Covenant Health Research

Issue 12, Winter 2009

A New Beginning as Covenant Health

The corporate identity, including a new name and logo, for our provincial Catholic health care organization was officially launched on November 27, 2008 by President and CEO Patrick Dumelie.

"As a Catholic organization, we chose the word covenant to affirm our faith in God's promises and to express our dedication to carrying on the healing ministry of Jesus," noted Patrick on a staff memo on launch day. "Our name speaks of our deep commitment to caring for the whole person and our unconditional service to people of all faiths, cultures and circumstances."

Building on a 146-year legacy of service, Covenant Health brings together 16 Catholic facilities in 11 communities across Alberta. For more information, visit www.CovenantHealth.ca

Covenant Health
Compassionate care led by Catholic values

Covenant Health Research goes Digital

The last issue of Caritas Research marked our first foray into the new digital-only format. Since joining the burgeoning trend towards environmentally friendly forms of communication, the Covenant Health Research Centre (CHRC) has realized additional benefits in reduced costs to deliver a full color publication with an enlarged capacity for text and photographs.

Although we no longer provide a print version, two versions of the publication are available; a high resolution version intended for those who prefer to print the .pdf on their own printer, and a low resolution available for quicker download times.

An archive of all Caritas Research publications issued from November 2002 to current issues is available on the website at: www.caritas.ab.ca/Home/Research/NewsandEvents/Research+Newsletter+2.htm

If you have a comment about this issue or if you are interested in submitting an article, paper, abstract, photograph or notice, etc., please contact Mary-Ann Clarkes at 780.735.2274 or email: caritasrsearch@caritas.cha.ab.ca

In This Issue

Production Notes

Caritas Hospitals Foundation

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Researcher Profiles

L to R: Dr. Ingrid de Kock; Dr. Mehrnoush Mirhosseini; Dr. Sarah Burton-MacLeod

Dr. Ingrid de Kock joined the Regional Palliative Care Program in the Capital Health Region in July 2000, after completing a Fellowship in Palliative Care Medicine at the University of Ottawa. As Palliative Care Physician with the Regional Palliative Care Program she provides consulting services to the community, acute care hospitals, Edmonton hospices and long-term care facilities. She has a strong clinical focus and is involved in teaching and research activities of the Division of Palliative Care Medicine in the capacity of Assistant Clinical Professor. Her research focus is on the role of marijuana in Palliative Care Medicine, sexuality in Palliative Care, and aspects of opioid use in cancer patients. She is involved with the development and maintenance of the Palliative.org web site and Palliative Care Rounds.

Dr. Mehrnoush (Noush) Mirhosseini is a member of Community Consult Team with Regional Palliative Care Program (RPCP). Dr. Mirhosseini was appointed as an Assistant Clinical Professor in the Division of Palliative Medicine in 2006. She collaborated with RPCP in 2004 and 2005 as a locum palliative care consultant. Dr. Mirhosseini completed her residency in Palliative Care Medicine and Family Medicine at the University of Alberta in 2004 and 2001-2003 respectively. She graduated from University of Tehran in 1984 and completed Diagnostic radiology training and fellowship in Ultrasound in 1989. She practiced Diagnostic radiology for 6 years prior to immigration to Canada in 1996.

Dr. Mirhosseini has a special interest in research which specifically includes management of lymphedema in advanced cancer patients as well as prediction of survival in this population.

Dr. Sarah Burton-MacLeod was delighted to join the Community Consult Team of the Regional Palliative Care Program in 2006. She is a graduate of Dalhousie University Medical School (2002) and completed her Family Medicine Residency as well as a Residency in Palliative Medicine through the University of Alberta (in 2004 and 2005 respectively). She worked on the Palliative Care Unit at Elisabeth Bruyere Hospital in Ottawa prior to joining the Community Team in Edmonton. Dr. Burton-MacLeod was appointed as an Assistant Clinical Professor in the Division of Palliative Care Medicine in December of 2007. Her areas of interest include both pre and postgraduate education in palliative care.

Comparison of the Prognostic Accuracy of Clinician Prediction and Four Clinical Assessment Tools in Predicting Survival of Terminally Ill Patients in Different Palliative Care Settings: Preliminary Data

Authors: Mehrnoush Mirhosseini; Ingrid de Kock; Hue Quan; Francis Ho; Francis Lau

Background: For patients with life-limiting illness, accurate survival prediction is often important for decision-making regarding goals of care, treatment options and dealing with closure on personal family matters. Predicting prognosis and survival of palliative patients is a challenging aspect of palliative care practice. Clinicians use assessment tools to facilitate this process. The most commonly mentioned tools in

the literature include functional tools and prognostic tools. Most commonly iterated functional tools include Palliative Performance Scale (PPS), Eastern Cooperative Oncology Group Performance Status (ECOG) and Karnofsky performances scale (KPS). The most commonly mentioned validated prognostic tools include Palliative Prognostic Scale (PaP), Palliative Prognostic Index (PPI).

Research question: Our overall question is whether the accuracy of clinician prediction of survival of terminally ill patients can be improved by using prognostic tools in different palliative care settings. We also aim to answer these questions: A) Are PaP and PPI comparable in prognostic accuracy? B) Can PPS be used as a prognostic index tool in survival prediction? C) Can PPS and ECOG be used interchangeably with each other? D) Are the functional status tools (PPS and ECOG) comparable with the prognostic index tools (PPI) in survival prediction? E) How does CPS compare when used with and without the prognostic tools?

Methods: Clinical data, as a part of the initial consultation, is routinely collected on all palliative patients referred to the Palliative Care Community Consultation Service at the Edmonton Regional Palliative Care Program. In collaboration with the University of Victoria, we are conducting a pilot study to use this data to complete the four tools (PaP, PPI, PPS, and ECOG) via a teleform. The data will be condensed for a period of one year (December 2007- December 2008). A follow up period to acquire the actual survival of the recruited patients is planned subsequent to closure of the study.

Results: The preliminary results on the first eight months of data collection indicate that we have recruited 323 patients up to Aug 21/08. Of these patients,189 (58%) are deceased. Cancer diagnosis was present in 89.5% of the patients. The most common primary cancer diagnosis were lung and gastrointestinal. Patients' survival were longest in the acute care setting and the lowest median survival was shared by patients in long term care facilities and at home (Mean survival was higher in patients at home). So far the data shows that decreasing PPS percentage indicates worst survival (this does not apply to PPS of 80% due to small sample size). The results pertaining to PPS are statistically significant. Despite incomplete data set, statistically significant results indicate that ECOG levels correlate with patients' survival. There are linear relationships between PPS and KPS (positive linear relationship) as well as PPS and ECOG (negative linear relationship). Despite the incomplete data set and small cohort up to present, the prognostic value of the different levels of PaP and PPI were statistically significant. It is hard to comment on the accuracy of the clinician prediction of survival (CPS) since at the present the actual survival for all the recruited patients is not available.

Conclusion: This pilot study will be combined with other multi-site data to strengthen the availability of accurate and timely prognostication information for palliative care patients, their families and the health care providers charged with their care.

Administration of Subcutaneous Potassium Infusion in Advanced Cancer Patients

Authors: Sarah Burton-MacLeod MD, CCFP; Ingrid de Kock MBChB, DA, (SA); Laura Hager BSc (Pharm); Monique Bielech BSc(Pharm); Joan Faily MD, CCFP; Mehrnoush Mirhosseini MD, CCFP

Background: Hypokalemia is commonly encountered across all medical settings, including Palliative Care. Depending on the goals of care and the clinical situation, hypokalemia is treated to prevent serious symptomatology. The use of subcutaneous potassium infusion is closely related to that of hypodermoclysis ("clysis") and there are only anecdotal reports of their use prior to 1982. The majority of subsequent data mentions the subcutaneous use of potassium only as secondary outcome in a mixed population. The

Regional Palliative Care Program has now accumulated several years of experience using potassium administered via clysis. We now consider it standard practice. To contribute to the evidence base for best clinical practice, we have conducted a chart review of all patients admitted to a tertiary palliative care unit and a hospice unit over a one-year period between January and December, 2006. In collecting data pertaining to the provision of subcutaneous administration of potassium, we have described the frequency, dose, side-effects, tolerability and effect on serum potassium values.

Methods: We collected data regarding patients' age and diagnosis, presence and severity of hypokalemia and, if present, whether or not it was treated using potassium chloride via clysis. If it was treated in this manner, pre and post infusion potassium levels were collected, as well as duration of treatment, dosage of potassium chloride, rate of infusion and type of clysis fluid. Additionally, information on any adverse reactions to KCl via clysis was collected.

Results: A total of 212 charts were reviewed between the two sites, where 26% of the patients had hypokalemia. Overall 38% of these episodes were treated . The average duration of treatment with KCl via clysis was 11.4 days. In the majority (85%) of episodes, normal saline was used as clysis fluid. The remainder used 2/3 1/3. The most common infusion rate was 60cc/hr with a maximum of 80 cc/hr and the most common dose of KCl used was 20mmol/L (range of 10 to 40 mmol/L). Paired t-tests between pre-infusion levels and post-infusion potassium levels showed a significant difference (p-value < 0.0001). Of the 26 potassium chloride infusions, only four led to adverse site reactions. One developed pain at the infusion site, while in the other three cases either leaking or pooling at the site was noted. There were no reports of either redness or development of infection at the site.

Conclusion: This is the first study to show that administration of KCl via clysis is a well-tolerated method to correct mild to moderate hypokalemia in Palliative care population

Prevalence and Characteristics of Lower Extremity Edema in Advanced Cancer Patients

Authors: Mehrnoush Mirhosseini, Division Of Palliative Medicine, Department Of Oncology, University Of Alberta, Edmonton; Ingrid De Kock, Division Of Palliative Medicine, Department Of Oncology, University Of Alberta, Edmonton

Background: Review of the literature provides little specific data on leg edema in the advanced cancer population, yet in our experience, this is a commonly encountered symptom in clinical palliative care practice. Leg edema has a significant impact on physical function, which leads to further morbidity, anxiety and feelings of being a burden. The previously described treatment options are specifically focused on swelling due to lymph edema. Literature regarding the treatment of lower extremity edema due to other reasons is almost non-existent.

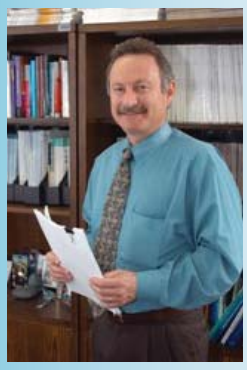
Methodology: As a part of designing a prospective study to investigate the old and renewed technique of subcutaneous controlled drainage of lower limb edema, we have looked at the prevalence and clinical presentation of lower leg edema. We conducted a chart review of all patients admitted to a tertiary palliative care unit (TPCU) and a hospice unit between January 1 and December 31, 2006. Other than assessing the prevalence and clinical presentation of documented lower leg edema, we also paid attention to any explored therapy options.

Results: The total cohort included 351 patients. The edema was present in 61.2% of TPCU patients and 65.2% of hospice patients. The cohort showed the prevalence of edema to be 63.5 % which is

statistically significant (CI 95%, 58.5-68.5%) but there was no significant statistical difference between the prevalence of edema in the TPCU versus hospice setting. Of the 223 patients with edema, 92.4% suffered from bilateral edema and 7.6% had unilateral swelling. 18 male patients also had scrotal and penile edema. Additional signs or symptoms associated with the lower extremity edema included, redness in19.7%, ulceration in 8.5%, blistering in 4.5%, weeping in15.6%, cellulites in 3.1%, and pain in 9% of the patients (the prevalence of the additional signs and symptoms associated with LEE were not statistically significant). In term of provided interventions and managements for edema, 89.7% did not receive any treatment. The most commonly used management was compression stockings (6.7%) and the other offered treatments included diuretics, physiotherapy, and subcutaneous drainage. Leg wrapping were rarely used.

Conclusion: This study, to our knowledge, provides the only existing evidence that demonstrates the high prevalence of lower extremity edema in advanced cancer patients in tertiary palliative care and hospice settings. Future prospective studies are required to address this common clinical symptom and its treatment options.

Researcher Profile



Dr. Robin Fainsinger graduated from the University of Cape Town in South Africa in 1981. In 1991, he completed the first fellowship in palliative medicine at the University of Alberta in Edmonton, Canada. He continues to reside in Edmonton where he was Director of the Palliative Care Program at the Royal Alexandra Hospital from October 1994 – April 2006. He is the Director of the Tertiary Palliative Care Unit at the Grey Nuns Hospital, Director of the Division of Palliative Care Medicine in the Dept of Oncology, and Clinical Director for the Alberta Health Services – Edmonton Regional Palliative Care Program. He is a Professor in the Division of Palliative Care Medicine, Department of Oncology at the University of Alberta. He is active in education and research, and has published articles on a number of palliative care topics, with an interest in dehydration, delirium, sedation at the end of life, and a classification system for cancer pain. He has over 150 publications in journals and book chapters.

Intermittent Subcutaneous Opioids for the Management of Cancer Pain - Abstract

Henrique A. Parsons, MD[1]; Abdul Shukkoor, MD[2]; Hue Quan, MSc[3]; Marvin O. Delgado-Guay, MD[1]; J. Lynn Palmer, PhD[1]; Robin Fainsinger, MD[2,3]; Eduardo Bruera, MD[1]. 1 Department of Palliative Care and Rehabilitation Medicine, University of Texas M.D. Anderson Cancer Center; 2Division of Palliative Care Medicine, Department of Oncology, University of Alberta, Edmonton, Alberta, Canada; 3 Capital Health Regional Palliative Care Program, Edmonton, Alberta, Canada

Introduction: Opioids are the mainstream treatment for cancer pain. When the oral route is unavailable, the most common alternative is the expensive continuous intravenous infusion. Intermittent subcutaneous (ISC) opioid administration is less expensive and a potential alternative. The purpose of this study was to determine the safety and effectiveness of ISC opioids for the management of cancer pain.

Methods: Retrospective review of 552 consecutive admissions to a palliative care unit. Data was collected for all patients who needed parenteral opioids. In patients receiving ISC, demographics, injection sites (localization, side effects, and duration) and opioids

(types, daily doses, and costs) were reviewed. Costs per milligram were determined and corrected according to relative potency to morphine. ISC was considered successful if it was discontinued in favor of the oral or transdermal route, or continued until death. All patients used the Edmonton Injector, an inexpensive mechanical device to deliver ISC opioids.

Results: 352/552(63%) admissions required parenteral opioids, and 301/352(86%) used ISC. 53% were female, mean age(range) was 61(19-97) years, and the most frequent diagnosis were thoracic(28%), gastrointestinal(18%), urological(11%), and breast(11%) cancers. The success rate was 88 %(266/301). The average (SD) duration of ISC was 14(11) days, number of sites was 2(2), and site duration 8(11) days. The most frequent site was the arm (61%). The most frequent reasons for site change were local redness (20%), bleeding (8%), and leakage(5%). Side effects and site duration did not significantly correlate with site location or opioid. The average potency-corrected (SD) drug cost was CDN$3.49(5.16) significantly lower for methadone, CDN$0.29(0.22).

Conclusions: ISC opioid administration is a safe, effective, and inexpensive cancer pain management modality. It is particularly interesting in financial resource-scarce areas, because of its very low cost and easy management.

This article is currently in press with the Journal of Palliative Medicine.

Researcher Profiles

Dr Sherrill Conroy RN is a member of the Faculty of Nursing, University of Alberta. Her doctoral work at the University of Oxford investigated teaching and learning ethics in healthcare professions. She worked in child health for many years with a continuous concern for the growing size of today's children resulting in research interests in childhood obesity prevention. She uses interpretive inquiry and participatory action research to understand children's and parents' experience with under- and over-nutrition during pregnancy and the growing years. Dr Conroy is concerned about how adverse social determinants of health and government policies could adversely affect maternal and child health in relation to obesity. She is interested in helping children, parents and communities to take positive self-directed actions grounded in equity and social justice for improved health.

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.

The link between infant size and later obesity: A pilot study of mothers' understandings of this link in relation to received guidance

Authors: Dr Sherrill Conroy, University of Alberta, Faculty of Nursing; Dr Lola Baydala, Associate Professor of Pediatrics, Misericordia Children's Health Centre and the University of Alberta

Adult and childhood obesity in Canada and worldwide has reached epidemic proportions–a sobering thought when we know that obesity gives rise to many associated co-morbidities that place demands on quality of life, homecare and acute hospital beds. It occurs in a complex multidimensional environment affected by social determinants of health. This disease burden contributes to mortality at an earlier age. It is well documented that obesity in adults and children has some of its origins during gestation and in early infancy, particularly in those infants weighing less than 2500 grams or over 4000 grams.

The purpose of this research project was to hear mothers' experience with healthcare professionals advice about diet, exercise and possible obesity. Qualitative conversations were carried out from October, 2007 to October 2008 with patients from the Misericordia Children's Health Centre with generous funding from Covenant Health Research Centre. We listened to 9 mothers whose infants weighed between 4000 grams to 4900 grams. **Consistently, these mothers shared that no health professionals had spoken with them during pregnancy or in the first eight months of their infants' lives specifically about diet and exercise or about possible links with infant size to later obesity.** This is of great concern if health professionals are serious about obesity prevention during two early critical periods in life when the trajectory towards obesity may start.

After receiving ethics approvals, mothers were recruited through information letters handed out thanks to Janet Wass, RN on 4E or in the Misericordia Children's Health Centre to potential recruits whose infants met the above criteria. Successful recruitment required personal contact on 4E with the researcher. Posters about the study were placed in the Misericordia Children's Health Centre and in various places throughout the hospital. Of the 19 mothers approached, 9 agreed to a conversation in their homes with the researcher about their experience with professionals' advice during pregnancy and early infancy of their child. Unfortunately, two other eligible families lived outside the study catchment area (i.e., NWT and Camrose). Others found themselves too busy with new infants to participate in the study. Three infants did not fall within the criteria of ≥ 4000 grams or ≤2500 grams birth weight, in spite of parents' interest. Nonetheless, they verbally indicated spontaneously that they had not received advice from professionals about diet, exercise or the possibility of infant size affecting their child's later prospects of obesity. These low to midlevel income mothers were interested in their children's health sufficiently to care about diet and nutrition regardless of family income.

Statistics:

Infants: 6 males: 3 females.

Term birth weight: 2 X 4000 grams; 3 X 4010-4020 grams; 1 X 4435 grams; 1 X 4240 grams; 1 X 4500grams; 1 X 5400grams.

Two mothers had well controlled gestational diabetes with no history of diabetes before or after gestation.

Income level: Mothers alone - $0-30,000; $35,000-70,000; Family incomes $10,000 –200,000.

Maternal ages: 26-34 years.

Maternal educational level achieved: ≥ grade eight (1); high school (1);College (4); University (3)

Maternal pre-pregnant self-reported BMI: according to CDC acceptable range 19.1-27.3 range - (women) – 5 mothers (mean = 23.2 BMI); overweight CDC range ≥ 27.3 – (2 - mean = 28.95 BMI); (severe overweight ≥ 32.3) – 1 mother @ BMI of 40; 1 unavailable

Recommendations: All mothers should receive information during pregnancy and their child's infancy about diet and exercise for themselves and their infants. Prior to conception, women of all ages and incomes in the under- or overweight categories need to be screened for BMI and waist-height ratio while remaining aware of women's sensitivity about being perceived as fat or too thin. Counseling about pre-pregnancy weight reduction is a viable option. The trend is to obesity, fast food diets, and lax exercise habits especially in Albertan cold weather, inhibiting mothers from walking in adverse weather with young children. Health professionals must seriously consider providing solid health advice to all mothers related to diet and exercise regardless of income or educational levels. We should not rely on relatives or friends to provide that information. Canada's Food and Exercise guide should be made available to all pregnant women and discussed on a regular basis. These mothers were interested in providing a healthy environment for their children. Nonetheless, in these tough economic times we cannot leave them without up-to-date information about healthy choices.

References available upon request.

Researcher Profile

Carrie Chamberland began her career as a Registered Nurse in 1981. After working in Medicine for 2 years and ICU/CCU for 8 years, she transferred to emergency nursing in 1991 and has worked in the ER at both the Charles Camsell Hospital and the Royal Alexandra Hospital. Carrie has been the Coordinator for the P.A.R.T.Y. Program since November 2001.

Empowering Youth to Make the Safe Choice - A Program Improvement Survey of the P.A.R.T.Y. (Prevent Alcohol and Risk Related Trauma in Youth) Edmonton Program

Researcher: Carrie Chamberland

A program improvement study was designed to assess the extent to which participation in the P.A.R.T.Y. Program (Prevent Alcohol and Risk Related Trauma in Youth) at the Misericordia Hospital leads to increased knowledge as well as changed attitudes or behaviors regarding risk-taking and risk-prevention among grade 9 students. To this end, a descriptive-comparative study was conducted with data collected through a series of anonymous surveys completed by students who attended a P.A.R.T.Y. program at the Misericordia Hospital in the fall of 2007.

The surveys were administered immediately prior to and then one week after and one month after the one-day program was completed. The surveys compared the students' knowledge, behavior, and attitudes toward risk-taking and risk-prevention in a pre-post comparative fashion. All data were entered into a spreadsheet, and examined using descriptive-

comparative statistical procedures available through the SPSS computer program. Data from 385 surveys were included in this analysis (i.e. 140 pre-program surveys, 123 one-week post-program surveys, and 122 one-month post-program surveys).

The surveys reveal that students had a high level of risk-taking and risk-prevention knowledge prior to the program. Statistically different numbers pre-program to one week post-program were found for 3 of 8 knowledge questions, 1 of 2 behavior questions, and 3 of 8, all which were improvements. These changes remained stable from the one week post-program point to the one month post-program point. Only one behavior question was found to have had a significant decrease in student ratings from one week to one month post-program, with this a possible outcome of missing data or random chance.

The findings reveal an increase or improvement in youth knowledge, behavior, and attitudes towards risk prevention and risk-taking that was maintained over a short time frame. Larger scale research must be conducted to determine if changes in youth knowledge, behavior, and attitudes toward risk-taking and risk-prevention persist over longer periods of time. Regardless, this study highlights the importance of community-based efforts to minimize risk-taking and risky behavior among adolescents.

Acknowledgement: Research funding for these studies from Covenant Health is gratefully acknowledged.

Researcher Profiles

L to R: Geniene Stokowski, Denise Steel

Geniene Stokowski received her diploma in 1999 and then finished her degree in 2007 at the University of Alberta. She has worked in ICU for several years. In 2006 she became part of the IV therapy department as a clinical nurse educator and is currently working on projects related to IV therapy.

Denise Steele developed the PICC program at the Misericordia Community Hospital in 1994. As a Clinical Nurse Educator she is actively involved in patient safety initiatives and education related to IV therapy. She is currently completing her degree in Nursing.

A Program Evaluation of RN PICC Placement Practices and Patient Outcomes

Researchers: Geniene Stokowski, and Denise Steele

Abstract: A program evaluation study for quality improvement purposes was designed to compare complication rates for two different methods of peripherally-inserted central catheter (PICC) insertion by registered nurses. The first method was locating anatomical landmarks and using palpation to insert PICC lines into veins in the antecubital fossa (bend in the arm) and the second method was

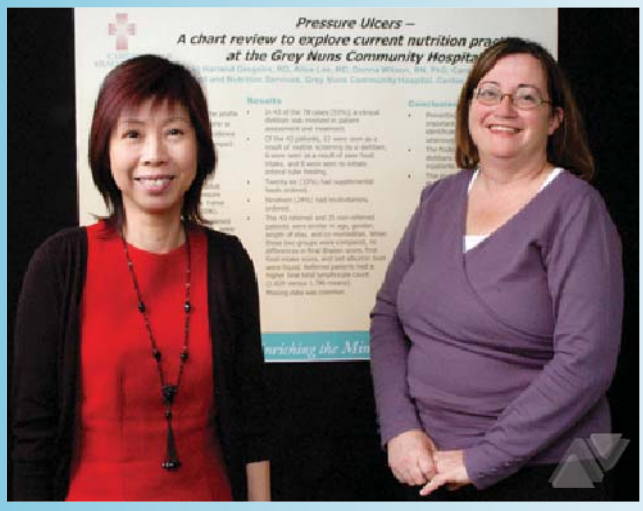
where PICC lines are inserted higher in the arm using ultrasound-guidance. The relationship between thrombosis rates and each procedure was analyzed. The study was also undertaken to determine patient comfort levels with the new placement site for the PICC line (mid upper arm) with the old placement site (antecubital fossa).

This study involved a retrospective secondary data analysis study of routinely collected data on all inpatient hospital and outpatients who had a peripherally inserted central catheter during a two-year time frame (January 2006 to December 2007) at the Misericordia Hospital. A total of 538 patients about whom data had been collected at follow-up were included in the analysis. Data were entered into a spreadsheet, and examined using descriptive-comparative statistical procedures available through the SPSS computer program.

The findings of the analysis revealed that thrombosis incidence rates were considerably reduced when RNs began using ultrasound guidance to locate an appropriate vein to insert PICC lines, as opposed to inserting PICC lines using the palpation method. The overall DVT rate decreased from 9.3% using palpation to 1.9% using ultrasound. Due to data limitations, patient comfort level with the new placement site for the PICC line in the mid upper arm with the old placement site at the bend of the arm could not be compared. After RNs began to insert PICCs using the ultrasound method, RN placed PICC lines increased from 76.9% to 98.7% of all PICC insertions. The number of PICC line insertions also increased by 30% from 2006 to 2007.

The findings of this evaluation study add to a growing body of research that describes evaluation studies or another type of research investigation undertaken on ultrasound-guided PICC placement. The change in PICC insertion practice from the palpation method to using ultrasound guidance method has reduced the incidence of PICC related upper extremity deep vein thrombosis.

Researcher Profiles



L to R: Alice Lee; Mary Jo Harland Gregoire

Alice Lee has been a clinical dietitian with Covenant Health for over 20 years covering many clinical programs. She became a Program Leader for Nutrition Services, Grey Nuns and Misericordia in 2006. Alice is always interested in practice-based research, her last endeavor was “The Mystery of the Elevated Lipase", a study of the unexplained lipase rise in ICU patients in 2001.

Mary Jo Harland Gregoire is a Clinical Dietitian with 24 years experience, 20 of which have been at Covenant Health. She is currently working in the surgery area which involves assessment of nutritional requirements for surgical patients, including parenteral and enteral nutrition. Past clinical experiences include palliative care, medicine, outpatients, neonatal nutrition and cardiac nutrition. Research involvement has always been focused on practice based research including the publication of an article on Nutrition Screening in the Family Practice setting in Dietetic Practice and Research. Current research is now focused on the Nutrition Intervention in Pressure Ulcer prevention and also on Prevalence and Incidence Studies.

Pressure Ulcers – A Chart Review to Explore Current Nutrition Practices at the Grey Nuns Community Hospital

Researchers: Mary Jo Harland Gregoire and Alice Lee

Abstract: A descriptive-comparative study was designed to examine the profile of hospital inpatients who were diagnosed with one or more pressure ulcers, as well as the incidence of referral to Dietitians and the impact of their nutritional support practices. After ethics and administrative approvals were obtained, and Covenant Health funding secured, a retrospective chart audit of adult inpatient charts that were coded for pressure ulcers over a one-year time frame (April 1, 2005 through March 31, 2006) was implemented at the Grey Nuns Hospital. Among all 8,000 charts for inpatients that year, 78 were coded with one or more pressure ulcers. Data from these 78 charts were entered into a spreadsheet and examined using descriptive-comparative statistical procedures available through the SPSS computer program.

In 43 of the 78 cases (55%), a Dietitian was involved in the care of the patient. As such, in nearly half of all cases, Dietitians were not involved in assessing or addressing the nutritional state of these patients. Of the 43 patients who were seen by a Dietitian, 12 were seen as a result of routine screening by dietary staff, 6 were referred to Dietary due to low food intake, 7 were seen by a Dietitian in response to tube feeding orders, and 18 more were seen by Dietitians for largely unrecorded reasons. In contrast, among these 78 patients, 51 (65.4%) were referred to a Wound Care Nurse.

Among all 78 patients, 45 (57.7%) had a sacral/coccyx ulcer, 23 (29.5%) died in hospital, the average age was 72.8 (median =76.5, range 22-95), 64.1% were admitted from home, and 65.4% were male. Their average hospital stay was 33.9 days (median=21 days) in length.

The 43 referred to a Dietitian and 35 other patients were similar in age, gender, length of stay, and co-morbidities. When the two groups were compared, no differences in final Braden score, final food intake score, and last albumin level were found. Referred patients, however, had a higher final total lymphocyte count (1.829 versus 1.796 means). Missing data were common, unfortunately obscuring other possible information on the outcomes of referral to a Dietitian.

In conclusion, preventing pressure ulcers is very important, as is rapid identification and management whenever they occur. Although pressure ulcers are common, few are coded as such in hospital charts. This study also found Dietitians are not always involved when patients develop pressure ulcers. Unfortunately, this study was not able to outline the impact of involving Dietitians in the care of what is likely to be nutritionally-compromised patients. Patients need multidisciplinary team-based care, with each team member contributing to enhance patient care. Dietitians could assist this team by developing Nutritional Standards of Practice, and they need to continue to conduct research to illustrate the outcomes that occur through their involvement.

Covenant Health Nurse Scientist News

Covenant Health Research Really Matters

Since September of 2005, Donna Wilson, a Professor in the Faculty of Nursing at the University of Alberta, has worked in a part-time joint appointment arrangement as Covenant Health Nurse Scientist. Among other activities aimed at fostering evidence-based practice and advancements in the care of senior citizens, she assists Covenant Health individuals and teams who want to do a research study. Three such studies have been completed over the past year! A summary of each of these worthwhile and interesting studies is provided below.

Each of these studies occurred because one or two people had a question or a concern that would be best answered by a new research study. Some questions or concerns can be answered by past research studies, but past research may not always apply to the question or concern that exists today. Past research could have been done in another country with a different healthcare system affecting the research findings or many years ago when times were different. Although research is not always the answer to a problem, and research does not always supply answers, the information that comes from research studies has credibility.

This credibility is because of the care that is taken to plan the study, conduct it, analyze the findings until the researchers are certain about these findings, and with care also taken to write a report that accurately and honestly presents these findings.

Research studies also require careful planning to collect good information and assess it appropriately, with ethical implications and protections needing to be considered in advance. The thought of doing research when you have never done it before can be daunting, but Covenant Health is unique among other health care groups, as they have a Nurse Scientist to help with all stages of a research study. Someone who has done research before can be a guide or even an active partner. The following study reports show how important it is to do research. The Pressure Ulcers study completed earlier this year has already led to some important practice changes, changes to benefit Covenant Health patients and staff. The PICC RN study confirmed that a change in practice was safe, humane, and also cost-effective. The PARTY study showed that a Covenant Health injury-prevention program for teens or pre-teens is effective at changing attitudes and beliefs about their risks and responsibilities for preventing injuries. Each study is extremely valuable for the credible and useful information that it gained.

Donna Wilson, RN, PhD
Covenant Health Nurse Scientist and
Full Professor – University of Alberta

Upcoming Workshops & Events

The Covenant Health Research Centre and the Pediatric Environmental Health Specialty Unit present:

"How Local Research can Influence Policy and Practice"
a Maternal Infant-Child Health and Environment Research Symposium

Thursday, 2009, February 26th – 08:00-17:00 hrs;

to be held at the University of Alberta, Lister Conference Centre.

This Symposium will bring together an inter-disciplinary group of government agencies, local Alberta and international researchers as well as practitioners for a day of presentations, reference groups and discussion. All meals and refreshments will be provided.

There are no fees for Covenant Health staff, physicians, practitioners and researchers. Pre-registration is REQUIRED as space is limited. For further information or to register, please contact Mary-Ann Clarkes at 780.735.2274 or via email at caritasrsearch@caritas.cha.ab.ca

The Covenant Health Research Centre announces a Workshop Series Presentation:

"De-Mystifying Research Ethics, Grant and Administrative Application Processes"
by Judith Abbott,
Health Research Ethics Board (HREB) and
Donna Wilson, Covenant Health Nurse Scientist

Wednesday, March 4th, 2009, 09:00-12:00hrs

Classroom 0651, Grey Nuns Community Hospital

This workshop will be of interest to individuals who require a better understanding of HREB and their application process. Information regarding the new HERO on-line system will be presented. Another focus of this workshop is to provide instruction on successful proposal writing for both funding and administrative/operational approvals.

There is no charge for this workshop. To register, contact Mary-Ann Clarkes at 780.735.2274 or via email: caritasrsearch@caritas.cha.ab.ca

Learning Resources - MCH

Audio VisuAl Services

Audio Visual Services has moved into its new home in the Weinlos Library. The Weinlos Library has a new, clean look. Watch for the announcement of an Open House to celebrate these new and exciting changes.

Library Services

Up-to-Date – an online, evidence-based, peer-reviewed health information resource is now available in Covenant Health Libraries:

Grey Nuns Health Sciences Library, Mon-Fri, 8:00 a.m. – 4:15 p.m.

Misericordia Weinlos Library Mon-Fri, 8:15 a.m. – 4:30 p.m.