public health interventions and preventative actions that can result not only in better health but also a reduced burden on health care and other social programs.

Links of Interest:

- “How Local Research can Influence Policy and Practice”, a Maternal-infant Child Health and Environment Research Symposium web-casts, background papers, speaker profiles, presentations and important reference links are available for your access at: <http://www.caritas.ab.ca/Home/Research/ForResearchers/Symposium+Resource+Page>
- Paediatric Environment Health Specialty Units (PEHSU): <http://aoec.org/PEHSU/index.html>
- World Health Organization (WHO): <http://www.who.int/ceh/en/index.html>

Researcher Profiles



Dr. Lola Baydala is an Associate Professor of Pediatrics in the Faculty of Medicine at the University of Alberta and a Consultant Pediatrician in the Misericordia Children’s Health Centre. Dr. Baydala’s work includes patient care, teaching, research and child advocacy. Her research focuses on health disparities in minority and marginalized populations and uses a community-based participatory approach to address concerns that have been identified by community members. Dr. Baydala’s research is supported by the Canadian Institute of Health Research, the Alberta Centre for Child, Family and Community Research and Covenant Health.



Merle Kennedy, PhD is the Research Project Manager for Women and Children’s Health Community Based Participatory Research, which focuses on collaborative projects that study the social determinants of health. She works out of the Child Health Clinic located in the Mother Rosalie Health Services Centre.

A Culturally Adapted Drug and Alcohol Abuse Prevention Program for Aboriginal Children and Youth - Lola Baydala, Merle Kennedy, Betty Sewlal, Carmen Rasmussen, Kathleen Alexis, Fay Fletcher, Liz Letendre, Janine Odishaw, Brenda Kootenay, Sherry Letendre, Tanja Schramm



ACKNOWLEDGEMENTS: The authors wish to acknowledge the work of community Elders who made significant contributions to adapting and delivering the prevention program including Bella Alexis, Ida Alexis, Jean Alexis, Rosalie Alexis, Stanley Alexis, Angela Jones, Effie Kootenay, Helen Letendre, Nancy Potts, and Paul Potts.

This research was supported by grants from the Covenant Health Research Trust Fund, Aboriginal Health Strategy Fund of Alberta Health and Wellness, and Alberta Centre for Child, Family and Community Research.

For the past 8 years, the Alexis Nakota Sioux Nation has collaborated with Dr. Lola Baydala, a pediatrician at the Misericordia Hospital, who specializes in community based, participatory research (CBPR). CBPR is an innovative approach in health; a process of “systematic inquiry, in collaboration with those affected by the issue being studied, for the purposes of education and taking action or effecting social change” (Institute of Health Promotion, 1995, p. 4). A participatory approach to research recognizes community as a “social and cultural entity” and therefore the “active engagement and influence of community members in all aspects of the research process” is integral to this approach (Israel, Schulz, Parker, & Becker, 2001, p. 184). Community members contribute their expertise, participate in decisions made throughout the research process, and share ownership of the research data and outcomes which, in turn, support knowledge translation and increase participants’ understanding of the social determinants of health within their social and cultural context (Israel, Schulz, Parker, & Becker, 1998; Israel et al., 2003). This, in turn, leads to more relevant and appropriate interventions, policy recommendations and social change aimed at improving the health of community members (Israel, Eng, Schulz, & Parker, 2005).

The Alexis Nakota Sioux Nation, located in central Alberta, has a population of 1,566. The community has its own school with an enrollment of 207 students (2007) in Grades K – 12, and an average classroom size of 20 students. Over time, the need

for a school based drug and alcohol abuse prevention program became evident and in 2005 Dr. Baydala and a research team from the University of Alberta were invited by the Alexis Nakota Sioux Nation to collaborate with community stakeholders, through the Alexis Working Committee, to establish such a program.

The primary role of the Alexis Working Committee has been to oversee general operations of the project including funding, expenditures, timelines, and interpretation and presentation of research results. Stakeholders on the Alexis Working Committee include community representatives from health and education as well as the community at large and researchers from the University of Alberta. An Adaptations Committee was also established from the membership of the Alexis Working Committee to focus specifically on program adaptations. Meetings of both committees were attended by one or more Elders and there was an open invitation to students' parents/guardians to attend any of the meetings of the Adaptations Committee.

The principles of CBPR and the CIHR Guidelines for Health Research Involving Aboriginal People (Canadian Institute for Health Research, 2007) provided a frame of reference for the development of this research project. The proposed work was presented to community members and to the Alexis Nakota Sioux Chief and Council and a Band Council Resolution was obtained. A Band Council Resolution is the mechanism by which the elected representatives

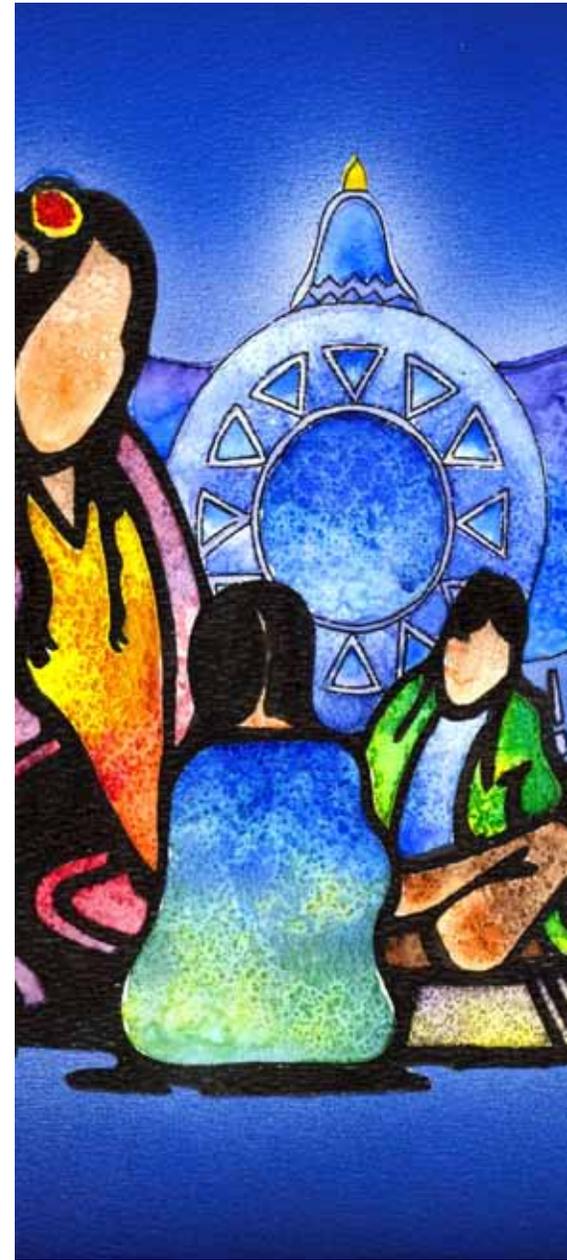
of a Band Council authorize such work in their community.

The Alexis Working and Adaptation Committees met on a regular basis over two years (2005 – 2007) and through a process of consensus completed the following project objectives:

1. review and adapt the first level (level I) of the three level, three year LifeSkills Training (LST) program (Botvin, 2004)
2. deliver the adapted program to grade 3 students at Alexis Nakota Sioux Nation School
3. measure changes in students' knowledge of the negative effects of drug and alcohol use, attitudes towards drugs and alcohol, and drug and alcohol refusal and life skills
4. document the community's experiences of and responses to the program adaptations and delivery.

The LST program is a school-based drug and alcohol abuse prevention program that has been shown in numerous studies to significantly reduce substance abuse among young people. The LST program is a generic program that has been proven to be highly effective in the general population however, this program has never before been implemented with Canadian Aboriginal children and youth and its effectiveness in this population is not known.

Previous research has shown that cultural adaptations to evidence-



based prevention programs can significantly improve engagement and acceptability of such programs. As a first step, and in keeping with Aboriginal research guidelines, the Alexis Nakota Sioux Nation extensively reviewed and adapted the LST program to ensure that it incorporated the cultural beliefs, values, language and visual images of their community.

Aboriginal ways of knowing including “ceremonies, prayer, storytelling, circle theories and the recognition of people’s own life stories” (Alberta Mental Health Board, 2005, p. 6) are the foundations upon which the adaptations were made. Where appropriate, the program was translated into the Isga language. The Isga language, also known as Stoney, is the ancestral language of the people of the Alexis Nakota Sioux Nation. A cultural activity/ceremony, chosen by Elders, was added to each program module. An artist from the community was hired to create culturally appropriate images that were meaningful to the community. These images replaced those in the original LST program. Art work submitted by students from the community’s school was also included in the adapted program.

The culturally adapted level I, elementary program was delivered to all grade 3 students at Alexis School, as a component of the Health and Life Skills Kindergarten to Grade 9 Program of Studies (Alberta Learning, 2002). The program was delivered by a community member who had attended a two day training workshop with a certified LST trainer. Children who received the program completed questionnaires before and after receiving the 8 week adapted program. A pre/post test questionnaire was used to measure changes in student participants’ drug and alcohol refusal skills, self-beliefs, and knowledge of the negative effects of drug and alcohol use. In addition to these questionnaires, two focus groups were convened: one with school personnel/community members who were actively involved in support-

ing or working with the program and another with Elders who contributed to the cultural adaptations, language translation and classroom delivery of the LST program. Outcomes of both the quantitative and qualitative measures included: 1) positive changes in student participants’ drug and alcohol refusal skills, self-beliefs, and knowledge of the negative effects of drug and alcohol use, 2) ownership of and investment in the program by the community, 3) teaching approaches and activities that correspond with the learning contexts, worldviews and relationships of the community, and 4) participation of Elders to ensure that learning activities reflect traditional ways of knowing. The data provides evidence for the relevance, importance, and potential benefits of employing a culturally adapted, evidence-based substance abuse prevention program with Aboriginal students attending a First Nations school.

The complete, 3 year program is now being delivered to elementary and junior high school students by Elders and a community member who has received training on the program’s content and delivery. Quantitative and qualitative measures of the program’s effectiveness will be collected, analyzed and interpreted by the Working Committee.

References are available upon request.

Authors’ Biographies

Lola Baydala, MD, MSc, FRCP(C), FAAP is an associate professor of Pediatrics at the University of Alberta.

Merle Kennedy, PhD is the research project manager for Women and Children’s Health

Community Based Participatory Research.

Betty Sewlal, MSc is the Principal of the Alexis Nakota Sioux Nation School.

Carmen Rasmussen, PhD is an Assistant Professor in the Section of Pediatric Neurosciences, Division of Neurodevelopmental Pediatrics, Department of Pediatrics, University of Alberta.

Kathleen Alexis is a Director with Alexis Land Management, Department of Economic Development, Alexis Nakota Sioux Nation.

Fay Fletcher, PhD is an Assistant Professor with the Faculty of Extension and School of Public Health, University of Alberta.

Liz Letendre is the Director of Education, Alexis Nakota Sioux Nation Board of Education.

Janine Odishaw, PhD is a postdoctoral fellow in the Department of Educational Psychology, University of Alberta.

Brenda Kootenay is the Stoney language instructor with the Alexis Nakota Sioux Nation School.

Sherry Letendre teaches the adapted Nimi Icinohabi (LifeSkills Training) program; she is also a research assistant with the history program at the Alexis Nakota Sioux Nation School.

Tanja Schramm, PhD is a researcher at the Alexis Nakota Sioux Nation School; she documents local history for the purpose of integrating Nakota values and heritage into the school curriculum.





A Picture is worth a Thousand Words

The pilot project, “A Visual Narrative Inquiry Concerning the Experiences of First Nations, Métis and Inuit Students in Edmonton Public Schools” was developed through a collaborative partnership between the First Nations, Métis, and Inuit (FNMI) External Advisory Committee of Edmonton Public Schools (EPS) and Women and Children’s Health Community Based Participatory Research Group. Over time the FNMI External Advisory Committee of EPS has engaged in discussions about the efficacy of Aboriginal education in Edmonton Public Schools with the intention of improving and promoting the health and well-being of FNMI students through knowledge-based activities. Their focus had centered on community input, including families, and they wanted to hear from students at all grade levels. This qualitative project focused on kindergarten to grade 3 students’ perceptions and experiences of school. What stories would their photographs create and recreate? What can the children teach us? The implementation of the project at Prince Charles Elementary School

was supported with Urban Aboriginal Strategy funding.

The active process of visual narrative inquiry allows students to compose, collect, and converse through/with photographs that they create. Participants were invited to join a camera club and become image-makers, to photograph “what matters” to them through a sequence of 4 camera works. Students learned about the ethics of taking photographs, how to use a one-time camera as well as techniques for creating photographs such as perspective, framing, focal point, and composition. Students reviewed each set of photographs and placed them in their photo albums. They also shared their photographs with the school’s Elder, vice-principal, and their families. Students participated in conversations with the researcher in which they told stories about their photographs. The data was then analyzed thematically; family, pets, popular culture and bus-sing were topics that mattered to the children.

The post narrative presentation by

Hedy Bach and Merle Kennedy, of the project “Teachings from a Kiskinohamatokamikohk: Learning from children’s photographs” was funded by the Covenant Health Research Trust Fund and held at the Nina Haggerty Centre for the Arts from April 2nd to 18th, 2009. The project was presented in a series of recollections that illustrated a process of transforming subjectively collected data, replacing the singular narrative of a researcher with an inter-subjective narrative created relationally in our work with the children. Moving the post narrative presentation into the community created the possibility of a more inclusive discourse on education. More stories make it possible to imagine the “what ifs” of the world.

Merle Kennedy, PhD

Links of Interest:

Women and Children’s Health, Community Based Participatory Research - <http://www.cbpr4health.ca/>



Researcher Profiles



Dr. Alexandra Marin is a Care of the Elderly physician with the Regional Geriatrics program; Assistant Clinical professor, Department of Family Medicine, Division Care of the Elderly; Primary site-Misericordia Hospital, Site Leader, Geriatrics. Her research interests involve care of seniors in primary care and acute care settings.

Donna Wilson, RN, PhD profile can be found on page 14

Hope as a Technique for Reducing Depression Among Continuing Care Residents: Final Research Investigation Report - Executive Summary

AUTHORS *Alexandra Marin, MD, CCFP; Ethel Steinkey, MTS; Donna Wilson, RN, PhD*

Depression is a common problem among senior citizens, particularly those living in nursing homes. An experimental study was undertaken in 2008 to examine the effects of a four-week hope program among older nursing home residents diagnosed with depression.

METHODOLOGY:

After nursing home residents, aged 65 or older, who had been diagnosed with depression, were identified and agreed to participate in this study, they were randomly assigned to: (a) an intervention group and provided with daily hope interventions involving positive messages or pictures over four weeks, or (b) a control group that was provided with short informal weekday greetings over the same period. All were tested before and after for levels of hope and depression, with the results compared between and within groups.

FINDINGS:

The structured hope intervention was not proven effective for significantly reducing depression or raising hope. Instead, a significant reduction in depression among control group subjects was found, as well as a non-significant increase in their level of hope.

CONCLUSIONS AND IMPLICATIONS FOR POLICY AND PRACTICE:

Although these findings suggest a social approach is the most efficacious for addressing depression among elderly nursing home residents, further investigations are needed to confirm the role of friendly visitors. Additional studies are also needed to test this hope intervention, as well as other non-pharmacological approaches for reducing depression among senior citizens. These studies are required, as the population in Canada and other developed countries is aging; and simple or cost-effective and humane interventions to address depression are needed.

ACKNOWLEDGEMENTS:

The Covenant Health Research Trust Fund for funding this research study, the Covenant Health for encouraging, permitting, and facilitating this study, Carol Vogler, PhD – who helped design this study, Gordon Self – who helped inspire this study, Misty Whalen – who facilitated this study, Param Bhardwaj, BSc, MSc Candidate (Psychiatry) – who drafted the final research report, and many others who helped gather data or who provided data for this study.

Abstract published: "The Canadian Journal of Geriatrics" Volume 12, issue 1, 2009, page 38





A 2-step Delphi Survey on Best-practice Nursing Care to Detect Acute Delirium, Safeguard Patients Experiencing Acute Delirium, and Reduce or Eliminate Acute Delirium

AUTHORS: Donna Wilson (Principal Researcher); Bonnie Launhardt; Manju Enjati; Sylvia Treloar; Myrna Galbraith; Janice Kinch

PURPOSE: This study sought to learn from nurses how they detect adult hospital patients who are experiencing acute delirium, how they safeguard them, and how they help these patients recover.

METHODS: A two-stage voluntary Delphi survey was employed, involving nurses at two representative full-service hospitals in Western Canada.

FINDINGS AND DISCUSSION OF FINDINGS: Many different responses to the first survey's three nursing practice questions were gained, with content analysis used to group similar responses for further testing in the second survey. An analysis of findings from the second survey clearly revealed one high priority method that nurses use to detect adult patients experiencing acute delirium, "nurse notices that patient's cognitive (mental) status has deteriorated overnight or from the last day that the nurse saw this patient," as well as four less common but still frequently used methods and four additional but uncommon methods. Similarly, one high priority nursing practice to safeguard adult hospital patients experiencing acute delirium was revealed, "setting up an early warning system

to alert nurses to activities that could result in harm to the patient," with four less common but still apparently important practices and nine less common practices. Two high priority nursing practices to help adult hospital patients who are experiencing acute delirium recover from it were revealed, with three less common but still apparently important practices, and 10 additional less important practices. These were: "Ensuring that the acute delirium is assessed and addressed by other members of the healthcare team" and "Assisting team efforts to determine the cause of the acute delirium."

CONCLUSION: This study demonstrates the value of the Delphi research technique for facilitating reflection on nursing practice, such as what nurses recognize are important practices for caring for adult hospital patients who are experiencing acute delirium. Research is now needed to establish "best practice" nursing care.

ACKNOWLEDGEMENTS: Research funding for this study from the Covenant Health Research Trust Fund is gratefully acknowledged. The assistance of Covenant Health staff and administrators in facilitating this study and research assistance from Mary-Ann Clarkes is also gratefully acknowledged.



Left
L - R: Donna Wilson, RN, PhD; Dr. Jasneet Parmar; Dr. Marjan Ab-basi; Cheryl Sadowski, B.Sc.(Pharm), Pharm.D; Dr. Mehrnoush Mirhosseini

Top Right
Bonnie Launhardt, RN, MSN, NP

Bottom Right
Manju Enjati, BSc, RN, MSN, NP



Management Forum

On October 9th, 2009, an Acute Delirium Detection and Management Forum was held at the Misericordia Community Hospital. The Forum brought together a multidisciplinary group of practitioners to discuss the complex issue of acute delirium as part of a study entitled:

"A 2-step Delphi survey on best practice nursing care to detect acute delirium, safeguard patients experiencing acute delirium, and reduce or eliminate acute delirium"

Thank you to all speakers and participants who contributed to both the Forum and the study.

Researcher Profiles



Scott Baerg, RN, BN, MBA is currently the Director of Mental Health for the Edmonton Acute Care Division of Covenant Health. He completed his Bachelor of Nursing degree from the University of Calgary in 1996. After relocating to Edmonton he worked as a staff nurse at Alberta Hospital-Edmonton, The Stollery Children's Hospital and the Cross Cancer Institute. In 2002 Scott completed his MBA through the University of Alberta. Shortly after that he began working with Caritas Health Group at the Edmonton General Continuing Care Centre. Scott has been in working in his current role in mental health for the last three years. During his time with Caritas and now Covenant Health, Scott has supported research as well as numerous other initiatives with the goal of improving the provision of quality patient care.



Alison Morin, RN, BScN currently holds the position of Director in Medicine for the Grey Nun's and Misericordia Hospitals of Covenant Health. Alison is a graduate of the Royal Alexandra Hospital School of Nursing, and she later obtained her BScN from the University of Alberta. During her career, her experience in medicine and geriatrics has been in practice, clinical education and administration.

Donna Wilson, RN, PhD profile can be found on page 14

“A Patient-Centred Qualitative Study of Factors Contributing to the High Use of Hospitals”

AUTHORS: Donna Wilson, RN, PhD; Scott Baerg, RN, BN, MBA; Alison Morin, RN, BScN

AIMS AND OBJECTIVES:

A qualitative (ethnographic) study was conducted to reveal contributing factors or influences for the “high” use of hospitals, specifically long hospital stays or frequent admissions. The purpose of this study was to learn from younger inpatients who had been frequently admitted to adult mental health units and older inpatients experiencing long hospital stays, and from their family members and formal care providers (doctors and nurses), what contributed to their considerable need for or use of inpatient hospital services.

METHODS: This 2008 study, involving semi-structured interviewing mainly, was undertaken in two mid-sized full service acute care hospitals in Western

Canada. Younger (age 18-64) persons (15 in total) who had been admitted 2+ times in the past year to an acute care hospital diagnosed with a mental illness and older persons (age 65+) hospitalized for 35 or more days (14 in total) were identified and interviewed if they were able to voluntarily provide informed consent. Interviewing continued until data saturation occurred in both streams, with data from each stream analyzed after 2-4 interviews to identify findings and refine subsequent interviews, and to group findings into categories. Ongoing cross-stream comparisons of findings and categories were carried out, with common emerging themes validated across streams in subsequent interviews.

RESULTS: Three themes were identified, although with some categorical distinctions for younger mentally-ill high users and older long-stay high us-

ers: (a) individuals with serious illnesses and high care needs, (b) hospitals are an accessible and often sole place to get needed care, and (c) factors external to these people engender long hospital stays and/or readmissions.

CONCLUSIONS AND APPLICATION TO PRACTICE: This study's findings add to the small body of research on high users of hospitals; individuals who clearly need new insights through research into their need for and use of hospitals, and new approaches to address their health and health care needs.

ACKNOWLEDGEMENTS:

Research funding for this study from the Covenant Health Research Trust Fund is gratefully acknowledged. The assistance of Covenant Health staff and administrators in facilitating this study and research assistance from Carmen Webber, Kirstin McLaughlin and Mike Hewitt is also gratefully acknowledged.

Researcher Profiles

Dr. Robert Balyk, M.D., F.R.C.S.(C) is the director of the Northern Alberta Shoulder and Treatment Program and is also a surgeon member of both the Shoulder and Upper Extremity Research Group of Edmonton (SURGE) and the Joint Orthopaedic Initiative in National Trials of the Shoulder (JOINTS Canada). Dr. Balyk is an Associate Clinical Professor at the University of Alberta. He is a graduate of the University of Manitoba Medical School (1983) and completed his Orthopaedic Residency at the University of Alberta in 1991. He then went on to do a clinical fellowship, an A.O. fellowship in trauma and a Sports Medicine fellowship. (University of Alberta 1991, University of Innsbruck, Austria 1992, and Virginia Mason Clinic, Virginia, Washington 1993 respectively). Dr. Balyk's area of interest is in shoulder research.

“Cemented versus Uncemented Fixation of Humeral Components for Total Shoulder Arthroplasty for Osteoarthritis of the Shoulder”

AUTHOR: *Robert Balyk, MD, FRCS(C)*

BACKGROUND:

Cemented fixation of the humeral component has been recognized as the standard of care, but uncemented fixation has shown the potential to provide long-term, stable fixation with low complication rates.

HYPOTHESIS:

Uncemented fixation of the humerus will result in the following: better disease-specific quality of life, decrease the incidence of radiographic loosening, decrease operative time and no increase in complications.

STUDY DESIGN: Prospective, randomized double blinded clinical trial. This is a JOINT'S Canada Tier 1 Project.

METHODS: All patients pre-

senting to 7 tertiary care centres with primary osteoarthritis of the shoulder requiring replacement were screened for eligibility. After signing informed consent, patients received a baseline assessment, a CT scan and subsequent standardized total shoulder arthroplasty. Patients were randomized to either group by a computer-generated procedure. Outcome measures included disease specific quality of life assessment (WOOS), global health status (SF-12), shoulder function (ASES), Activity level (MACTAR), operative time, and complications. Patients were assessed by a blinded evaluator in post-operative intervals of 2 and 6 weeks, and 3, 6, 12, 18, and 24 months. The primary endpoint was the WOOS score at 2 years

RESULTS: 161 patients were consented and randomized for the study (80 in the cemented group and 81 in the uncemented group).

Demographics and baseline evaluations were alike for both groups. The WOOS scores at post-operative intervals of 12, 18 and 24 months showed a significant difference ($p=0.009$, 0.001 , 0.028 respectively) in favour of the cemented group. The cemented group also had better Strength (3 m $p=0.038$, 12 m $p=0.036$, 18 m $p=0.051$, 24 m $p=0.053$) and forward flexion (6m $p=0.031$, 12 m $p=0.04$). As expected, the operative time was significantly less for the uncemented group (C = 2.26h +/- .63; U = 1.69h +/- 1.9, $p=0.03$).

CONCLUSIONS: These findings provide the first evidence that cemented fixation of the humeral head provides better quality of life, strength and ROM than uncemented fixation.

Researcher Profiles



Jana Rieger, PhD is the Program Director for Functional Outcomes at the Institute for Reconstructive Sciences in Medicine (iRSM) in Edmonton, Alberta, Canada. Dr. Rieger established both the Head and Neck Surgery Functional Assessment Laboratory and the Stomatognathic Function Laboratory at iRSM. She holds a joint appointment between iRSM and the University of Alberta, where she is an Associate Professor in Rehabilitation Medicine. Dr. Rieger is currently supported by the Alberta Heritage Foundation for Medical Research as a Heritage Researcher (Population Health Investigator). She is studying the effect of pharmaceutical and surgical interventions to determine the most effective approach to prevent xerostomia and maintain functional ability and quality of life in patients with head and neck cancer. Other current research interests include determination of function after surgical reconstruction and prosthetic rehabilitation of structures of the head and neck. Dr. Rieger has lectured internationally by invitation on functional outcomes of head and neck surgery and has published in scientific journals on research in this area.

“Listeners’ Social Perception of Speakers after Treatment for Laryngeal Cancer”

AUTHORS: *Aarhi Turcotte, MSc; Anroup Wilson, MSc; Jeffrey Harris, MD, FRCSC; Hadi Seikaly, MD, FRCSC; Jana M. Rieger, PhD*

Three primary methods to treat laryngeal cancer include radiation therapy, total laryngectomy, and supracricoid laryngectomy. Perceptual assessment to determine the social impact of vocal outcomes related to each treatment was employed to understand the effect that a disordered voice may have on societal perception of patients undergoing these treatments. Forty listeners were recruited to rate the voices of four groups of speakers: individuals treated with radiation therapy; individuals treated with total laryngectomy and re-

habilitated with a tracheoesophageal voice prosthesis; individuals treated with supracricoid laryngectomy; and individuals with no history of vocal disorders. The listeners rated the speakers’ voices on rating scales with eight descriptors related to the social perception of speech. The ratings were made on 7-point Likert scales. Results indicated that listeners rated the non-surgical groups more positively than the surgical groups on traits such as attractive, clever, sophisticated, and trustworthy. The surgical groups were rated more negatively than non-surgical groups on traits such as scary, annoying, and intimidating. These findings provide insight into how patients undergoing these treatments may be perceived by society. Individu-

als with large laryngectomies may be at higher risk of encountering negative social stigmatization in their daily life.

A full article can be found in the “Canadian Journal of Speech-Language Pathology and Audiology” – Vol.33, No. 1. spring 2009

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Honouring Dr. MacDonald

On January 16th, 2009, a dinner in honor of Dr. G.F. (Fred) MacDonald was held at the Copper Pot Restaurant in downtown Edmonton. Dr. MacDonald had been with the Research Centre since its inauguration in 2003 – responsible for its development and inception, and the dinner provided an opportunity for those attending to celebrate his many contributions and accomplishments; gifts and mementos were bestowed amongst speeches and well wishes offered by family, friends and peers.

Covenant Health Research Centre

Rm#IW-33 (Administration Suite)
Misericordia Community Hospital

Phone: 780.735.2274 Fax:
780.735.2674

Website: <http://www.caritas.ab.ca/Home/Research/default.htm>

**Office Hours: Monday to
Thursday, 08:00-16:00 hrs**



Covenant Health Nurse Scientist News



Donna Wilson is a Registered Nurse with a full-time tenured (continuing) position as a Full Professor in the Faculty of Nursing at the University of Alberta. In 2005, she was invited and accepted a joint appointment as Nurse Scientist for Covenant Health. She also works part-time as a casual staff nurse in a local acute-care hospital to remain current in health care and nursing practice. Her education includes a 3-year diploma in nursing from the Royal Alexandra Hospital School in Edmonton (1976), a Baccalaureate in Nursing degree (University of Alberta, 1981), a Master of Science in Nursing degree that majored in Gerontology and Health Care Management (University of Texas at Austin, 1985), and a Doctor of Philosophy in Educational Administration degree (University of Alberta, 1993). She has worked as a staff nurse, nursing supervisor, hospital administrator, nurse educator, and health researcher in Alberta, British Columbia, New Zealand, and Texas. Donna's program of research focuses on health services utilization and health policy, although primarily in relation to aging and end-of-life care. Her research often involves large administrative or population databases, and increasingly mixed-methods research to incorporate both qualitative and quantitative data. She has 4 books published, with another in process, and over 100 book chapters and journal articles in print.

Research links to health practices, policy, and services:

Not long ago, research was something that was done by a few "scientists," with these people often university professors - as they alone had access to large computers for data collection and data analysis, and they alone had the theoretical background to do research. Today, research is done by many more people, with these people usually working in groups that are formed for one or more research projects. These groups are usually interdisciplinary or multi-disciplinary, as a diverse team approach is now highly valued for comprehensive research planning and execution.

Sometimes people, particularly those who have not been directly involved in planning and carrying out a research study, think there is little value to them or relevance in research. It is easy to ignore research, but research studies are now being done in all spheres of our lives, and

the findings of these research studies are also impacting every facet of our lives.

Virtually all health care services and practices have been revised, if not newly developed, by research. Research is used to determine what "best practice" is, and also to identify practices that need to be abandoned as ineffective or undesirable. Research develops and tests new drugs, new machines, new knowledge, and new approaches to health care. These developments explain why only 8% of Canadians are hospitalized each year now, while 11% and 15% were hospitalized only 10 and 20 years ago respectively. These developments also explain why over 80% of all surgeries can now be done on an outpatient basis, and why outpatient tests and day surgery are such safe alternatives. These developments explain why there has been a reduction in the

number of surgeries done each year in Canada – with this reduction occurring despite population growth. Research findings also have a major impact on health policies and health services, with some services expanded and others improved as a result of research. Wise policy makers use research or existing research finding to justify new programs and revise existing ones. Research is here to stay, and its impact can only be expected to grow.

Donna Wilson, RN, PhD
Professor, Faculty of Nursing

LEARNING RESOURCES NEWS

The MCH Learning Resources Centre is celebrating SWEET! on Friday, June 19th. Drop by our Open House in Rooms 1NW-32 and 1NW-32-4 from 1-3 p.m. check out the renovated Weinlos Library, meet Jared Bodeux our new Audio Visual Technician, and tour the new Audio Visual Services department. There will be refreshments and door prizes!

AUDIO-VISUAL SERVICES

- provides expertise that supports the delivery of clear and professional educational and clinical messages
- supports promotional and operational initiatives
- provides AV equipment to GNCH and MCH centrally-booked meeting rooms, and has a bank of equipment for loan to site departments

More information is available on our intranet site:

www.intranet2.capitalhealth/CaritasAudioVisual/

LIBRARY SERVICES

- provides quality, knowledge-based information to support patient care and decision making within Covenant Health

More information is available on our intranet site:

www.intranet2.capitalhealth.ca/CaritasLibraries/

