CANNT JOURNAL
JOURNAL ACITN

Volume 19, Issue 1 January–March 2009

IN THIS ISSUE:

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CANNT JOURNAL
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The CANNT Journal
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Website: www.cannt.ca

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Letter from the Editor: Gillian Brunier

Recognition of excellence

We are thrilled to be able to profile all 17 of the CANNT 2008 award winners in this issue of the **CANNT Journal** (pages 52 to 60). Please take a moment out of your busy day to read the profiles of the award winners from across the country and take another moment to reflect on the accomplishments these nurses and technologists have achieved in spite of their busy days. We are very proud at CANNT to have such a large number of award winners, with such wide-ranging accomplishments.

Also in this issue of the **CANNT Journal,** we publish the results of a survey of Canadian nephrology nurses funded through a 2006 CANNT research grant. The investigators of the study are Jane Ridley and her colleagues at the London Health Sciences Centre, London, Ontario, and the University of Western Ontario. Their study is entitled: "Work environment, health outcomes, and magnet hospital traits in the Canadian nephrology nursing scene." If you have been a member of CANNT for the last few years, you may have completed a survey sent out by Jane and her colleagues to CANNT members across the country to obtain information for this study. If you want to understand more about the traits of magnet hospitals and how our Canadian nephrology workplaces measure up to these standards, read the report of their excellent study.

The second article in this issue is by Sue Young, Clinical Nurse Specialist in Nephrology at Providence Health Care—St. Paul's Hospital Renal Program, Vancouver, British Columbia. Sue received the CANNT 2008 Manuscript Award for her article entitled, "Rethinking and integrating nephrology palliative care: A nephrology nursing perspective." If you attended the most recent CANNT conference in Quebec City, you would have had the opportunity to hear Sue speak on how, with our aging dialysis population, we can best integrate the two fields of nephrology and palliative care, and what our role should be.

You should read Sue Young's article on nephrology palliative care together with Lee Beliveau's Bedside Matters column in this issue on "Picking up on the cues." Lee gives us a very personal glimpse at how a nephrology nurse at the bedside can integrate nephrology care with palliative care. The website Lee mentions at Fraser Health has some excellent materials on advance care planning for you to look at.

In her regular column for the **CANNT Journal,** Pharmacy News and Reviews, Jennifer Ryan keeps us up to date with two medications recently made available in Canada: one medication is for management of hypertension and the other is for management of type 2 diabetes. You need to be aware of how these agents work and potential side effects for your patients with chronic kidney disease.

Finally, take note of some of the deadlines listed in this issue of the **CANNT Journal** for submitting abstracts to CANNT 2009 in St. John, New Brunswick (see pages 24 to 25), for submitting nominations for CANNT (see page 61) and for submitting for CANNT awards and bursaries (see page 8). Mark these deadlines in your calendar and plan to make your contribution to recognizing excellence in 2009!

Reconnaître l'excellence

C'est avec un immense plaisir que nous avons tracé le profil des dix-sept lauréats qui ont remporté les Prix d'excellence de 2008 de l'ACITN/CANNT dans ce numéro du **Journal de l'ACITN/CANNT** (pages 52 à 60). Prenez quelques minutes de votre précieux temps pour lire les différents profils de ces gagnants répartis d'un bout à l'autre du pays et arrêtez-vous quelques instants pour vous pencher sur les réalisations que ces infirmières et technologues ont accomplies en dépit de leur horaire chargé. Nous sommes très fiers de compter un aussi grand nombre de lauréats ayant accompli des réalisations aussi diversifiées.

Dans ce numéro, nous publions également les résultats d'un sondage mené par des infirmières canadiennes en néphrologie et financé par une subvention à la recherche accordée par l'ACITN/CANNT en 2006. Les chercheuses de l'étude sont Jane Ridley et ses collègues du London Health Sciences Centre, à London, en Ontario et de la University of Western Ontario. Leur étude s'intitule « *Work environment, health outcomes, and magnet hospital traits in the Canadian nephrology nursing scene* » (Environnement de travail, résultats sur la santé et caractéristiques d'un hôpital-aimant dans la pratique des soins infirmiers en néphrologie au Canada). Si vous êtes membre de l'ACITN/CANNT depuis quelques années, vous avez peut-être rempli ce sondage envoyé par Jane et ses collègues à l'ensemble des membres de notre Association à l'échelle pancanadienne afin de recueillir de l'information pour cette étude. Si vous désirez en apprendre plus sur les caractéristiques des hôpitaux-aimants et sur la manière dont les milieux de travail en néphrologie au Canada sont évalués par rapport à ces normes, n'hésitez pas à lire le rapport de leur excellente étude.

Le deuxième article a été rédigé par Sue Young, infirmière clinique spécialisée en néphrologie à Providence Health Care—Programme de néphrologie du St. Paul's Hospital, à Vancouver, en Colombie-Britannique. Sue a reçu le Prix d'excellence du manuscrit de 2008 de l'ACITN/CANNT pour son article intitulé « *Rethinking and integrating nephrology palliative care: A nephrology nursing perspective* » (Un nouveau regard sur les soins palliatifs en néphrologie et leur intégration : Une perspective des soins infirmiers en néphrologie). Si vous avez assisté au dernier Congrès de l'ACITN/CANNT à Québec, vous avez eu la chance d'entendre Sue expliquer comment, avec une population vieillissante en dialyse, nous pouvons intégrer les soins néphrologiques aux soins palliatifs, et quel devrait être notre rôle.

Nous vous invitons à lire l'article de Sue Young sur les soins palliatifs en néphrologie ainsi que la rubrique de Lee Beliveau intitulée « Bedside Matters » (Au chevet des patients) portant sur l'interprétation des signaux. Lee nous donne un clin d'œil très personnel sur comment une infirmière en néphrologie au chevet d'un patient peut intégrer les soins néphrologiques aux soins palliatifs. Le site Web du Fraser Health, mentionné par Lee, vous offre d'excellents outils sur la planification avancée des soins que vous pouvez consulter.

Dans sa rubrique habituelle du **Journal de l'ACITN/CANNT**, intitulée « Pharmacy News and Reviews » (Revues et nouvelles en pharmacie), Jennifer Ryan nous renseigne sur deux médicaments qui sont offerts depuis peu au Canada : le premier médicament pour la prise en charge de l'hypertension et le second pour la maîtrise du diabète de type 2. Vous devez connaître le mode d'action de ces deux agents ainsi que leurs effets secondaires potentiels chez les patients atteints de maladie rénale chronique.

Enfin, veuillez prendre note des différentes dates d'échéance indiquées dans ce numéro de l'ACITN/CANNT pour soumettre des résumés de présentation en prévision du Congrès de 2009 à Saint John, au Nouveau-Brunswick (voir pages 26 à 27) ; pour déposer votre candidature au conseil d'administration de l'ACITN/CANNT (voir page 62) et pour recommander des candidats au Programme de prix et bourses de l'ACITN/CANNT (voir page 9). Portez ces dates d'échéance à votre agenda et contribuez à reconnaître l'excellence en 2009 !

Le Journal ACITN
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• **Voici les échéanciers à rencontrer pour soumettre des articles/nouvelles au journal :**
Janvier–mars – le 15 janvier,
pour publication le 15 mars
Avril–juin – le 15 avril,
pour publication le 15 juin
Juillet–septembre – le 15 juillet,
pour publication le 15 septembre
Octobre–décembre – le 15 octobre,
pour publication le 15 décembre
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Message from the President

Happy New Year and wishes for a healthy and wonderful 2009. It does not seem possible that 18 months have passed since a good friend said to me, "You should think about putting your name forward to be on the board of directors of CANNT." And it does not seem like a year since my first CANNT board of directors' meeting in Winnipeg. What a wonderful year it has been. A little overwhelming at times, however, I have met wonderful people and learned how much work goes on behind the scenes to make this organization work for all members.

It was a proud moment for me when I gave my first message as your CANNT president for 2008–2009 in Quebec City. To give this speech during our 40th anniversary celebrations made it even more special. I felt like I was a small part of something that is so huge in potential.

Anniversaries are often thought of in terms of unions, something to be celebrated and treasured. This definition can be used to describe CANNT and its membership. This organization is a union; a blending of nurses and technologists, experienced and new, all of us so varied in our interests and areas of practice. Our common goal is what binds us together; the provision of quality care to all of our patients. This is why I said yes to my friend 18 months ago.

The year 2008 took us to Quebec City for our 40th symposium to celebrate our anniversary and bring us together once again. The conference was a huge success, and special thanks go to the planning committee co-chairs Danielle Boucher and Liane Dumais, as well as the committee members: Diane Boisvert, Julie Dupont, Robert Haché, Lori Harwood, Julie Paquet and Chantal Saumure for the hard work they put into this conference to make it wonderful. Special thanks also to Heather Reid and the staff of Innovative Conferences and Communications for the tremendous effort they put into this conference. Debbie Maure, our Administrative Assistant, should also be given a medal for keeping the board on track. I think all would agree that the anniversary committee led by Faye Clarke deserves a round of applause. The 1,020 attendees helped us to celebrate our 40th anniversary, as well as hosting a record number of posters and presentations.

Plans are underway for the 2009 symposium in St John, New Brunswick, so block off October 15–18 and join CANNT for its 41st national symposium.

The board of directors will have its next meeting in Toronto in March, and will continue working on the strategic plan that will take us into the future. Some of the initiatives that were brought forward at the October symposium included the launching of the new CANNT website, formalization and expansion of the Refined Clinical Practice groups, launching of the Nursing Standards of Practice and the Technical Standards and the introduction of the Amgen Grants Program. Information on all of these is on the CANNT website, so log on and see what's available.

While you are on the website, consider looking at the call for nominations for the new BOD, which will be formed in the fall of 2009. The experience has been wonderful and I would whole-heartedly encourage you to think about joining the BOD.

Jan Baker, RN, BN, CNeph(C)
CANNT President

Message de la présidente

J'aimerais vous souhaiter une bonne et heureuse année et de la santé en 2009. Il y a à peine 18 mois—comme le temps passe vite—une bonne amie m'a suggéré de poser ma candidature au conseil d'administration de l'ACITN/CANNT. Et, c'est presque invraisemblable qu'une année se soit écoulée depuis ma première réunion à Winnipeg en tant que membre de ce conseil. Ce fut une année merveilleuse ! Parfois, je me suis sentie un peu débordée de travail, mais j'ai fait la connaissance de gens formidables et j'ai sais maintenant tout le travail qui est fait en arrière-scène pour faire travailler cette organisation pour l'ensemble de ses membres.

J'étais très fière le jour où j'ai prononcé mon premier discours à Québec en tant que présidente de l'ACITN/CANNT pour l'exercice de 2008–2009. Le fait de livrer ce discours durant les célébrations du 40e anniversaire de fondation de notre Association a rendu le moment encore plus exceptionnel. Je sentais que j'étais une infime partie de quelque chose de grandiose.

Quand on pense « anniversaire », on pense souvent à une réunion en famille, à un événement marquant qu'il faut célébrer et chérir. Cette définition peut également servir à décrire le lien particulier qui unit l'ACITN/CANNT et ses membres. Cette organisation représente une union en soi, une réunion d'infirmières, d'infirmiers et de technologues, expérimentés ou à leur début dans la profession. Tous autant que nous sommes, nous avons des champs d'intérêt et des domaines de pratique très diversifiés. Notre but commun est ce qui nous unit, nous réunit : la prestation de soins de qualité à tous nos patients. C'est précisément la raison qui m'a incitée à poser ma candidature, il y a 18 mois.

Notre Congrès annuel de 2008 nous a amenés dans la ville de Québec afin d'y célébrer notre 40e anniversaire de fondation et de nous réunir à nouveau. Le Congrès fut un immense succès. Je tiens à remercier les coprésidentes à la planification, Danielle Boucher et Liane Dumais, ainsi que les membres du comité organisateur, Diane Boisvert, Julie Dupont, Robert Haché, Lori Harwood, Julie Paquet et Chantal Saumure, pour tout le travail qu'ils ont accompli dans l'organisation de ce congrès extraordinaire. Je tiens également à remercier tout spécialement Heather Reid et son équipe à Innovative Conferences and Communications pour l'effort remarquable qu'elles ont déployé pour ce congrès. Debbie Maure, adjointe administrative, mérite également une médaille d'honneur pour avoir maintenu le conseil d'administration sur la bonne voie. Je crois que vous serez tous d'accord avec moi pour reconnaître que le comité des célébrations du 40e anniversaire de fondation, sous la direction de Faye Clarke, mérite une salve d'applaudissements. Les 1 020 participantes et participants au Congrès nous ont permis de célébrer en grand notre 40e anniversaire de fondation en présentant un nombre record d'affiches scientifiques et de communications orales.

L'organisation du Congrès de 2009, qui aura lieu à Saint John, au Nouveau-Brunswick, va bon train. N'oubliez pas de bloquer à votre agenda les dates du 15 au 18 octobre et de vous joindre à nous pour la tenue du 41e Congrès annuel de l'ACITN/CANNT.

Le conseil d'administration tiendra sa prochaine réunion à Toronto en mars et continuera de travailler sur le plan stratégique qui nous guidera pour les années à venir. Certaines des initiatives qui ont été mises de l'avant au Congrès de Québec incluaient l'inauguration du nouveau site Web de l'ACITN/CANNT, l'officialisation et l'expansion de groupes de discussion sur la pratique clinique, le lancement des normes de pratique infirmière et de pratique technique et la présentation du Programme de subventions d'Amgen. Vous trouverez de plus amples renseignements sur le site Web de l'ACITN/CANNT.

Lorsque vous consulterez le site Web, profitez de ce moment pour jeter un coup d'œil à notre appel de mises en candidature pour former le nouveau conseil d'administration à l'automne 2009. L'expérience est fantastique, et je vous encourage vivement à poser votre candidature.

Jan Baker, inf., B.Sc.inf., CNéph(C)
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CANNT Bursaries, Grants & Awards of Excellence

New for 2009!
Amgen Canada Travel, Research & Preceptorship/Mentorship Grants

Deadlines:

June 1, 2009: Amgen Grants

June 15, 2009:CANNT Awards of Excellence, Bursaries & Grant

This year, additional opportunities in awards, bursaries and grants are available to CANNT members.

Also, take the opportunity to recognize a colleague or two for their excellent and outstanding work in the field of nephrology nursing or technology. Nominate a fellow nephrology professional who makes a difference in your workplace. If selected they will receive verbal recognition at the CANNT Annual General Meeting in St. John, New Brunswick, a plaque to commemorate the award, and a monetary reward.

Go to **www.cannt.ca** for more detailed information about the opportunities available.

Bourses, subventions et prix d'excellence de l'ACITN/CANNT

Du nouveau pour 2009 !

Subventions d'Amgen Canada pour le déplacement, la recherche et le préceptorat/mentorat

Cette année, l'ACTIN/CANNT offre de nouveaux programmes de bourses, de subventions et de prix d'excellence à ses membres.

Nous vous invitons également à profiter de l'occasion pour reconnaître un ou deux collègues pour leur excellent travail et leur contribution exceptionnelle au domaine des soins infirmiers ou de la technologie en néphrologie. N'hésitez pas à soumettre la candidature de professionnels œuvrant en néphrologie qui font la différence dans votre milieu de travail—les lauréats recevront une reconnaissance verbale à l'Assemblée générale annuelle de l'ACITN/CANNT, qui aura lieu à Saint John, au Nouveau-Brunswick, ainsi qu'une plaque commémorative et une récompense en argent.

Allez à www.cannt.ca pour obtenir de plus amples renseignements sur les programmes offerts.

Dates limites des mises en candidature :

Le 1er juin 2009 : Subventions d'Amgen

Le 15 juin 2009 : Bourses, subventions et prix d'excellence de l'ACITN/CANNT

Regional reports
Rapports régionaux

Western Region (Marilyn Muir)

Greetings from the very, very cold western region! I trust everyone had a good holiday season, and now we are back in the swing of things. I appreciate the opportunity to represent the West, and am quite happy with the response from my unit liaisons despite this crazy weather and those lucky enough to be away on a winter vacation!

Manitoba

- Seven Oaks dialysis unit opened its home hemodialysis program in December 2008. There will be four stations, and two nurses have been hired.
- SOGH has hired a second renal educator, Giselle Roy. Janine Kemp has been hired as the new Vascular Access Nurse.
- The SOGH Hemodialysis Unit will be expanding in 2009.
- The Health Sciences Centre will also be expanding in 2009 by 10 stations.
- The home hemodialysis program continues to expand at HSC. There are currently 11 patients trained. HSC will also train its first nocturnal home hemodialysis patient in the next couple of months.
- HCS has welcomed Jennifer Taylor as a new Manager of Patient Care. She will work alongside Gillian Toth as the program continues to expand.
- Boundary Trails dialysis unit staff, patients and families were the winning unit in the annual Manitoba Renal Program's annual Renal Ride/Glide/Stride event in September. The unit raised more than $2,625.00 for the Manitoba Kidney Foundation.

Saskatchewan

- September 2008, the Saskatoon Renal Program formalized a dialysis access program, coordinated by a dialysis access clinician.
- The vascular surgeons in this program performed their first DRIL procedure January 2009.

Northern Alberta Renal Program

- Is proud to continue to provide nephrology services for the Edmonton area, as well as to communities outside of Edmonton.
- Following the success of the dialysis bus service and the diabetic nephropathy clinics, we now have a total of seven diabetic nephropathy clinics throughout northern Alberta.
- The first general nephrology clinic was offered this past December in Grand Prairie and Peace River, Alberta.
- This clinic provides non-urgent nephrology assessment and care to patients in their own communities. There are six other potential communities in Northern Alberta that are also looking into initiating these clinics.

Southern Alberta Renal Program

- The Southern Alberta Renal Program relocated to the new Sheldon Chumir Building. This move included the outpatient peritoneal dialysis program, outpatient clinics and community dialysis.
- We also welcome Laurel McDonough as our new Patient Care Manager.
- Gisele Scott-Woo has joined our care team in her pharmacist role.
- A renal wellness clinic is being created to address the basic needs of stage 3 patients. This clinic will be scheduled quarterly.
- The nocturnal hemodialysis self-care program is working very hard to offer patients an alternative self-care modality.
- Peritoneal dialysis is very close to launching its Cycler Assist Home Program.

BC Children's Hospital

- New multi-organ transplant program will be fully functioning with a multidisciplinary team for January 2009.
- A large group of multidisciplinary team members will be attending the annual dialysis conference in Houston, Texas, in March with two poster presentations and three oral presentations.
- RDU census on the rise.

St. Paul's Hospital Hemodialysis Unit

- SPH started training Licensed Practical Nurses (LPNs) for hemodialysis in the new year. The LPNs will start working in the community units.
- A provincial vascular access workshop is being developed. It will pilot in three units. St. Paul's Hospital will be one of them. SPH has adapted the workshop to incorporate vascular access competencies, and provincial recommendations of matching nurses' cannulation skill level to the degree of access difficulty.
- After the workshop, nurses will self-determine what skill level they are at, do a self-test, check in with the access coordinator or educator to review the test, and develop an education plan to assist the nurse in meeting the competencies.
- In January we did a trial of web-based provincial vascular access rounds for VA nurses, surgeons, nephrologists and radiologists. Challenging cases will be reviewed, for educational purposes.

St. Paul's CKD Clinic

- St Paul's CKD clinic will be opening a new clinic on January 16, called the Integrated Care Clinic, a kidney plus clinic. This clinic will see CKD patients with one or more of diabetes and heart disease.
- The clinic will have a nephrologist, alternating cardiologist and endocrinologist at the clinic and our usual complement of allied health staff, nurse, dietitian, social worker and pharmacist.
- The clinic will run weekly on Fridays and have a maximum of 200 patients.
- The goals of the clinic are:
  1. Improved coordination and access, and decreased waiting times for complex patients with kidney disease and one or more comorbidity.
  2. Integration of specialist visits resulting in more comprehensive, streamlined care.
  3. Improved communication and care plan coordination with the primary care provider.

Région de l'Ouest (Marilyn Muir)

Bonjour à toutes et à tous de la part de vos collègues de la région très, très froide de l'Ouest ! J'espère que vous avez passé de très belles fêtes. Nous devons maintenant nous remettre dans le bain ! J'apprécie la possibilité qui m'est donnée de représenter la région de l'Ouest et je suis très heureuse de la réponse de mes agentes et agents de liaison, malgré cette météo glaciale et ceux qui sont assez chanceux pour fuir l'hiver !

Manitoba

- La clinique de dialyse *Seven Oaks* a inauguré son Programme d'hémodialyse à domicile en décembre 2008. Il y a quatre postes de dialyse, et deux infirmières ont été embauchées.
- Le *Seven Oaks General Hospital* (SOGH) a embauché une deuxième éducatrice rénale, Giselle Roy, ainsi qu'une nouvelle infirmière en accès vasculaires, Janine Kemp.
- L'unité d'hémodialyse du SOGH prendra de l'expansion en 2009.
- Le *Health Sciences Centre* (HSC) prendra également de l'expansion en 2009 pour compter 10 postes de dialyse.
- Le Programme d'hémodialyse à domicile continue son expansion au HSC. À l'heure actuelle, nous avons formé 11 patients. Le HSC formera également le premier patient en hémodialyse nocturne à domicile dans quelques mois.
- Le HCS a accueilli dans son équipe Jennifer Taylor à titre de nouvelle gestionnaire des soins aux patients. Elle travaillera en étroite collaboration avec Gillian Toth à mesure que le programme prendra de l'expansion.
- L'unité de dialyse du *Boundry Trails Health Centre* a été l'unité gagnante du Programme de néphrologie du Manitoba dans le cadre de la Journée « *Ride/Glide/Slide* » (vélo, patins à roues alignées et course à pied) qui a eu lieu en septembre dernier grâce à la participation du personnel, des patients et de leurs familles qui ont réussi à ramasser plus de 2 625 $ pour la Fondation du rein du Manitoba.

Saskatchewan

- En septembre 2008, le Programme de néphrologie de Saskatoon a lancé son Programme d'accès pour la dialyse, coordonné par un clinicien en accès vasculaires pour la dialyse.
- Dans le cadre de ce programme, les chirurgiens vasculaires ont effectué leur première intervention avec la technique DRIL (technique de revascularisation distale par pontage associée à une ligature du segment intermédiaire ou « *Distal Revascularization and Interval Ligation* ») en janvier 2009.

Programme de néphrologie du Nord de l'Alberta

- Le Programme de néphrologie du Nord de l'Alberta est fier de continuer à offrir des services de néphrologie pour la région d'Edmonton et dans les collectivités avoisinantes.
- À la suite du succès de l'autobus de dialyse et des cliniques de néphropathie diabétique, on compte maintenant sept cliniques de néphropathie diabétique dans le Nord de l'Alberta.

NOTICE BOARD

- Ottawa Supper Clubs–Contact Janet Graham, Nephrology Unit, Ottawa Hospital, jgraham@ottawahospital.on.ca
- **March 8–10, 2009**. The Annual Dialysis Conference. Houston, Texas. Website: www.som.missouri.edu/Dialysis/
- **March 12, 2009**. World Kidney Day. International Federation of Kidney Foundations. Website: http://www.ifkf.net/worldkidneyday.php
- **March 15, 2009**. Kidney Foundation of Canada. Deadline for Allied Health Fellowships and Scholarships. Contact: Coordinator, Research Grants and Awards, (800) 361-7494, ext. 232, E-mail: research@kidney.ca. Website: www.kidney.ca
- **April 1, 2009.** Call for Abstracts deadline for CANNT 2009. Consult CANNT website for submission guidelines: www.cannt.ca
- **April 4, 2009**. Exam date for CNeph(C) certification exam. Contact Canadian Nurses Association Certification Program, E-mail: certification@cna-aiic.ca. Website: www.cna-aiic.ca. Toll-free phone number: 1-800-450-5206
- **April 26–29, 2009**. The American Nephrology Nurses Association (ANNA) 40th National Symposium, Hilton San Diego and the San Diego Convention Center in San Diego, CA. Website: www.annanurse.org
- **June 15, 2009**. CANNT Awards, Bursaries and Grant Application Deadline. For more information, contact Debbie Maure at the CANNT National Office (705) 720-2819, toll-free 1-877-720-2819, E-mail cannt@cannt.ca, or visit our website at www.cannt.ca
- **August 28–30, 2009**. The 3rd North American Chapter Meeting of the International Society for Peritoneal Dialysis (ISPD), The Westin Bayshore, Vancouver, BC. Website: www.ispd.org
- **September 5–8, 2009**. 38th European Dialysis and Transplant Nurses Association/European Renal Care Association (EDTNA/ERCA) International Conference, Hamburg, Germany. Website: www.edtnaerca.org
- **September 16, 2009**. Nephrology Healthcare Professionals Day.
- **October 15, 2009**. Kidney Foundation of Canada. Deadline for Allied Health Research Grants. Contact: Coordinator, Research Grants and Awards, E-mail: research@kidney.ca. Website: www.kidney.ca
- **October 15–18, 2009**. CANNT 41st National Symposium. Saint John Trade & Convention Centre, Saint John, New Brunswick. Conference Planner: Heather Reid: E-mail: hreid@innovcc.ca. Website: www.cannt.ca

- La première clinique générale de néphrologie a été inaugurée en décembre dernier à Grand Prairie et Peace River, en Alberta. Cette clinique offre une évaluation non urgente et des soins de néphrologie aux patients dans leurs propres collectivités. On compte six autres collectivités dans le Nord de l'Alberta qui désirent instaurer de telles cliniques.

Programme de néphrologie du Sud de l'Alberta

- Le Programme de néphrologie du Sud de l'Alberta ainsi que le Programme de dialyse péritonéale des patients à domicile, les cliniques ambulatoires et les services communautaires de dialyse se sont installés dans le nouveau pavillon Sheldon Chumir.
- Nous désirons souhaiter la bienvenue de Laurel McDonough à titre de gestionnaire des soins aux patients.
- Gisele Scott-Woo s'est jointe à notre équipe multidisciplinaire dans son rôle de pharmacienne.
- Un atelier de formation sur le bien-être en néphrologie a été créé pour répondre aux besoins fondamentaux des patients au stade 3 de la maladie. Cet atelier sera prévu tous les trois mois.
- Le personnel du Programme de soins autonomes en hémodialyse nocturne travaille très fort afin d'offrir aux patients un mode de rechange qui permet les soins autogérés.
- En dialyse péritonéale, nous sommes sur le point de lancer le Programme de dialyse péritonéale à domicile assisté par cycleur.

BC Children's Hospital, Colombie-Britannique

- Le nouveau Programme de transplantation multiple d'organes sera pleinement fonctionnel avec une équipe multidisciplinaire en janvier 2009.
- Une grande délégation de l'équipe multidisciplinaire assistera à la Conférence annuelle de dialyse à Houston, au Texas, en mars prochain, pour y présenter deux affiches scientifiques et trois communications orales.
- La croissance démographique de notre population de patients à l'unité de dialyse est en hausse.

Unité d'hémodialyse du St Paul's Hospital (SPH)

- Le SPH va commencer à former des infirmières auxiliaires autorisées (IAA) en hémodialyse au cours de la prochaine année. Les IAA travailleront dans les unités communautaires.
- Un atelier provincial sur les accès vasculaires a été conçu. Il sera donné dans trois unités, dont au SPH. Le SPH a adapté cet atelier pour incorporer les compétences en accès vasculaires ainsi que les recommandations provinciales pour jumeler le niveau d'habiletés des infirmières au degré de difficulté associé à l'accès.
- À la suite de cet atelier, les infirmières seront en mesure de déterminer elles-mêmes leur propre niveau d'habileté, de procéder à une auto-évaluation, de consulter le coordonnateur ou l'éducateur en accès vasculaires afin de passer en revue leur évaluation et d'établir un plan éducatif pour aider les infirmières à atteindre les compétences visées.
- En janvier, nous allons faire l'essai de groupes de discussion en ligne sur les accès vasculaires pour les infirmières en accès vasculaires, les chirurgiens, les néphrologues et les radiologues, à l'échelle provinciale. Des cas stimulants seront passés en revue à des fins éducatives.

Clinique de maladie rénale chronique (MRC) du SPH

- La clinique MRC du SPH ouvrira une nouvelle clinique le 16 janvier, appelée Clinique des soins intégrés, qui est une super clinique sur les maladies du rein. Cette clinique accueillera les patients atteints de MRC avec au moins une comorbidité (diabète ou maladie du cœur).
- La clinique aura un néphrologue sur place, en plus d'un cardiologue et d'un endocrinologue en alternance et de notre personnel médical usuel (personnel infirmier, diététiste, travailleur social et pharmacien).
- La clinique sera ouverte tous les vendredis et comptera un maximum de 200 patients.
- La clinique a pour objectifs :
  1. d'améliorer la coordination, l'accès et la diminution des temps d'attente pour les cas complexes de maladie rénale avec au moins une comorbidité ;
  2. d'intégrer les visites aux médecins spécialisés, ce qui entraînera une séquence de soins plus complète et simplifiée ;
  3. d'améliorer la communication et la coordination des plans de soins avec le fournisseur de soins primaires.

Ontario (Gail Barbour)

I want to wish everyone writing the CNA Nephrology Exam in April the best of luck.

Greater Ontario

Grand River Hospital, Kitchener

- Hosted a nephrology update day in November with speakers Dr. L. Vitou, Dr. M. Bernaroia, Ken Roberts, SMW, and Carolyn Oscarson, RN Transplant Co-coordinator.
- Home dialysis program has three patients successfully dialyzing at home.

London Health Science Centre

Victoria Hospital

- Several staff attended CANNT 2008 in Quebec City. A great time for networking.
- Congratulations to Barb Wilson and Lori Harwood for receiving a grant to study the culture of cannulation among the dialysis nurses.

University Hospital

- Congratulations to staff who contributed to CANNT through presentations.
- The renal program represented ambulatory care for Accreditation Canada. A positive report resulted through everyone's hard work.
- Construction is underway for the new dialysis unit, opening in late spring.

Hanover Hospital (Satellite)

- Had two education events in the fall, and staff attended CANNT.
- Began use of new safety fistula needles.

Thunder Bay Regional Hospital

- Further education on Prisma Flex machine for plasma exchange.
- Orientation of new staff for home hemodialysis program.
- Plans underway for buttonhole program for home hemodialysis unit.

Laurentian Hospital (Satellite)
- Two educational events: 1) dinner and learn with Dr. Berall from Humber River Regional Hospital, 2) PD principals presented by Cindy Wheeler of Baxter.
- Smooth transition was made into our new unit on the 9th floor.
- Initiation of paperless charting using attachment of laptop to machines.
- Creation of nutritional newsletter THE NUTRIET—educational tool for patients.

North Bay General Hospital
- Planning some lunch and learn to share information brought back from CANNT
- Implementing a new medical directive, which allows adjustment of EPO through use of an algorithm when hg is out of range.
- Part of a Northern Quality Collaborative to Measure Vascular Access issues within Northern Ontario.
- Construction of our new dialysis unit is underway with relocation less than two years away.

Central Ontario

Halton Health Care Services, Oakville
- Monthly lunch and learn topics—Peritoneal Dialysis 101 for Hemodialysis Nurses, Access Monitoring 101, and Hepatitis review.
- Introduction of safety needles.
- Burlington Satellite project underway, expected opening in spring 2009.
- Very active committee looking at all aspects of fire and evacuation planning.
- Completed patient ID initiative to be in compliance with Patient Safety Guidelines. Next step will be to link Lab ID systems.
- Planning underway with inpatient staff to improve collaborative management of the hospitalized renal patients.
- Chris Lynskey travelled to China in mid-October as part of Cultural Delegation for Nephrology Nursing. Highlights of this trip will be submitted to the journal.

Credit Valley Hospital
- Seven staff attended CANNT. It was a great learning experience.
- A record number of CVH RNs have applied to write the nephrology certification exam in 2009—17 in all! Good luck.

Sir William Oster Health Centre, Brampton
- We have had unit-specific in-service on buttonhole and infections related to access: AVF, CVC, and AVG.
- Nephrology program has created a newsletter with information for our patients.
- We have a new "socks off" initiative for our hemodialysis program. It includes regular foot assessment for all patients with involvement from our educator and wound care nurse.
- Home Peritoneal Dialysis Program is officially open after months of development. We have several patients trained and now at home managing their own therapy.

Headwaters Health Care Centre, Orangeville
- Attendance at CANNT—two nurses and one biomedical.
- More than two years with Multiple Resistant Organisms (MROs) in the unit (acquired from referral units) with NO nosocomial transmission in the unit.

Toronto

Hospital for Sick Children
- Creating new dialysis competencies for new staff that are comprehensive and detailed.

St. Joseph's Health Centre
- The All Saints Renal Symposium (SMH and SJHC) was held in November sponsored by Amgen.

St. Michael's Hospital
- The All Saints Renal Symposium (SMH and SJHC) was held in November sponsored by Amgen.
- Trial of REMS technology (for wound healing and peripheral neuropathy).
- We were proud to recognize Jill Campbell and Jim McDougall as recipients of CANNT Awards of Excellence (Admin/Leadership and Technology).

Toronto General Hospital
- Educational rounds provided by multidisciplinary team every week.
- Publication of a paper done at the home hemodialysis unit about the use of alternative anticoagulation strategies for a nocturnal home hemodialysis patient with heparin-induced thrombocytopenia.

Toronto East General
- Updates/review of infection control practices in hemodialysis unit to align with the "Safer Healthcare Now" Initiative.
- In-service was provided by staff RN Desiree Portugal on the topic of patient adherence issues in the hemodialysis unit.
- Study group formed with Nursing Practice Leader Kerry Overholt to prepare for 2009 CNA certification exam.
- Outpatient BP clinic has enrolled some hemodialysis patients to monitor non-dialysis days.
- Hemodialysis Partnership Council was formed to discuss overall unit concerns with the multidisciplinary team.
- Weekly team rounds have been redesigned to follow CQI parameters of hemodialysis population and transition to "e-charting" initiative.
- Five staff members have applied for CNA nephrology exam in April.
- Occupational Health certified several staff for TB testing of hemodialysis patients.

Peterborough Clinic
- Held a Kidney Foundation event, which included renal diet, and a panel presentation dealt with coping with CKD and treatment modalities.
- Regular PD support meetings for patients are being held.
- Initiation of "bullet rounds"—the multidisciplinary team meet and review a run of patients in 15-minute periods, over a course of six weeks all patients are reviewed.
- Kate Brown, RN, and Cherie Waldock, MSW, presented "Developing a Pathway for Risk Screening and Reporting a Patient's Medical Condition to the Ministry of Transportation" at CANNT. Seven other staff attended CANNT.

Cornwall Dialysis Unit
- Sue Wood from Fresenius gave presentation on Hyperphosphatemia and Phos Lo.

Orillia Soldiers Memorial Hospital
- Dinner and learn with speaker on renal lab values.
- Plans are underway to provide hemodialysis to acute patients at the RVH in Barrie.

Royal Victoria Hospital, Barrie
- Educational talk given by Dr. Krishnan on hypertensive drugs and dialysis.
- Presentation on capping CVC with sodium citrate by Laurie Pritchard, OSMH educator.
- Instituted use of sodium citrate in CVC.
- Program changed use of Diapes dialyzers to Rexeed dialyzers with improved clearances.

Eastern Ontario
The Ottawa Hospital—
Home Hemo Dialysis Unit
- We now have three patients home, doing nocturnal HD on the Bellco single needle.

The Ottawa Hospital—
Riverside Campus
- Janet Graham (Access Coordinator) has been doing vascular access cases whereby different cases are discussed monthly.
- Learning and development opportunities presented by clinical educators entitled, Personality Styles Yours and Mine, Aggressive or Assertive?
- CPI training: 12 staff attended. It was felt to be a beneficial course on how to defuse situations that may arise in the workplace with staff, patients, and visitors.
- Three RPNs working in the unit as of April. An updated skills list created for the RPNs to be able to work in the unit. The RPN will fully care for his/her patient and follow TOH model of care.
- Chronic Disease Prevention Management Project—TOH is embarking on a four-year project to bring the key principles of CDPM into our nephrology program.
- Lorrie Liberty has initiated the 'Dudley Do Right' Campaign to encourage staff to make fewer mistakes.
- Dr. Burns and Dr. Zimmerman are co-investigating a new study entitled: Mortality Indicators from Spectroscopy in Incident Only Hemodialysis. The purpose is to investigate to what degree subtle changes in whole blood and blood serum in patients with ESRD predict their overall two-year mortality.
- Protocol title: Randomized crossover study of short daily hemodialysis compared to conventional hemodialysis to determine the mechanisms of hypertension control. The purpose of the study is to compare the mechanism of blood pressure control on short daily hemodialysis with conventional, three times per week hemodialysis.

The Ottawa Hospital
Hawkesbury Hemodialysis Unit
- Education initiative providing education to caregivers/residences on caring for a dialysis patient is coming along.
- We held a Christmas party for our patients with several Christmas activities. Fun was had by all.

Bayshore Dialysis Clinic, Brockville
- Plan in place for nine new Bellco Formula Machines for January 2009.

Renfrew Victoria Hospital, Renfrew
- Four staff attended CANNT in Quebec City.
- Our program is at present reviewing electronic charting from various suppliers.
- Late career day nurses are working on projects like med review using a template the physicians can use for quick review, also Hepatitis B education and scheduling of patients requiring immunization. They are also reviewing vascular access, again using a template to determine problems, transonic reviews, etc.

Région de l'Ontario (Gail Barbour)

J'aimerais souhaiter la meilleure des chances à toutes celles et à tous ceux qui vont passer l'examen d'agrément en néphrologie en avril prochain.

Centre de l'Ontario
Grand River Hospital, Kitchener
- A tenu une Journée de la néphrologie en novembre dernier à laquelle les conférenciers suivants ont participé : Dr L.Vitou, Dr M. Bernaroia, Ken Roberts, SMW, et Carolyn Oscarson, inf., coordonnatrice à la clinique de transplantation.
- Le Programme de dialyse à domicile compte trois patients qui procèdent avec succès à leurs traitements de dialyse à domicile.

London Health Science Centre
Victoria Hospital
- Plusieurs membres du personnel ont assisté au Congrès de 2008 l'ACITN/CANNT dans la ville de Québec. Ce fut une excellente occasion de réseauter.
- Félicitations à Barb Wilson et à Lori Harwood pour leur subvention à la recherche sur la culture relative à la technique de piquage privilégiée par les infirmières en dialyse.

University Hospital
- Félicitations aux membres du personnel qui ont présenté des communications orales au dernier Congrès de l'ACITN/CANNT.
- Le Programme de néphrologie présentait le volet des soins ambulatoires lors de la visite du conseil canadien d'agrément des services de santé (CCASS). Un rapport positif a été produit grâce à l'excellent travail de tout un chacun.
- Les travaux de construction de la nouvelle unité de dialyse avancent bien ; l'ouverture est prévue à la fin du printemps.

Hanover Hospital (centre satellite)
- A tenu deux activités d'éducation à l'automne dernier et des membres du personnel ont assisté au Congrès de 2008 de l'ACITN/CANNT.
- A commencé à utiliser de nouvelles aiguilles à fistule de sécurité.

Thunder Bay Regional Hospital
- A tenu une activité d'éducation avec un conférencier sur les effets de l'IRT et du phosphore.
- A offert une séance de formation avancée sur l'appareil PrismaFlex d'échanges plasmatiques.
- A procédé à l'orientation du nouveau personnel pour le Programme d'hémodialyse à domicile.
- Envisage d'utiliser la technique du « trou de bouton » à l'unité d'hémodialyse à domicile.

Laurentian Hospital (centre satellite)

- A tenu deux activités d'éducation : 1) dîner-causerie avec le Dr Berall du *Humber River Regional Hospital* et 2) conférence sur les principes en DP, présentée par Cindy Wheeler de Baxter.
- A procédé à une transition en douceur dans la nouvelle unité au 9e étage.
- A instauré un programme de consignation au dossier sans papier au moyen d'ordinateurs portatifs fixés aux appareils de dialyse.
- A conçu un bulletin d'information portant sur la nutrition, *THE NUTRIET*—outil éducationnel à l'intention des patients.

North Bay General Hospital

- A organisé quelques dîners-causeries pour partager l'information recueillie au Congrès de 2008 de l'ACITN/CANNT.
- A instauré une nouvelle directive médicale qui permet l'ajustement de l'ÉPO au moyen d'un algorithme lorsque le taux d'hémoglobine se situe en dehors des valeurs normales.
- Collabore à un projet de qualité du Nord de l'Ontario visant à mesurer les problèmes relatifs aux accès vasculaires.
- La construction de notre nouvelle unité de dialyse qui va bon train devrait prendre moins de deux ans.

Centre de l'Ontario

Halton Health Care Services, Oakville

- A tenu des dîners-causeries mensuels sur les sujets suivants : les principes de base de la dialyse péritonéale à l'intention des infirmières en hémodialyse, les principes de base de la surveillance de l'accès vasculaire et revue de l'hépatite.
- A introduit l'utilisation d'aiguilles de sûreté.
- Le projet entourant le centre satellite de Burlington va bon train ; l'ouverture est prévue au printemps 2009.
- A mis sur pied un comité très dynamique pour envisager tous les aspects d'un plan d'évacuation d'urgence en cas d'incendie.
- A terminé l'initiative entourant l'identification des patients en conformité avec les lignes directives en matière de sécurité pour les patients. La prochaine étape consiste à faire le lien avec les systèmes d'identification des laboratoires.
- La planification d'une approche collaborative pour améliorer la prise en charge des patients hospitalisés qui ont besoin de dialyse est en cours avec le personnel soignant.
- Chris Lynskey était de la délégation culturelle pour les soins infirmiers en néphrologie qui s'est rendue en Chine à la mi-octobre ; les faits saillants de ce voyage seront présentés dans le **Journal de l'ACITN/CANNT**.

Credit Valley Hospital (CVH)

- Sept membres du personnel ont pris part au Congrès de l'ACITN/CANNT ; ce fut une excellente expérience d'apprentissage.
- Un nombre record d'infirmières du CVH se sont inscrites à l'examen d'agrément en néphrologie en 2009—17 au total ! Bonne chance à toutes !

Sir William Oster Health Centre, Brampton

- Nous avons eu une formation interne sur la technique du trou de bouton et sur les infections associées aux différents types d'accès : fistule artérioveineuse (FAV), cathéter veineux central (CVC) et greffon artérioveineux (GAV).
- Le personnel du Programme de néphrologie a conçu un bulletin d'information à l'intention de ses patients.
- Nous avons mis de l'avant une nouvelle initiative dans le cadre de notre Programme d'hémodialyse qui porte sur l'évaluation régulière des pieds de tous les patients en collaboration de notre éducatrice et l'infirmière du traitement des plaies.
- Le Programme de dialyse péritonéale à domicile est officiellement lancé après des mois de développement. Nous avons plusieurs patients qui ont suivi la formation et qui procèdent eux-mêmes à leurs traitements de DP à domicile.

Headwaters Health Care Centre, Orangeville

- Deux infirmières et un technologue en génie biomédical ont assisté au Congrès de l'ACITN/CANNT.
- Nous avons passé le cap des deux années avec des organismes multirésistants (acquis d'autres unités) SANS transmission nosocomiale dans l'unité.

Le grand Toronto

Hospital for Sick Children

- Nous travaillons à la création de nouvelles compétences détaillées en dialyse pour le nouveau personnel.

St. Joseph's Health Centre (SJHC)

- Le Symposium du SMH et du SJHC, commandité par Amgen, a eu lieu en novembre dernier.

St. Michael's Hospital (SMH)

- Le Symposium du SMH et du SJHC, commandité par Amgen, a eu lieu en novembre dernier.
- Essai en cours d'un appareil de REMS Technology (pour le traitement des plaies et la neuropathie périphérique).
- Félicitations à Jill Campbell et Jim McDougall, récipiendaires des prix d'Excellence respectivement en administration/leadership et en technologie de l'ACITN/CANNT.

Toronto General Hospital

- Des rencontres éducatives sont offertes toutes les semaines par une équipe multidisciplinaire.
- Publication d'un document d'information préparé par l'unité d'hémodialyse à domicile sur l'utilisation de stratégies de rechange à l'anticoagulation chez un patient en hémodialyse nocturne à domicile qui présente une thrombocytopénie induite sous héparine.

Toronto East General

- Mise à jour et revue des pratiques en matière de prévention des infections à l'unité d'hémodialyse afin de s'harmoniser à la campagne pancanadienne « Des soins de santé plus sécuritaires, maintenant ! (SSPSM) ».
- Des séances de formation interne ont été offertes par Désirée Portugal, inf., sur les difficultés d'observance des patients de l'unité d'hémodialyse.
- Un groupe d'étude, dirigé par Kerry Overholt, chef de la pratique infirmière, a été formé afin de préparer l'examen d'agrément de l'Association des infirmières et infirmiers du Canada (AIIC) de 2009.

- La clinique ambulatoire de surveillance de la tension artérielle (TA) a recruté quelques patients en hémodialyse pour le suivi de leur TA les jours où ils ne sont pas dialysés.
- Un conseil de partenariat sur l'hémodialyse a été formé pour discuter des préoccupations communes à l'ensemble de l'unité avec l'équipe multidisciplinaire.
- Les rencontres d'équipe hebdomadaires ont été remaniées afin de respecter les paramètres d'amélioration continue de la qualité relatifs à population en hémodialyse et à la transition vers une consignation au dossier électronique.
- Cinq membres du personnel sont inscrits pour passer en avril prochain l'examen d'agrément en néphrologie de l'AIIC.
- La division de la Santé de l'environnement et du milieu de travail de Santé Canada a spécialement formé et plusieurs membres du personnel pour dépister la tuberculose (TB) chez les patients en hémodialyse.

Peterborough Clinic
- A tenu, en collaboration avec la Fondation du rein, une activité qui incluait la présentation d'une diète rénale ; un groupe de spécialistes a aussi abordé la prise en charge de la maladie rénale chronique (MRC) et les différents modes de traitement.
- Des rencontres de soutien pour les patients en DP ont lieu régulièrement.
- Instauration de « discussions éclair » au cours desquelles l'équipe multidisciplinaire se rencontre et passe en revue un certain nombre de patients en 15 minutes ; sur une période de six semaines, tous les patients sont passés en revue.
- Kate Brown, inf, et Cherie Waldock, M.Serv.Soc., ont présenté une communication orale sur "*Developing a Pathway for Risk Screening and Reporting a Patient's Medical Condition to the Ministry of Transportation*" (Établir une méthode de sélection des risques et de signalement de l'état de santé d'un patient au ministère des Transports) lors du Congrès de 2008 de l'ACITN/CANNT.
- Sept autres membres du personnel ont assisté à ce congrès.

Cornwall Dialysis Unit
- Sue Wood de Fresenius a donné une présentation sur l'hyperphosphatémie et Phos Lo.

Orillia Soldiers Memorial Hospital (OSMH)
- Un souper-conférence a eu lieu sur l'importance des valeurs de laboratoire en néphrologie.
- Nous planifions offrir aux patients atteints d'une affection aiguë des traitements d'hémodialyse au *Royal Victoria Hospital,* à Barrie.

Royal Victoria Hospital (RVH), Barrie
- Le Dr Krishnan a présenté une causerie sur les antihypertenseurs et la dialyse.
- Laurie Pritchard, éducatrice au OSMH, a donné une présentation sur l'utilisation du citrate de sodium avec les cathéters veineux centraux (CVC).
- Nous avons instauré l'utilisation du citrate de sodium avec les CVC.
- Le Programme d'hémodialyse a remplacé les dialyseurs Diapes pour les dialyseurs Rexeed avec clairances améliorées.

Est de l'Ontario

L'Hôpital d'Ottawa—Unité d'hémodialyse à domicile
- Nous avons maintenant trois patients à domicile qui effectuent leur HD nocturne avec l'appareil Bellco à aiguille unique.

L'Hôpital d'Ottawa—Campus Riverside
- Janet Graham, coordonnatrice aux accès, présente des études de cas sur les accès vasculaires où différents cas sont abordés chaque mois.
- Des occasions d'apprentissage et de perfectionnement intitulées « Personality Styles Yours and Mine, Aggressive or Assertive? (Styles de personnalité, toi et moi, comportement agressif ou assertif ?) » ont été présentées par les éducatrices cliniques.
- Formation sur la Prévention et l'intervention en cas de crise : 12 membres du personnel y ont assisté. D'après les commentaires reçus, ce fut un cours bénéfique sur la manière de coordonner les situations de crise qui peuvent survenir en milieu de travail auprès du personnel, des patients et des visiteurs.
- Trois infirmières auxiliaires autorisées (IAA) vont commencer à travailler à l'unité dès avril. Nous avons mis à jour une liste des compétences pour les IAA qui travailleront à l'unité. L'IAA prendra entièrement soin de son patient et suivra le modèle de soins de L'Hôpital d'Ottawa (L'HO).
- Projet de prise en charge de la prévention des maladies chroniques—L'HO s'engage dans un projet d'une durée de quatre années pour établir les principes clés de la prise en charge de la prévention des maladies chroniques dans son Programme de néphrologie.
- Lorrie Liberty a lancé la campagne « *Dudley do right* » pour encourager le personnel à faire moins d'erreurs.
- Les Drs Burns et Zimmerman sont les chercheurs principaux d'une nouvelle étude intitulée « Mortality Indicators from Spectroscopy in Incident Only Hemodialysis » (Indicateurs de mortalité obtenus par spectroscopie dans l'incident d'hémodialyse seulement). Cette étude vise à déterminer le degré selon lequel des changements subtils dans le sang entier et le sérum sanguin chez les patients en IRT prédisent la mortalité globale après deux ans.
- Titre du protocole : Étude croisée à répartition aléatoire visant à comparer l'hémodialyse quotidienne de courte durée et l'hémodialyse classique afin de déterminer les mécanismes de maîtrise de l'hypertension. L'étude a pour but de comparer le mécanisme de maîtrise de la tension artérielle entre l'hémodialyse quotidienne de courte durée et l'hémodialyse classique qui est faite trois fois par semaine.

Centre satellite d'hémodialyse de L'HO à l'Hôpital général de Hawkesbury
- Nous offrirons bientôt des séances de formation aux fournisseurs de soins/résidences qui prennent soins d'un patient dialysé.
- Nous avons organisé une fête de Noël pour nos patients avec plusieurs activités au menu. Tout le monde s'est bien amusé !

Bayshore Dialysis Clinic, Brockville
- Nous prévoyons accueillir neuf nouveaux appareils Bellco pour janvier 2009.

Renfrew Victoria Hospital, Renfrew

- Quatre membres du personnel ont assisté au Congrès de l'ACITN/CANNT à Québec.
- Nous sommes en plein processus de révision de notre consignation électronique au dossier avec divers fournisseurs.
- Des infirmières d'expérience de jour travaillent à des projets tels que : révision médicale au moyen d'un modèle que les médecins peuvent utiliser pour une révision rapide ; éducation sur l'hépatite B et planification d'un calendrier de vaccination pour les patients devant recevoir une immunisation ; évaluation de l'accès vasculaire au moyen d'un modèle afin de déterminer tout problème potentiel ; révisions transsoniques ; etc.

Atlantic Region (Colleen Wile)

I want to thank Chantal Saumure for 10 years of dedicated involvement in CANNT, as a board member and as a regional liaison. Chantal has stepped down as liaison to fulfill other commitments. We thank her for all her contributions over the years to CANNT as an organization, and for her valuable contributions to the **CANNT Journal**.

Corner Brook, Newfoundland

- Clinic/transplant coordinator nurse Marion Rose retired at the end of January. Laura Caines will assume this position. We will certainly miss Marion who has worked in renal care since 1978. Enjoy your retirement.
- Paulette Mackenzie (staff nurse) has successfully completed the Health Assessment Course.
- The PRI/Transplant clinic has moved to new offices and the patient care coordinator has finally got her office back.

St. John's, Newfoundland

- We've restarted our weekly in-services that now include twice-monthly interprofessional rounds.
- Three nurses are preparing to write the nephrology certification exam.
- In November, Eastern Health Dialysis program held a "Patient Safety" Education Day. This topic was based on recommendations (accreditation team) that we have annual safety education. The topics included:
  - Whims
  - Positive patient identification
  - Pandemic planning measures
  - Infection control measures (with great emphasis on "hand hygiene")
  - Privacy and confidentiality (with the new Privacy legislation).
- Peritoneal dialysis celebrates 30 years in Newfoundland and Labrador. HAPPY BIRTHDAY! Debbie Gill was the first nurse trained in PD and has been involved since the beginning and still works in PD.
- HSC site recently underwent renovations and was down to only a few stations for in-patients, so a number of out-patients transferred temporarily to the Waterford site along with several of the nursing staff. We added some Y-connectors, tightened our belts and moved over to accommodate the renovations. A few patients actually liked it at the Waterford (we have TVs) and they transferred permanently. Everyone else moved back the week before Christmas.

Charlottetown, Prince Edward Island

- Preparations are underway for the upcoming CANNT Atlantic Conference to be held June 5 at Stanhope Beach Resort.

Cape Breton, Nova Scotia

- Six staff members attended the national CANNT symposium in Quebec, and feedback was brought back to the unit.
- Staff members are encouraged to become CANNT members.
- Our vascular access clinic has begun and will be held once a month with options to change depending on the need. Wait times from referral to surgery have improved.
- Expansion of six stations to open TTS is expected in the near future.
- LPNs are increasing their scope of practice to include care of hemodialysis catheters for patients with stable and predictable outcomes.
- Karen MacDonald was recipient of the Fran Boutilier scholarship for $2,000.00.
- Heather Mac Queen and Mary Larade presented an overview of the vascular camp they held at the IHI conference and accepted an award for their contribution to quality improvement.

Halifax/Dartmouth, Nova Scotia

- Evening education sessions have resumed hopefully bimonthly.
- Expansion of the LPN role to the satellite has now begun with our Liverpool satellite being the first to maximize its scope of practice in caring for our stable predictable hemodialysis patients with tunnelled CVCs.
- We are exploring the option of providing nocturnal hemodialysis to our home hemodialysis population.
- Good luck to several members of our team who are writing the nephrology certification exam in April, including a couple of staff from the IWK.
- The main in-centre dialysis unit has once again exceeded capacity and options are being investigated to find additional space for dialysis treatments.

Moncton, New Brunswick

- First vascular camp was held in November and was well attended. Another camp is being planned for wound management.
- A new fixed schedule process was implanted in January.
- Started our participation in the Contrast study.

Saint John, New Brunswick

- Monthly educational lunch and learn sessions continue. Eight attended the national symposium in Quebec City.
- CANNT national committee continues to work toward creating an excellent learning opportunity for the CANNT symposium in October 2009. Stay tuned for the CALL FOR ABSTRACTS.
- I would like to recognize the retirement of Bonnie Ross and Faye Clark. These two individuals have shown a long-term commitment to this program and, particularly, the patients we serve.

Région de l'Atlantique (Colleen Wile)

J'aimerais remercier Chantal Saumure pour ses dix années de participation dévouée dans les activités de l'ACITN/CANNT en tant que membre du conseil d'administration et d'agente de liaison régionale. Chantal se retire de rôle d'agente de liaison pour relever de nouveaux défis. Nous tenons à la remer-

cier pour l'ensemble de ses contributions au fil des ans, notamment pour sa précieuse collaboration au **Journal de l'ACITN/CANNT**.

Corner Brook, Terre-Neuve-et-Labrador

- Marion Rose, infirmière et coordonnatrice de la clinique de transplantation, prend sa retraite à la fin de janvier. Laura Caines assumera ces responsabilités. Marion nous manquera à coup sûr, car elle travaillait à l'unité de néphrologie depuis 1978. Bonne retraite !
- Paulette Mackenzie, infirmière de soins généraux, a réussi avec succès le cours sur l'évaluation en santé.
- La Clinique de transplantation/d'insuffisance rénale prérénale a emménagé dans ses nouveaux locaux et la coordonnatrice aux soins des patients a finalement réintégré son bureau.

St. John's, Terre-Neuve-et-Labrador

- Nous avons relancé nos séances de formation interne sur une base hebdomadaire incluant maintenant des groupes de discussions interprofessionnels deux fois par mois.
- Trois infirmières se préparent à passer leur examen d'agrément en néphrologie.
- En novembre dernier, le Programme de santé en dialyse de l'Est a tenu une Journée d'éducation sur la « sécurité du patient ». Ce sujet avait été choisi en réponse aux recommandations (équipe d'agrément) quant à l'obtention d'une formation annuelle sur la sécurité. Les points abordés portaient sur :
  - SIMDUT ;
  - identification positive du patient ;
  - mesures de planification en cas de pandémie ;
  - mesures de prévention de l'infection (avec un accent important sur l'« hygiène des mains ») ; respect de la vie privée et confidentialité (nouvelle loi).
- La dialyse péritonéale (DP) célèbre ses 30 ans à Terre-Neuve-et-Labrador. JOYEUX ANNIVERSAIRE ! Debbie Gill fut la première infirmière formée en DP. Elle s'est investie depuis les tout premiers débuts et travaille toujours en DP.
- Le site du Health Science Centre (HSC) a entrepris récemment des rénovations et n'a cessé ses opérations que pour quelques postes de dialyse pour les patients hospitalisés. Un grand nombre de patients externes ont été transférés temporairement au site de Waterford, accompagnés de plusieurs infirmières. Nous avons ajouté des raccords en Y, retroussé nos manches et nous sommes adaptés à la situation pendant cette période. Un petit nombre de patients ont vraiment aimé leur expérience de traitement à Waterford (en partie à cause des téléviseurs) et y ont transféré leur dossier en permanence. Tous les autres sont revenus au HSC la semaine avant Noël.

Charlottetown, Île-du-Prince-Édouard

- Les préparatifs vont bon train en prévision de la réunion de la région Atlantique de l'ACITN/CANNT qui aura lieu le 5 juin 2009 au Stanhope Beach Resort.

Cap Breton, Nouvelle-Écosse

- Six membres du personnel ont assisté au Congrès annuel de 2008 de l'ACITN/CANNT à Québec et ont transmis l'information pertinente au personnel de l'unité.
- Les membres du personnel sont encouragés à devenir membre de l'ACITN/CANNT.
- Nous avons commencé à donner un atelier sur les accès vasculaires qui aura lieu tous les mois en fonction des besoins, ce qui est sujet à changement. Nous avons observé une amélioration des temps d'attente pour l'orientation en chirurgie.
- L'inauguration de six nouveaux postes de télésurveillance est prévue dans un avenir rapproché.
- La portée de la pratique des infirmières auxiliaires immatriculées (IAI) a été élargie pour inclure les soins apportés aux cathéters d'hémodialyse chez les patients présentant des résultats stables et prévisibles.
- Karen MacDonald a reçu la bourse d'études Fran Boutilier d'une valeur de 2000 $.
- Heather Mac Queen et Mary Larade ont présenté un aperçu de leur atelier sur les accès vasculaires au Congrès de l'*Institute for Healthcare Improvement* (IHI) et ont été récompensées pour leur contribution à l'amélioration de la qualité.

Halifax/Dartmouth, Nouvelle-Écosse

- Nous avons relancé les Soirées de formation qui auront lieu, espérons-le, tous les deux mois.
- Les infirmières auxiliaires immatriculées (IAI) ont maintenant un rôle accru et notre centre satellite de Liverpool a été le premier à maximiser la portée de leur pratique dans les soins apportés aux cathéters veineux centraux (CVC) tunnelisés chez les patients en hémodialyse présentant des résultats stables et prévisibles.
- Nous explorons actuellement l'option d'offrir l'hémodialyse nocturne à notre population de patients en hémodialyse à domicile.
- Nous désirons souhaiter bonne chance à plusieurs membres de notre personnel infirmier ainsi que quelques membres du IWC Health Centre qui passeront l'examen d'agrément en néphrologie en avril prochain.
- L'unité principale de dialyse en milieu hospitalier a une fois de plus excédé sa capacité, et nous étudions actuellement des options afin de trouver un espace additionnel pour les traitements de dialyse.

Moncton, Nouveau-Brunswick

- Nous avons tenu notre premier atelier sur les accès vasculaires en novembre dernier et avons obtenu un bon taux de participation. Nous préparons un nouvel atelier qui portera sur le traitement des plaies.
- Un nouveau processus à horaire fixe a été mis en œuvre en janvier.
- Nous avons commencé notre participation à l'étude Contrast.

Saint John, Nouveau-Brunswick

- Nous continuons de tenir nos séances éducatives et mensuelles de déjeuners-causeries.
- Huit membres de notre personnel ont assisté au Congrès national qui a eu lieu dans la ville de Québec.
- Le comité organisateur du Congrès de l'ACITN/CANNT continue de travailler à la création d'une initiative exceptionnelle d'apprentissage pour le Congrès annuel qui aura lieu en octobre 2009. Surveillez notre invitation à présenter des communications.
- Nous tenons à vous informer de la retraite de Bonnie Ross et de Faye Clark. Elles ont toutes les deux fait preuve d'un engagement à long terme

dans notre programme de dialyse et, plus particulièrement, auprès de notre clientèle.

VP Technologists (Shripal Parikh)

Certification

Technical certification (cdt) for dialysis technicians and technologists is now officially suspended by Ontario Association of Certified Technicians and Technologists (OACETT). The reason for cancellation was not enough candidates to write the certification exam and it was not feasible for OACETT to continue to support dialysis technical certification (cdt). OACETT certification committee members and other technologists from across Canada have decided to conduct a survey regarding certification and its necessity. The survey committee members will try to reach all dialysis centres and their techs to complete the survey. It is hoped that survey results will give ideas to OACETT certification committee members about the direction of the certification process. Certification committee members are also talking to the Biomedical Engineering Technologists (BMET) about the possibility of a merger to offer cdt certification under International Certification Commission (ICC)). BMET group is currently offering Certified Biomedical Engineering Technologist (CBET) certification under ICC.

Thunder Bay Regional Health Science Centre

Thunder Bay Regional Health Sciences Centre had an in-house demo of the new Gambro Artis dialysis machine, which showcased the future of hemodialysis equipment. Their home hemodialysis program is now in full swing and currently has five patients at home in the region with two more in training. This program has changed the lives of the patients who have gone home, as their quality of life has improved by not having to travel or relocate to Thunder Bay, customizing the treatments to their specific needs, and allowing them to have more normal lives. They anticipate 16 patients in the program by the end of 2009.

Eastern Health, St. John's, NL

Two techs from Eastern Health attended the Phoenix Dialysis machine training course from Gambro in November, and one tech attended the WRO HH Water System training course in December. They also have a person who is in the process of completing a Bachelor of Technology from Memorial University of Newfoundland. They currently have the Endosafe PTS Portable Test System from Charles River Laboratories on site for evaluation purposes for endotoxin testing in unit and at the home patient sites.

Rapport du vice-président des technologues (Shripal Parikh)

Agrément

L'agrément des technologues en néphrologie (cdt) est officiellement suspendu par l'association des techniciens et technologues certifiés de l'Ontario, soit *l'Ontario Association of Certified Technicians and Technologists* (OACETT). L'OACETT a jugé nécessaire cette suspension en raison du manque de candidats à l'examen d'agrément et aussi parce qu'elle ne pouvait plus continuer à appuyer l'agrément des technologues en néphrologie (cdt). Les membres du comité à l'agrément de l'OACETT et d'autres technologues au Canada ont décidé de mener un sondage sur l'agrément et sa nécessité. Les membres de comité d'étude vont tenter de joindre tous les centres de dialyse et les technologues pour leur demander de répondre à ce sondage. Nous espérons que les résultats de ce sondage donneront des idées aux membres du comité à l'agrément de l'OACETT quant à la direction qu'il faut donner au processus d'agrément. Les membres du comité à l'agrément vont également consulter le groupe des technologues en génie biomédical en vue de la possibilité d'une fusion pour offrir l'agrément des technologues en néphrologie (cdt) de la Commission internationale d'agrément (*International Certification Commission* ou ICC). Le groupe des technologues en génie biomédical offre actuellement l'agrément de l'ICC.

Thunder Bay Regional Health Science Centre

Le *Thunder Bay Regional Health Sciences Centre* a à l'essai le nouvel appareil de dialyse Artis de Gambro qui illustre l'avenir en matière d'équipement en hémodialyse. Le Programme d'hémodialyse à domicile bat son plein et compte actuellement cinq patients à domicile dans la région, dont deux autres sont en formation. Ce programme a changé la vie de patients qui ont opté pour l'hémodialyse à domicile, étant donné que leur qualité de vie s'est améliorée en évitant les déplacements ou le déménagement à Thunder Bay, en adaptant les traitements à leurs besoins particuliers et en leur permettant d'avoir un mode de vie plus normal. Le personnel prévoit desservir 16 patients d'ici la fin de 2009.

Eastern Health, St. John's, Terre-Neuve-et-Labrador

Deux technologues du *Eastern Health* ont assisté à la formation sur les appareils de dialyse Phoenix de Gambro en novembre dernier et un technologue a reçu la formation sur le système de traitement d'eau par osmose inverse (OI) également de Gambro en décembre. Un membre de leur équipe termine actuellement son baccalauréat en technologie au *Memorial University of Newfoundland*. De plus, le *Eastern Health* a, à des fins d'évaluation, le Système portatif d'essais sur le lysat d'amébocytes de Limulus Endosafe PTS des laboratoires Charles River, conçu pour déceler la présence d'endotoxines dans l'unité de dialyse et au domicile des patients.

Please send all submissions, questions or comments to:

Gillian Brunier, Editor, CANNT Journal

Fax: (416) 495-0513

e-mail: gillianbrunier@sympatico.ca

Your board in action

The fall board meeting was held October 21–23, 2008, in Quebec City, Quebec.

The purpose of this article is to keep you informed of the activities of the CANNT board of directors (BOD). The highlights of the meeting are as follows:

Membership

- 2008 was a record year for membership numbers, likely due to the appeal of Quebec City as a conference venue, and the organization's 40th anniversary. The BOD discussed ways of encouraging long-standing membership.

Finances

- CANNT continues to be in good financial standing. As 2007–2008 was a year of significant projects and celebrations for our 40th anniversary, CANNT equity funds were used to fund positive and innovative activities that will result in benefit to the membership at large.
- The annual CANNT symposium continues to be the major revenue generator, supporting activities throughout the year. The conference in Winnipeg netted less revenue than previous conferences but, nevertheless, had positive impact on the budget—the shortfall was offset by increasing membership numbers.
- Our corporate sponsors, as always, are to be thanked for continuing to support our activities, including the annual symposium, journal, awards, and bursaries.
- The BOD approved a motion to consolidate regional funds under the national CANNT account with specific funds earmarked for each region. This will result in increased clarity of funds utilization and will simplify the accounting.

Strategic planning

- The strategic planning process initiated at the fall 2007 board meeting in Winnipeg was completed this year and the final version approved at the fall 2008 meeting. This plan will guide CANNT BOD activities through to 2013, focusing on seven main goals pertaining to the following topic areas: membership, communication, education, professional practice, research, partnership, and viability of the association. The final version of the strategic plan is available to members on request.

Journal

- The CANNT Journal, a peer-reviewed publication, is published quarterly. This resource is valued by nephrology professionals and is now indexed through Cinahl and OVID databases.
- The journal highlight in 2008 was the 40th anniversary issue edited by Gillian Brunier and guest co-editor Faye Clarke. The issue profiled CANNT's history and included reprints of published articles from previous CANNT publications, along with entries from past presidents of the association.
- The CANNT Journal Award 2008 went to Lori Harwood, Barbara Wilson, Bonita Thompson, Elizabeth Brown and Danae Young, from London, Ontario, for their article "Predictors of hemodialysis central venous catheter exit-site infections."
- The 2008 Manuscript Award was awarded to Sue Young, of Vancouver, B.C., for her manuscript "Rethinking and integrating nephrology palliative care."

Website

- This year, the board was pleased to launch the new CANNT website, hosted by a new website provider, at the annual symposium. The process of choosing a new provider was undertaken with requests for proposals from three website companies. Each proposal was evaluated by a group of board members and consensus was reached to go with the current provider. The increased flexibility afforded by the new provider will lead to increased availability of educational and other resources for the membership.

Communication

- Communication continues to be facilitated via unit liaisons, regional VPs, the CANNT website and email blasts. Special thanks to the unit liaisons for the work they do to keep CANNT at the forefront in units across the country.
- Refined clinical practice groups (RCPG) continue to grow, with the vascular access coordinators' group now an RCPG, and interest from the pediatric community.
- The CANNT office can now be accessed via our toll-free number at 1-877-720-2819.

CANNT office operations

- Purchase of some updated office equipment was carried out in 2008.
- The contract for the administrative assistant, Debbie Maure, was renewed following the completion of a performance review process by the BOD.

Standards of practice

- The update of the nursing standards of practice was completed under the leadership of Marsha Wood, a CANNT member from Halifax, N.S. Marsha worked alongside a team of volunteer CANNT nursing members to complete the project.
- The technological standards were also updated and a new home dialysis standards document was created under the leadership of VP Technologists Marc Héroux and his team of volunteer CANNT technological members.
- Both sets of standards were made available on CD to attendees at CANNT 2008.

Awards of excellence and bursaries

- Congratulations to the 2007–2008 award winners:
  - Award of Excellence Clinical Practice: Sandra Lagacé
  - Award of Excellence Administration/Leadership: Jillian Campbell
  - Award of Excellence Education: Katie Nikl
  - Award of Excellence Technical: Tie: Robert Haché, James McDougall
  - Award of Excellence, Novice Practitioner: Nicole Veronovici
  - Franca Tantalo Bursary: Billie Hilborn
  - Frances Boutilier Bursary: Karen MacDonald
- CANNT is pleased to be partnering with Amgen on the development of new awards and bursaries funded through an educational grant from Amgen Canada Inc. The awards will increase research capacity, educational resources, and research potential within the nephrology technological and nursing areas.

Research grant

- The research grant was awarded to Barbara Wilson, London, ON, for her study entitled, "The culture of vascular access cannulation among nurses in a chronic hemodialysis unit."

Nominations committee

- A call for nominations was sent to the membership for the positions of president-elect, VP Western, VP Ontario, and VP Technologists. The successful candidates who joined the CANNT 2008–2009 board are Rick Luscombe, President-Elect (acclaimed), Marilyn Muir, VP Western, Gail Barbour, VP Ontario, and Shripal Parikh, VP Technologists.

Krescent Program

- CANNT continues to support this initiative through an annual financial contribution. The Kidney Research Scientist Core Education and National Training (KRESCENT) Program is a joint initiative of the Kidney Foundation of Canada, the Canadian Society of Nephrology, and Institute of Nutrition, Metabolism and Diabetes of the Canadian Institutes of Health Research (CIHR).

Canadian Nurses Association (CNA) Certification

- More than 1,080 nurses are now certified in nephrology nursing in Canada. Congratulations to those of you who have written or re-certified in 2008. The CNA had representation at CANNT 2008 with a booth in the exhibit hall and a video presentation at the annual general meeting.
- A pre-symposium workshop on preparing for and writing the CNA exam in nephrology was presented at CANNT 2008.
- CANNT was pleased to recommend Gillian Brunier, CANNT Journal Editor, as one of the CNA "100 in 100" nurses who have had significant influence on the profession. Gillian was celebrated along with her colleagues at a reception in Ottawa in November 2008.

CANNT's 40th anniversary celebrations

- The year went by quickly with celebrations held at CANNT 2008 in Quebec City. A birthday party was held on Friday, October 24, where attendees viewed slide shows from the 40 years and heard from past-president and founding member of CANNT, Frances Boutilier, and Faye Clarke, chair of the 40th anniversary planning committee. The July–September journal issue was dedicated to the past and the future of nephrology nursing in Canada.

Nephrology Healthcare Professionals Day (2nd annual): September 19, 2008

- The second annual Nephrology Healthcare Professionals Day was celebrated by many units across the country. Allied health members from the Canadian Association of Nephrology Dietitians (CAND), Renal Pharmacists' network assisted in the planning and promotion of the day.

CANNT Symposium 2009

- The 2009 symposium will be held at the St. John Trade and Convention Centre, St. John, N.B., October 15–18. The theme of the conference is *Turning the Tides for Tomorrow.*

It has been a productive year and your CANNT board of directors has worked hard to promote and develop CANNT as the voice of nephrology nursing in Canada. Please consider becoming involved in CANNT. It is your organization, so any input is valued. The next board meeting will be held in spring 2009. Please feel free to contact your CANNT representative or me should you have any concerns.

Respectfully submitted,
Alison Thomas,
RN(EC), MN, CNeph(C)
Past-President

Votre conseil d'administration en action

La réunion automnale du conseil d'administration (C.A.) de l'ACITN/CANNT a eu lieu du 21 au 23 octobre 2008 à Québec, dans la province de Québec. Le présent article consiste à vous informer sur les activités de votre Association. Voici les points saillants de cette réunion :

Adhésion

- L'année 2008 a été une année record en ce qui concerne le nombre d'adhésions que nous avons enregistrées, vraisemblablement en raison de l'attrait de la ville de Québec comme lieu de congrès et des célébrations du 40e anniversaire de fondation. Le C.A. a discuté de stratégies pour maintenir l'adhésion des membres à long terme.

Finances

- L'ACITN/CANNT continue d'être en bonne situation financière. Étant donné que l'exercice de 2007–2008 devait entreprendre des projets importants et organiser les célébrations du 40e anniversaire, des fonds de placements en actions ordinaires ont été utilisés pour financer des activités constructives et innovatrices qui ont entraîné des avantages pour les membres en général.
- Le Congrès annuel de l'ACITN/CANNT constitue toujours notre principale source de revenus qui finance nos activités tout au long de l'année. Le congrès qui a eu lieu à Québec a généré moins de recettes nettes que les congrès précédents. Néanmoins, il y a eu des répercussions positives sur le plan budgétaire—le manque à gagner a été compensé par une augmentation du nombre d'adhésions.
- Nous tenons à remercier nos sociétés commanditaires qui, comme toujours, continuent d'appuyer nos activités, incluant le congrès annuel, le journal, les prix et les bourses.
- Le C.A. a approuvé la motion de consolider les fonds régionaux en un seul compte national de l'ACITN/CANNT avec des fonds particuliers affectés à chaque région. Ceci permettra de clarifier l'utilisation des fonds et de simplifier la comptabilité.

Planification stratégique

- Le processus de planification stratégique instauré à la réunion automnale de 2007 à Winnipeg a été achevé cette année et la version définitive a été approuvée à l'assemblée qui a eu lieu à l'automne 2008. Ce plan stratégique guidera les activités du C.A. de l'ACITN/CANNT jusqu'en 2013, en axant ses efforts sur les sept principaux objectifs visant les secteurs suivants : adhésion, communication, éducation, pratique professionnelle, recherche, partenariat et viabilité. Le plan stratégique est accessible aux membres sur demande.

Journal

- Le Journal de l'ACITN (*CANNT Journal*) est une publication révisée par des collègues qui est publiée trimestriellement. Cette source d'information est prisée par les professionnels en néphrologie et est maintenant indexée dans les bases de données Cinahl et OVID.
- Le clou du Journal en 2008 a été le numéro spécial soulignant le 40e anniversaire de fondation, publié sous la codirection de Gillian Brunier et de Faye Clarke. Le numéro présentait l'historique de l'Association et incluait la réimpression d'articles déjà parus dans le Journal, en plus des articles rédigés par d'ex-présidentes de l'Association.
- Le Prix d'excellence de 2008 du Journal de l'ACITN/CANNT a été remis à Lori Harwood, à Barbara Wilson, à Bonita Thompson, à Elizabeth Brown et à Danae Young, de London, en Ontario, pour leur article intitulé « *Predictors of hemodialysis central venous catheter exit-site infections* ».
- Le Prix d'excellence du manuscrit de 2008 a été remis à Sue Young, de Vancouver, en Colombie-Britannique, pour son ouvrage intitulé « *Rethinking and integrating nephrology palliative care* ».

Site Web

- Cette année, le C.A. était heureux d'inaugurer, lors du Congrès annuel de 2008, le nouveau site Web de l'ACITN/CANNT administré par un nouveau fournisseur. La sélection du nouveau gestionnaire du site Web s'est faite par appel d'offres auprès de trois entreprises de sites Web. Chaque soumission a été évaluée par un groupe formé de membres du C.A. et un consensus a été atteint à l'égard du fournisseur choisi. La plus grande souplesse offerte par le nouveau fournisseur procurera une plus grande accessibilité à des ressources de formation ou autres à nos membres.

Communication

- La communication continue d'être assurée par les agentes et agents de liaison, les v.-p. régionaux, le site Web et les nombreux courriels. Nous tenons à remercier tout spécialement les agentes et agents de liaison pour le travail qu'ils ou elles effectuent afin de maintenir l'ACITN/CANNT au premier rang dans leur unité respective partout au Canada.
- Des groupes de discussion sur la pratique clinique continuent de croître et de se former, dont le nouveau groupe des coordonnateurs aux accès vasculaires, en plus d'un intérêt marqué de la part de la communauté pédiatrique.
- Vous pouvez maintenant joindre le secrétariat de l'ACITN/CANNT en composant le numéro sans frais : 1-877-720-2819.

Services administratifs

- Nous avons effectué l'achat d'équipement afin de mettre à jour notre parc informatique en 2008.
- Nous avons renouvelé le contrat de l'assistante administrative, Debbie Maure, après l'évaluation de son rendement par le C.A.

Normes de la pratique

- La mise à jour des normes de la pratique infirmière a été faite sous la direction de Marsha Wood, membre de l'ACITN/CANNT d'Halifax, en Nouvelle-Écosse. Marsha a travaillé en étroite collaboration avec une équipe d'infirmières bénévoles et membres de l'ACITN/CANNT pour mener à terme ce projet.

- Les normes de pratique technique ont également été mises à jour et une nouvelle norme sur la dialyse à domicile a été rédigée par une équipe de technologues bénévoles et membres de l'ACITN/CANNT, sous la direction du v.-p. des technologues, Marc Héroux.
- Les deux normes ont été remises aux membres sur CD lors du Congrès de 2008 de l'ACITN/CANNT.

Prix d'excellence et bourses

- Félicitations à tous les lauréats de 2007–2008 :
  - Prix d'excellence en pratique clinique : Sandra Lagacé
  - Prix d'excellence en administration/leadership : Jillian Campbell
  - Prix d'excellence en éducation : Katie Nikl
  - Prix d'excellence en technologie : ex æquo : Robert Haché et James McDougall
  - Prix d'excellence pour une infirmière débutant en néphrologie : Nicole Veronivici, région de l'Ouest
  - Bourse *Franca Tantalo* : Billie Hilborn
  - Bourse *Frances Boutilier* : Karen MacDonald
- L'ACITN/CANNT est fière de son partenariat avec Amgen pour la création de nouveaux prix d'excellence et de nouvelles bourses financés par une subvention à l'éducation d'Amgen Canada, inc. Les prix permettent d'accroître la capacité de recherche ainsi que le potentiel de recherche dans les secteurs de la technologie et des soins infirmiers en néphrologie.

Subvention de recherche

- La subvention de recherche a été accordée à Barbara Wilson, de London, en Ontario, pour son étude intitulée « *The culture of vascular access cannulation among nurses in a chronic hemodialysis unit* ».

Comité des mises en candidature

- Un appel de mises en candidature a été envoyé à tous les membres pour l'élection des postes suivants : président(e) élu(e), v.-p. pour l'Ouest, v.-p. pour l'Ontario et v.-p. des technologues. Les candidats élus qui se sont joints au C.A. de l'ACITN/CANNT pour l'exercice de 2008-2009 sont : Rick Luscombe, président élu (par acclamation), Marilyn Muir, v.-p. pour l'Ouest, Gail Barbour, v.-p. pour l'Ontario et Shripal Parikh, v.-p. des technologues.

Programme Krescent

- L'ACITN/CANNT continue d'appuyer cette initiative grâce à une contribution financière annuelle. Le Programme KRESCENT (*Kidney Research Scientist Core Education and National Training*) qui est un programme national de formation scientifique et d'encadrement des chercheurs spécialisés dans le domaine rénal, est une initiative conjointe de la Fondation canadienne du rein, de la Société canadienne de néphrologie et de l'Institut de nutrition, du métabolisme et du diabète (INMB) de l'Institut de recherche en santé du Canada (IRSC).

Agrément de l'Association des infirmières et infirmiers du Canada (AIIC)

- Plus de 1 080 infirmières et infirmiers ont été agréés en soins infirmiers en néphrologie au Canada. Nous tenons à féliciter ceux et celles qui ont passé l'examen ou renouvelé leur agrément en 2008. L'AIIC était présente au Congrès de l'ACITN/CANNT de 2008 avec un stand dans le hall des exposants et a fait une présentation vidéo lors de l'Assemblée générale annuelle (AGA).
- Un atelier de préparation pour passer l'examen d'agrément CNépho(C) de l'AIIC a été présenté en avant-première du Congrès de l'ACITN/CANNT de 2008.
- Ce fut avec grand plaisir que l'ACITN/CANNT a recommandé la candidature de Gillian Brunier, rédactrice en chef du Journal de l'ACITN/CANNT, au Prix du Centenaire de l'AIIC, mettant à l'honneur 100 infirmières et infirmiers exceptionnels dont les contributions personnelles et professionnelles ont entraîné d'extraordinaires et considérables répercussions dans le secteur infirmier. Gillian a donc reçu ce Prix et célébré avec ses collègues lors d'une réception à Ottawa en novembre 2008.

Célébrations du 40e anniversaire de fondation de l'ACITN/CANNT

- L'année est passée très vite avec les célébrations qui ont eu lieu lors du Congrès de l'ACITN/CANNT de 2008 dans la ville de Québec. Une fête d'anniversaire a été célébrée le vendredi 24 octobre 2008 où les participantes et les participants ont visionné un diaporama pour souligner les 40 ans de fondation de l'Association et écouté les allocutions de l'ex-présidente et membre fondateur de l'Association, Frances Boutilier, et de la présidente du Comité organisateur des célébrations du 40e anniversaire, Faye Clarke. Le numéro de juillet-septembre du Journal de l'ACITN/CANNT a été consacré à l'historique et à l'avenir des soins infirmiers en néphrologie au Canada.

Deuxième Journée annuelle des professionnels de la santé en néphrologie— le 19 septembre 2008

- La deuxième Journée annuelle des professionnels de la santé en néphrologie a été célébrée par de nombreuses unités au pays. Des collègues de *l'Association of Nephrology Dieticians* (AND) et du *Renal Pharmacist Network* (REN) ont collaboré à l'organisation et à la promotion de cette journée.

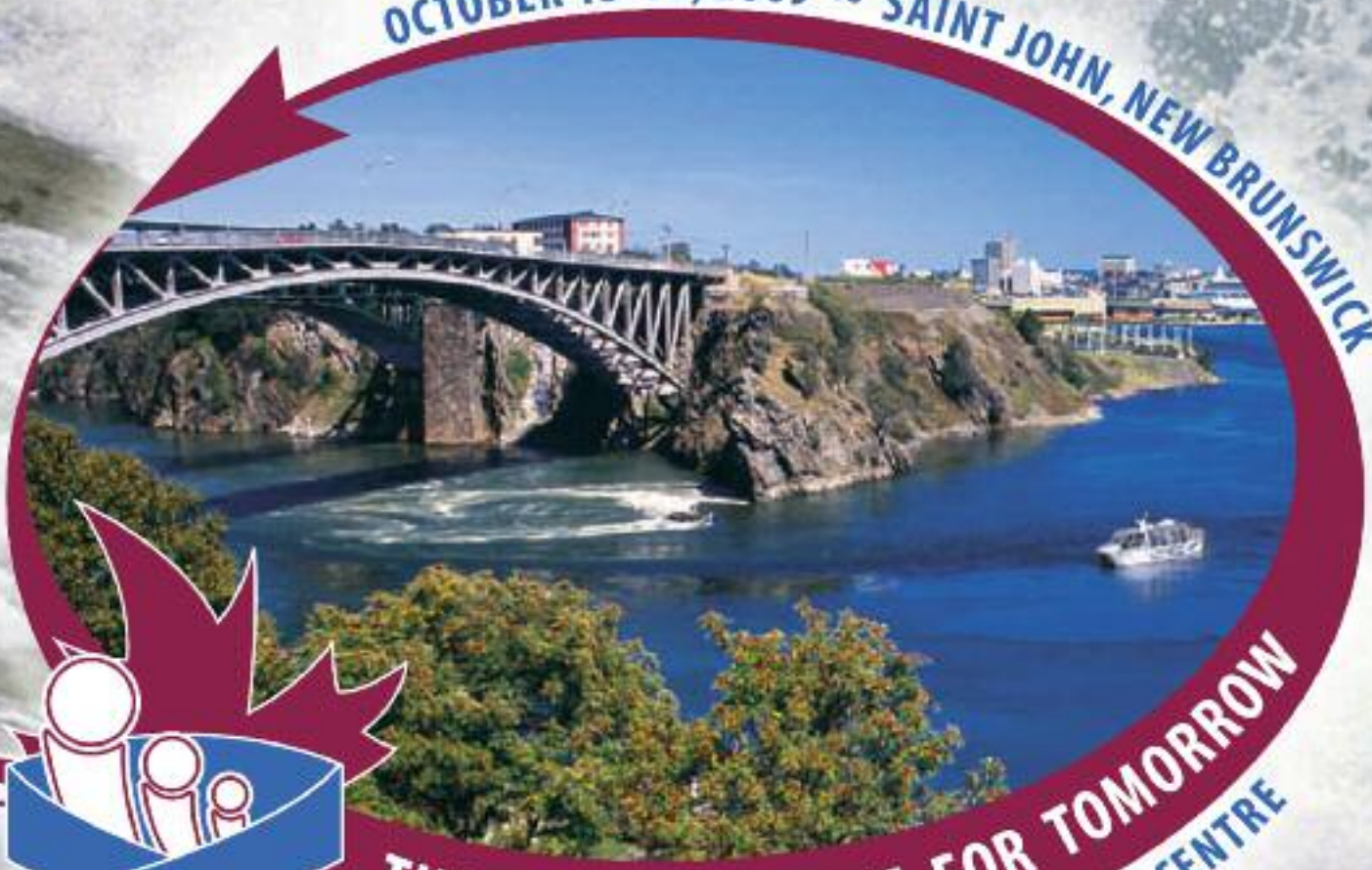
Congrès annuel de l'ACITN/CANNT de 2009

- Le Congrès annuel de l'ACITN/CANNT de 2009 aura lieu au *Saint John Trade and Convention Centre*, à Saint John, au Nouveau-Brunswick, du 15 au 18 octobre 2009. Le thème retenu est : *Turning the Tides for Tomorrow* (traduction libre : Remonter le courant pour l'avenir).

Ce fut une année productive et votre C.A. a travaillé fort pour promouvoir et développer l'ACITN/CANNT comme la voix des soins infirmiers en néphrologie au Canada. Nous vous invitons à prendre part aux activités de l'ACITN/CANNT. Il s'agit de votre association, et nous serions heureux de recevoir vos commentaires. La prochaine réunion du C.A. aura lieu au printemps de 2009. Pour toute information ou question, n'hésitez pas à communiquer avec moi ou avec votre agente ou agent de liaison de l'ACITN/CANNT.

Le tout respectueusement soumis par
Alison Thomas,
inf. (EC), M.Sc.Inf., CNéph(C),
Présidente sortante

OCTOBER 15-18, 2009 ~ SAINT JOHN, NEW BRUNSWICK



TURNING THE TIDES FOR TOMORROW

SAINT JOHN TRADE & CONVENTION CENTRE

CANNT ACITN

CANADIAN ASSOCIATION OF NEPHROLOGY NURSES AND TECHNOLOGISTS

L'ASSOCIATION CANADIENNE DES INFIRMIÈRES ET TECHNICIENS DE NÉPHROLOGIE

CANNT/ACITN 2009

Call For ABSTRACTS

SAINT JOHN
New Brunswick
2009

*Abstracts are currently being accepted for ORAL and POSTER presentations for **CANNT 2009**, the annual national meeting of the Canadian Association of Nephrology Nurses and Technologists, to be held **October 15 – 18, 2009** at the **Saint John Trade & Convention Centre, Saint John, New Brunswick**. Topics of interest may include: clinical research, innovative projects and solutions, ethics, case presentations and clinical reviews. All abstract submissions must be evidence-based.*

CONFERENCE THEME:

The theme for CANNT 2009 is **"TURNING THE TIDES FOR TOMORROW"**. In keeping with the conference theme, abstract submissions should demonstrate leading-edge nephrology topics, appropriate for the novice through to the advanced practice professional. Please consult the sidebar for possible areas of interest.

ABSTRACT SUBMISSION GUIDELINES – Deadline: April 1, 2009

All abstracts must be submitted via e-mail (hreid@innovcc.ca) as an attachment in Word or WordPerfect

Submissions must include the following:

Abstract Title
- must accurately reflect the content of the presentation

Abstract Text
- should be no longer than 250 words (font: Times New Roman 12 point)
- provide author information on a separate page
- should be as informative as possible

If **research-based**, should include:
- purpose of study
- methods
- results
- conclusions
- implications for nephrology care

If **practice/education-based**, should include:
- purpose of the project
- description
- evaluation/outcomes
- implications for nephrology practice/education

- define **all abbreviations** the first time they appear in the abstract
- use only the **generic** names of drugs
- **do not identify companies and/or products in the body or title of the abstract**

PRESENTATION INFORMATION: (provided on separate page)

- identify preferred format of presentation (ORAL or POSTER)
- full names and credentials of authors
- contact information for first author must include: full name, e-mail address, fax number, mailing address with postal code, home and work telephone numbers
- identify preferred audiovisual requirements (PC Viewer for Powerpoint or Slides)

Modes of Dialysis
Pathophysiology
Pediatrics
Pharmacology
Education
Leadership
Transplantation
Technology
Chronic kidney disease
Psychosocial
Advance directives
Nutrition
Infection control
Vascular access
Professional development
Ethics
Professional practice
Research
Disaster planning

IMPORTANT NOTES:

Only **COMPLETE** submissions received by **Wednesday, April 1, 2009** will be considered.

All correspondence will be with the first author only.

Acceptance of abstract does not waive attendance fees (registration, transportation, accommodations).

Notification regarding selection decisions will be provided by Friday, May 1, 2009.

Should the abstract be selected for presentation, the author(s) authorize(s) the publication of the abstract submitted for publication in the CANNT Journal.

The presentation shall not make comparison to companies or products for any purposes of product marketing, nor will topics or materials used discredit companies or products.

The abstract should make full disclosure of corporate funding sources.

Abstracts not in the required format will be returned to the author for revision.

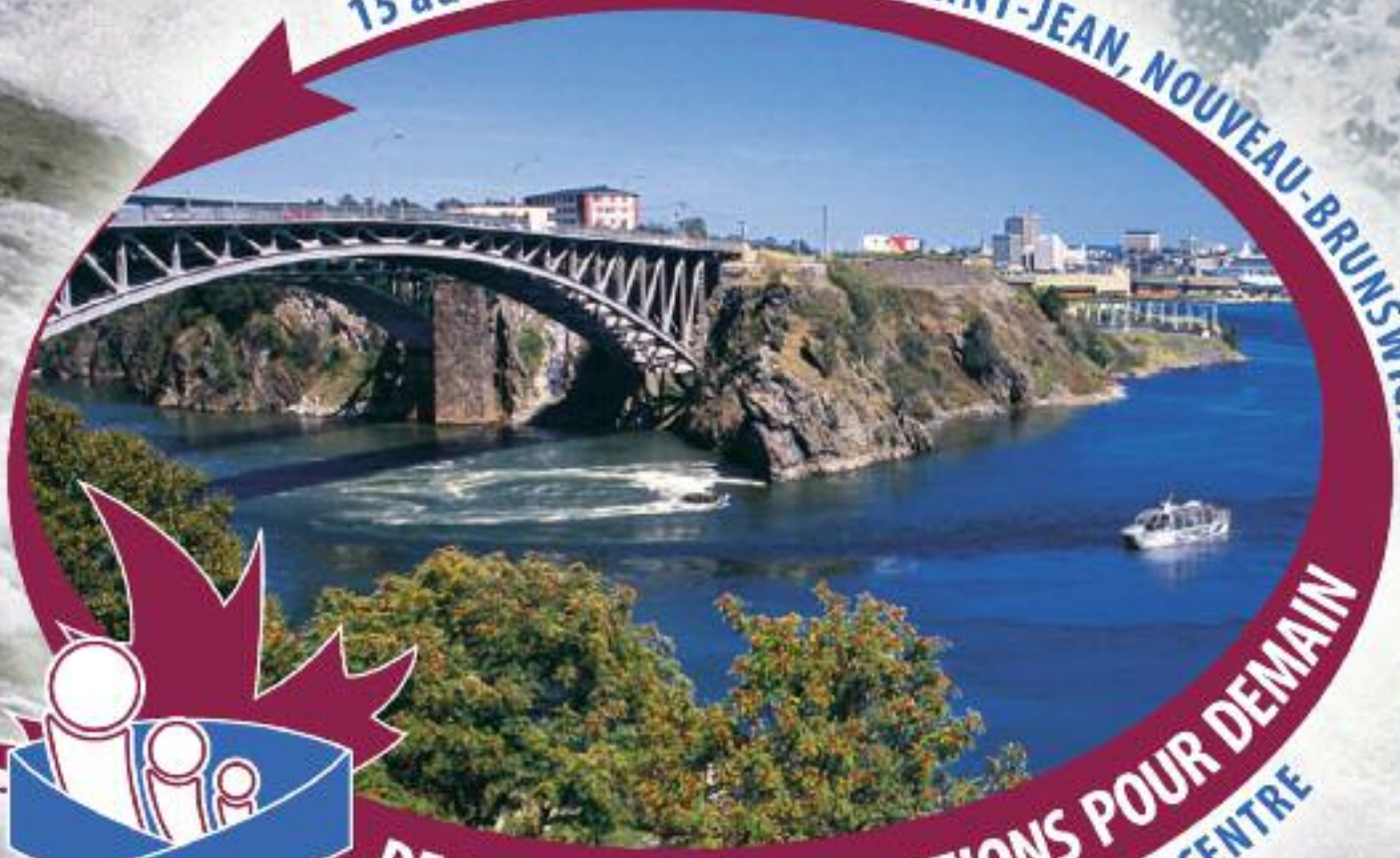
The language of abstract submission would be the language of presentation, if selected.

FORWARD ABSTRACTS TO:

MAIL: **CANNT 2009 ABSTRACTS**
Innovative Conferences & Communications
P.O. Box 319
59 Millmanor Place
Delaware, Ontario, Canada
N0L 1E0

E-MAIL: **hreid@innovcc.ca** ***(with file attached)***

15 au 18 OCTOBRE 2009 ~ SAINT-JEAN, NOUVEAU-BRUNSWICK



DES VAGUES D'INNOVATIONS POUR DEMAIN

SAINT JOHN TRADE & CONVENTION CENTRE

CANNT ACITN

CANADIAN ASSOCIATION OF NEPHROLOGY NURSES AND TECHNOLOGISTS
L'ASSOCIATION CANADIENNE DES INFIRMIÈRES ET TECHNICIENS DE NÉPHROLOGIE

CANNT/ACITN 2009

Demande de COMMUNICATIONS

SAINT-JEAN
Nouveau-Brunswick
2009

Nous acceptions présentement pour des présentations ORALES et des SÉANCES D'AFFICHAGE pour ***CANNT/ACITN 2009****, la réunion nationale annuelle de l'Association canadienne des infirmières/iers et technologues en néphrologie, qui se déroulera du* ***15 au 18 octobre 2009*** *au* ***Saint John Trade & Convention Centre, Saint-Jean, Nouveau-Brunswick****. Les sujets d'intérêts peuvent comprendre: la recherche clinique, les solutions et les projets innovateurs, l'éthique, la présentation de cas et les examens cliniques. Toutes les communications présentées doivent être basées des résultats cliniques et scientifiques.*

THÈME DE LA CONFÉRENCE:

Le thème de CANNT/ACITN 2009 est « **DES VAGUES D'INNOVATIONS POUR DEMAIN** ». Conformément au thème de la conférence, les communications présentées doivent toucher des sujets de pointe en néphrologie, appropriés aux novices comm aux expert. Veuillez consulter l'encadré pour les domaines d'intérêt possibles.

LIGNES DIRECTRICES POUR LA PRÉSENTATION DES COMMUNICATIONS - ÉCHÉANCE: 1er Avril 2009

Toutes les communications doivent être présentées par courriel à l'adresse suivante: hreid@innovcc.ca avec pièce jointe en format Word® ou WordPerfect®.

Les communications doivent comprendre les éléments suivants :

Titre de la communication
- doit refléter avec exactitude le contenu de la présentation;

Corps de la communication
- texte avec un maximum de 250 mots (caractère : Times New Roman, 12 points);
- fournir les renseignements sur l'auteur sur une page séparée;
- doit être le plus informatif possible;

si elle est **axée sur la recherche**:
- l'objet de l'étude;
- la méthodologie;
- les résultats;
- les conclusions;
- les implications pour les soins en néphrologie;

si elle est **axée sur la pratique/l'éducation**, elle doit comprendre:
- but du projet;
- la description;
- l'évaluation/les résultats;
- les implications pour la pratique et l'éducation en néphrologie;

- définir **toutes les abréviations** dans le texte;
- utiliser uniquement les noms **génériques** des médicaments;
- **ne pas identifier de compagnie ou de produit dans le titre ou le contenu de la communication.**

Modalités de traitement
Physiopathologie
Pédiatrie
Pharmacologie
Éducation
Leadership
Transplantation
Technologie
Maladies rénales chroniques
Aspect psychosocial
Directives avancées
Nutrition
Contrôle des infections
Abords vasculaires
Développement professionel
Éthique
Pratique professionnelle
Recherche
Plan de désastre

RENSEIGNEMENTS SUR LA PRÉSENTATION: (fournis sur une page séparée)

- indiquer le format de présentation privilégié (ORALE ou PAR AFFICHES);
- indiquer le nom et les qualifications professionnelles et académiques des auteurs;
- fournir les renseignements de l'auteur principal: nom complet, adresse de courriel, numéro de télécopieur, adresse postale avec le code postal, numéros de téléphone au domicile et au travail;
- indiquer les exigences audiovisuelles (projecteur LCD, pour présentation PowerPoint® ou par diapositives).

REMARQUES IMPORTANTES:

Seules les présentations **RÉPONDANT AUX CRITÈRES ÉNONCÉS** reçues avant le **mercredi 1er avril 2009** seront étudiées.

Toute correspondance sera effectuée exclusivement avec l'auteur principal.

L'acceptation de la communication ne dispense pas des frais de participation (inscription, transport, logement).

Les décisions de sélection seront communiquées avant le vendredi 1er mai 2009.

Si la communication est retenue aux fins de présentation, le ou les auteurs autorisent la publication de la communication présentée dans le Journal de la CANNT.

La présentation ne doit pas comparer des compagnies ou des produits à des fins mercantiles. Les sujets ou les documents utilisés ne doivent en aucun temps faire de discrimination entre compagnies ou produits.

La communication doit indiquer les sources de financement de sociétés, lorsque applicable.

Les communications qui ne rencontrent pas les exigences mentionnées ci-haut ne seront pas retenues et seront retournées à l'auteur principal pour fin de révision.

Si votre communication est choici, la langue de présentation sera celle de la demande de communication.

FAITES PARVENIR LES COMMUNICATIONS À:

COURRIER: **COMMUNICATIONS CANNT/ACITN 2009**
Innovative Conferences & Communications
B.P. 319
59, Millmanor Place
Delaware (Ontario), Canada
N0L 1E0

COURRIEL: **hreid@innovcc.ca** ***(avec le fichier joint)***

Work environment, health outcomes and magnet hospital traits in the Canadian nephrology nursing scene

By Jane Ridley, RN, MScN, CNeph(C), Barbara Wilson, RN, MScN, CNeph(C), Lori Harwood, RN, MSc, CNeph(C), and Heather K. Laschinger, RN, PhD

Abstract

Nephrology, like others areas of health care, is confronting a nursing shortage. Unless action is taken to address nursing shortages, patient care may be negatively affected (American Nephrology Nurses' Association, 2007). Previous studies have been conducted on magnet hospital traits, quality of nursing worklife, empowerment, job satisfaction, burnout, health outcomes, and their influence on nursing retention in Canada. However, there is little research in this area specific to nephrology nursing. This descriptive study examined whether magnet hospital traits, empowerment, and organizational support contribute to Canadian nephrology nurses' job satisfaction, health outcomes, and perceived quality of patient care. A randomly selected sample of 300 nurse members of the Canadian Association of Nephrology Nurses and Technologists (CANNT) was asked to complete a survey consisting of four instruments: The Nursing Work Index (Lake, 2002), the Conditions of Work Effectiveness Questionnaire II (Laschinger, Finegan, Shamian, & Wilk, 2001), the Pressure Management Indicator (Williams & Cooper, 1998), and the Maslach Burnout Inventory (Maslach, Jackson, & Leiter, 1996). There was a 48.1% response rate. Results demonstrated that some aspects of the Canadian nephrology nursing environment were rated quite favourably (e.g., high standards of care are expected; good working relationships with peers), but areas requiring improvement were evident (e.g., assignments that foster continuity of care). Overall, the nurses felt empowered. The results of the Pressure Management Indicator and Maslach Burnout Inventory indicated that nephrology nurses are generally coping well, but that some of them are struggling. Strategies that improve work environments could promote the recruitment and retention of nephrology nurses. Further research in this area is warranted.

Key words: empowerment, work environment, burnout, job strain, nephrology nursing

Introduction

Adequate nursing staffing is critical to the delivery of quality patient care. Yet, we are again in the midst of a nursing shortage. The American Nephrology Nurses' Association (ANNA) (2007) contends that patients will be negatively impacted unless decisive action is taken to address both current and future nursing shortages. What, then, can be done to increase the recruitment and retention of nephrology nurses?

A great deal of research has been done on magnet hospitals—institutions that successfully attract and retain nurses. It has been hypothesized that magnet hospitals have remained successful at recruiting and retaining nurses by maintaining and promoting work environments that foster empowerment, autonomy, responsibility, control over the environment, and positive collaborative nurse-physician relationships. A number of studies have demonstrated that the presence of these organizational characteristics contributes to positive outcomes including job satisfaction and perceived higher quality of care (Aiken & Patrician, 2000; Lake, 2002; Laschinger & Havens, 1997; Laschinger, Finegan, Shamian, & Wilk, 2001; Laschinger, Shamian, & Thomson, 2001; Scott, Sochalski, & Aiken, 1999; Wilson & Laschinger, 1994), autonomy, control over practice, and relationships with physicians, which positively impacted mortality rates (Aiken, Smith, & Lake, 1994). Laschinger, Shamian, and Thomson (2001) have also suggested that environments that encourage nurses to make decisions and exercise their judgment promote organizational trust.

A review of related literature raised questions about the Canadian nephrology nursing environment: What is our current state of affairs? Do magnet hospital traits, empowerment, and organizational support contribute to Canadian nephrology nurses' job satisfaction, health outcomes, and perceived quality of care? Answers to these important questions may play a future role in the development of more satisfying work environments and the recruitment and retention of nephrology nurses in Canada.

Theoretical framework

Kanter's (1977) theory of empowerment provides the theoretical framework for this study. According to Kanter, employee work behaviours and attitudes are shaped in response to characteristics of the work environment as opposed to personality traits of the individual. An empowering work environment is one in which employees have access to support, infor-

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Heather K. Laschinger, RN, PhD, Distinguished University Professor, Associated Director Nursing Research, Arthur Labatt Family School of Nursing, University of Western Ontario

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mation, resources, and opportunities for both increasing knowledge and skill, and potential for advancement within the organization. Those with access to these various structures feel empowered and contribute productively to the organization, participate more actively in organizational activities, and exhibit higher morale. Conversely, individuals in positions that limit access to empowerment structures become powerless, stagnate in their positions, become rules-minded, feel less committed, and have less job satisfaction. Laschinger's (1996) program of research based on Kanter's theory (1977) of empowerment and its application and relevance to nursing has been demonstrated in a variety of nursing settings.

Review of the literature

The nursing work environment

Healthy work environments are a topic on the forefront. Editorial columns regarding the impact of the work environment on nurses' job satisfaction and health outcomes and patient outcomes have been published in the **Canadian Nurse** (Little, 2007) and the **Nephrology Nursing Journal** (Gilmore, 2007). The Registered Nurses' Association of Ontario (RNAO) has developed six best practice guidelines related to work environments; a seventh is under development (Scarrow, 2007). The American Association of Critical Care Nurses (2005) has published standards for establishing and sustaining healthy work environments based on evidence that unhealthy environments contribute to stress among health professionals.

Nursing practice environments have been the subject of numerous studies. One such study of staff nurses revealed that perceived access to power and opportunities were related to their degree of organizational commitment, perceptions of their manager's level of organizational power, and perceptions of the presence of empowering organizational characteristics (Wilson & Laschinger, 1994). A secondary analysis of three studies further supported Kanter's (1977) theory that work environments in which nurses have access to information, support, and resources are supportive of professional practice (Laschinger, Almost, & Tuer-Hodes, 2003).

Empowering behaviours on behalf of managers have been demonstrated to be associated with greater workplace empowerment, nurses' ability to accomplish their work, and less job tension. Empowerment was negatively associated with job tension, which, in turn, negatively affected nurses' perceptions of work effectiveness. The nurses in this study were surveyed during a hospital merger. Surprisingly, they exhibited low levels of job tension and high levels of work effectiveness. It was hypothesized that management strategies in the transition process were empowering (Laschinger, Wong, McMahon, & Kaufmann, 1999). This research supports a related topic: The relationship between organizational culture and work environment. Leadership, job satisfaction, staff recruitment, and work support are elements of an institution's culture. These elements impact nursing and patient care delivery (McDaniel & Stumpf, 1993).

Research has also demonstrated that empowerment is related to job satisfaction, occupational mental health, and work effectiveness (Laschinger, Finegan, Shamian, & Wilk, 2001). Sarmiento, Laschinger, and Iwasiw (2004) found that a high degree of work empowerment in combination with low levels of burnout were predictive of nurse educators' job satisfaction.

Health outcomes

The work environment has an impact on nurses' occupational health. Research regarding burnout and mental health has been conducted among hospital staff nurses (Laschinger & Havens, 1997; Laschinger, Finegan, Shamian, & Wilk, 2001; Cohen-Katz, Wiley, Capuano, Baker, & Shapiro, 2005; Laschinger, Wong, McMahon, & Kaufmann, 1999), federal service and public health nurses (Sadovich, 2005), community mental health nurses (Edwards, Burnard, Coyle, Fothergill, & Hannigan, 2001), and nurse educators (Sarmiento, Laschinger, & Iwasiw, 2004). These studies support the link between environment, job strain, and mental health issues such as burnout.

The concept of burnout was introduced in the 1970s. Burnout is the result of chronic strain from a mismatch between the worker and the job (Maslach, 2003, p. 189). It is a syndrome characterized by physical, mental, and emotional exhaustion. It can result in a loss of concern about patients, cynicism, and negativism (Haddad, 2006). Work overload, lack of control, lack of reward for contribution, lack of community, lack of fairness, and value conflicts contribute to this problem. Long viewed as a personal or individual problem, burnout is, in reality, a systems problem (Maslach & Leiter, 1997).

Laschinger and associates have found that empowered nurses were less likely to experience job strain (Laschinger & Havens, 1997; Laschinger, Finegan, Shamian, & Wilk, 2001). Sadovich (2005) determined that burnout is correlated with work excitement. Increased work excitement was negatively related to emotional exhaustion and depersonalization and positively related to personal accomplishment.

Burnout among nurses has ramifications for patient care. Research has demonstrated that nurse burnout is related to decreased patient satisfaction (Cohen-Katz, Wiley, Capuano, Baker, & Shapiro, 2005; Leiter, Harvie, & Frizzell, 1998).

Arikan, Koksal, and Gokce (2007) examined work-related stress, burnout, and job satisfaction in hemodialysis (HD), intensive care, and specialty ward nurses. They concluded that the HD nurses were better off than their critical care counterparts with respect to stress, burnout, premature retirement, and job satisfaction. This was not due to the dialysis unit environment per se, but associated with the nurses being older, more experienced, and free of night shifts. Job stress was positively correlated with burnout and negatively correlated with job satisfaction. Nurses who felt that they had positive relationships with physicians and were exposed to positive attitudes among co-workers, patients, and administrators experienced less work-related stress, emotional exhaustion, and depersonalization. They felt more personal accomplishment and had more job satisfaction.

The nephrology nursing environment

Nephrology nurses view their role as being unique and different from their nursing colleagues (Morehouse, Colvin, & Maykut, 2001). However, until the past few years, there has been little in the literature specific to the nephrology nursing environment.

Thomas-Hawkins, Currier, Denno, and Wick (2003) surveyed the opinions of ANNA members employed in free-standing HD units in the United States (U.S.) (n = 383). They reported that while inter- and intra-disciplinary relationships

were viewed positively, there were problems in the area of organizational support. Shared governance was not a reality for many of the nurses and only half of the participants felt they had control over their practice. There was a perceived lack of administrative recognition for their work and inattention towards their professional development.

More recently, Gardner, Thomas-Hawkins, Fogg, and Latham (2007) examined relationships between nurses' perceptions of the HD work environment and nurse turnover, patient satisfaction, and hospitalizations (n = 199). The participants were employed in multiple facilities (56) owned by one HD company. The nephrology work environment was rated favourably. There were significant correlations between nurses' perceptions of the dialysis work environment, nurses' intentions to leave their jobs, nurse turnover rates, and patient hospitalizations.

Harwood et al. (2007) evaluated a renal nursing professional practice model (PPM) and its impact on the work environment (n = 31). Their findings indicated that a PPM promoted a positive and empowering environment for HD nurses.

The importance of fostering positive work environments for nurses cannot be overstated. Furthermore, research specific to nephrology nursing work environments in Canada and outcomes attributed to these are lacking. The purpose of this descriptive study was to examine whether magnet hospital traits, empowerment, and organizational support contribute to Canadian nephrology nurses' job satisfaction, health outcomes, and perceived quality of patient care.

Research methodology

Sample

Ethical approval was obtained from the university/hospital ethics board. The study was descriptive in nature. The intention was to clarify concepts and generate relationships. A computer-generated, randomly selected sample was used. Surveys were sent nationally to 300 randomly selected Canadian Association of Nephrology Nurses and Technologists (CANNT) nursing members who consented to be on a mailing list. The surveys were distributed in March 2007. This was followed by a second mailing in June 2007.

Instruments

Four instruments were used to obtain data.

The Nursing Work Index–Practice Environment Scale (NWI-PES) measures traits associated with magnet hospitals: autonomy, control over the practice environment, and nurse-physician relationships. The tool consists of 29 items that are rated in terms of being present in one's current job. Reliability indices for this instrument are high with Cronbach's Alpha scores ranging from .71 to .84 (Lake, 2002).

The Conditions of Work Effectiveness Questionnaire II (CWEQ-II) measures nurses' job satisfaction and their perceptions of empowerment. The tool consists of six subscales: opportunity, information, support, resources, formal power, and informal power. Opportunities involve challenging work and the opportunities to gain and utilize new knowledge and skills. Access to information refers to information on the organization's current state of affairs, values, and goals. Access to support pertains to information about what individuals do well, what they can improve upon, and advice for problem solving. Access to resources refers to having the time to accomplish job requirements and acquiring temporary help when needed. Job activities include rewards for innovation, flexibility in one's job, and visibility of one's work within the institution. Organizational relationships involve collaboration with colleagues, being sought out by others for help with problem solving, and seeking out ideas from colleagues. Reliability and validity have been documented with the CWEQ-II (Laschinger, Finegan, Shamian, & Wilk, 2001).

Table One. Demographic characteristics

Characteristic	N=129
Age (mean, years)	46.2
Gender	
Male %	3.1
Female %	96.9
Years in Nursing (mean)	23.2
Years in Nephrology Nursing (mean)	12.6±
Province Employed (%)	
Ontario	50.0
British Columbia	13.3
Quebec	9.4
New Brunswick	5.5
Alberta	4.7
Nova Scotia	4.7
Newfoundland	3.9
Saskatchewan	3.9
Manitoba	3.1
Prince Edward Island	0.8
North West Territories	0.8
Highest Educational Background (%)	
Diploma	59.7
Baccalaureate	35.7
Master's Degree	4.7
Area of Nursing Practice (%)	
Hemodialysis	61.2
Hemodialysis/Peritoneal Dialysis	6.9
Chronic Kidney Disease Clinic	4.6
Peritoneal Dialysis only	3.1
Transplant	2.3
Home Modality	2.3
Inpatient nephrology	1.6
Mix*	11.6
Plans to leave current position (%)	
Yes	23.3
No	76.7
Plans to leave current position (%)	
Within 6 months	12.1
Within 12 months	27.3
No concrete plans	60.6

* Indicates nurses working in more than one area of nephrology in addition to HD or PD; clinics; inpatient nephrology, transplant, education

The Pressure Management Indicator is a two-part questionnaire that was used to assess health outcomes and burnout. Part one involves rating the frequency of physical symptoms and lack of energy. Part two is a mini mental health check. Internal consistency reliability ranges from .82 to .85 across studies of diverse populations. This scale is significantly related to other mental health measures, providing evidence of predictive validity (Williams & Cooper, 1998).

The Maslach Burnout Inventory was also used to assess for burnout. The tool contains three subscales: emotional exhaustion, personal accomplishment, and cynicism. Reliability scores are acceptable with Cronbach alpha reliabilities ranging from .71 to .91 and test-retest reliabilities ranging from .60 to .82 (Maslach, Jackson, & Leiter, 1996). In addition to data from the questionnaires, background information about individual participants was collected including basic demographic information (gender, age, province of residence, nursing education, and employment), area(s) of nephrology practice, and current job title. Apart from the demographic information gathered, participants were asked if they had plans to leave their current position and, if so, whether this could potentially occur within the next six to 12 months.

Respondents were also asked to rate the quality of care delivered on their respective units. First, by rating the care provided at their facility on a 4-point Likert-type scale ranging from poor to excellent (1 = excellent, 4 = poor). Second, by indicating whether the level of care had changed over the past year and third, whether they would recommend their facility to family members if care was required. Finally, respondents were also asked about whether or not non-regulated workers were being employed in their respective work environments and their perceptions regarding the impact of this on the quality of care.

Table Two. Magnet hospital traits NWI-PES Top 10 and bottom 5 mean scoring items

	Nurses agreeing item present in work environment (%)	
Top 10 Scoring Items	**Ridley et al., 2008***	**Harwood et al., 2007**
Admin. expects high standard of care	86	83
Good MD-RN relationships	84	84
Working with competent nurses	88	93
Opportunity to serve on committees	81	90
Preceptorship program for new nurses	76	83
Supervisory staff supportive of nurses	74	45
Care based on a nursing, not a medical model	72	86
Time & opportunity to discuss patient problems with other nurses	64	67
Collaboration between nurses and doctors	64	67
Staff development/continuing education programs	62	61
Bottom 5 Scoring Items		
Visible & accessible Chief Nursing Officer	28	-
Written, up-to-date nursing care plans	32	52
Assignments that foster continuity of care	38	60
Administration that listens & responds to employee concerns	43	33
Opportunities for advancement	45	17

* *Current study*

Results

Demographics

The overall response rate for return of questionnaires was 48.1%. The majority of the respondents were female (96.9%). The average age was 46.2 years, the average years in nursing were 23.2, and the average years in nephrology were 12.6 with a range of one to 35 years. The largest percentage of participants (50.0%) was from Ontario. In terms of prior nursing education received, the majority of nurses were diploma prepared (59.7%), 35.7% were baccalaureate prepared, and 4.7% had obtained a master's degree. Nurses participating in this study practised in a variety of areas in nephrology including HD (61.2%), peritoneal dialysis (PD) (3.1%), and chronic kidney disease (CKD) (4.6%). A number of respondents (11.6%) worked in multiple areas of nephrology in addition to either HD or PD. (Refer to Table One for a summary of these data.)

Magnet hospital traits

Information obtained from the NWI-PES provided information about the nephrology nursing environment with respect to magnet hospital traits. Mean item results in decreasing rank order are presented in Table Two. Top ranking items included the administration expecting a high standard of care, good physician-nurse relationships, working with competent nurses, and the opportunity to serve on committees. In contrast, the lowest scoring items, least present in the work environment, included a visible and accessible chief nursing officer, written up-to-date plans of care, assignments that foster continuity of care, and administration that listens and responds to employee concerns. Perceived opportunities for advancement within the organization was the lowest scoring item.

Job satisfaction, empowerment, and quality of care

Information pertaining to job satisfaction and empowerment was obtained from the CWEQ-II. Scores for each of the subscales are presented in Table Three. The subscale scores for "opportunities" and "organizational relationships" scored the highest, indicating that colleagues get along well and that working relationships are cooperative and collaborative. The

highest scoring subscale was "opportunities". This implies that the nurses find their work challenging and have the opportunities to both gain and utilize new knowledge and skills. By contrast, the lowest ranking subscale pertained to job activities. Items in this subscale included rewards for innovation, flexibility in the job, and visibility of one's work within the organization, suggesting these elements were less than optimal in the work environments of nephrology nurses surveyed. The global empowerment score refers to the degree to which the nurses' current environments empower them to accomplish work effectively.

As additional measures to examine perceived quality of care, respondents were asked about the quality of care delivered on their units on a 4-point Likert scale from 1 (excellent) to 4 (poor) (See Table Four). The majority of the respondents rated the care as being good (50.8%) or excellent (35.9%). A small number rated care less favourably at fair (12.5%) or poor (0.8%). The majority of the respondents (79.2%) would recommend their facility to family. Most of the participants (58.3%) felt that the quality of care in their hospitals had remained the same over the previous year; 25.2% felt that care had deteriorated; and 16.5% felt that care had improved.

Given the nursing shortage, the authors inquired about whether or not non-regulated workers were being employed in nephrology and, if so, the perceived impact on the quality of care. Interestingly, 62.4% of the respondents stated that this was not applicable. Where non-regulated workers were employed, 20% of respondents felt care had remained the same, 1.6% felt it had improved, and 16% felt that it had deteriorated (see Table Four).

Health outcomes and burnout

The Pressure Management Indicator was used to look at health outcomes and burnout. The results are presented in Table Five. Part I pertains to physical symptoms. Ninety per cent of the participants reported infrequent physical symptoms. In terms of lack of energy, 52.5% of the participants reported experiencing this infrequently or less. Part II addresses mental health. While the majority of the participants (45.3%) reported nervousness only a little bit of the time, 10.2% reported it more than a good bit of the time. The majority of the participants (51.6%) had never been so down in the dumps that they were beyond cheering up. However, 19.5% reported feeling this some of the time or more frequently. Most of the respondents (44.5%) reported feeling blue some of the time; 14.8% reported this as occurring a good bit of the time or more. The majority of the participants (75.7%) considered themselves happy at least a good bit of the time. In terms of being calm and peaceful, the results were largely evenly distributed among three areas: a good bit of the time (28.3%), some of the time (28.3%), and most of the time (27.6%).

The Maslach Burnout Inventory results are presented in Table Six. Results are subdivided into three subscales. The first subscale is emotional exhaustion. The majority (40.8%) of respondents reported this a few times a month or more frequently, 23.4% once a month or less, 26.3% a few times a year, and 9.4% never. The second subscale is personal accomplishment. A fraction (12.6%) of the participants reported this a few times a month, 48.3% a few times a week, and a small percentage (.8%) reported it once a month or less. The third subscale is cynicism. A good number of the respondents (31.8%) reported that they did not experience any cynicism. Approximately one quarter of the participants (25.7%) reported it once a month or less, 12.5% a few times a month, 5.6% once a week, and 4.8% several times a week.

Plans to leave position

Apart from data obtained from the questionnaires, participants were asked questions that pertained to plans to leave their present position. Results of these data are presented in Table One. In terms of plans to leave their current position, 23.3% indicated that they had such plans while 76.7% did not. Of those planning to leave their present positions, 12.1% planned to do so within six months and 27.3% within the year. The remaining 60.6% had no concrete plans.

Discussion

The purpose of this study was to provide a snapshot of the Canadian nephrology nursing work environment and examine whether magnet hospital traits, empowerment, and orga-

Table Three. Empowerment and job satisfaction CWEQ-II subscale scores

Subscale	Mean score
Opportunity	3.66
Organizational relationships	3.61
Information	2.95
Support	2.9
Resources	2.893
Job activities	2.66
Empowerment (global)	3.1

Table Four. Perceived quality of care

Characteristic	N =	% Agreeing
Quality of care delivered on unit		
Excellent	46	35.9
Good	65	50.8
Fair	16	12.5
Poor	1	0.8
Quality of care in the hospital over the past year		
Improved	21	16.5
Remained the same	74	58.3
Deteriorated	32	25.2
Recommend facility to family		
Yes	99	79.2
No	26	20.8
Impact of non-regulated workers on quality of care		
Improved	2	1.6
Remained the same	25	20
Deteriorated	20	16
N/A	78	62.4

nizational support contribute to job satisfaction, health outcomes, and perceived quality of patient care. Overall, given the nursing shortage and general negativity surrounding health care, a number of the outcomes measured favoured positively. At the same time, it is apparent that some of our colleagues are struggling.

In terms of the presence of magnet hospital traits, it was encouraging to see that the top scoring items on the NWI-PES included administration expecting a high standard of care, good physician-nurse relationships, working with competent nurses, and the opportunity to serve on committees. Conversely, it is concerning to note that the lowest ranking items and, therefore, least present in nurses' work environments included written, up-to-date care plans, assignments that foster continuity of care, administration that listens and responds to employee concerns, and opportunities for advancement. From a practice perspective, clear expectations regarding plans of care and continuity in patient assignment are vital to providing good nursing care. It is evident from responses that nurses do not feel their concerns are being heard or responded to. Perhaps this is an area for future improvement from both patient care and recruitment and retention perspectives.

Perceived opportunities for advancement was rated as being low on the NWI-PES. The reality is that we do not have career laddering in Canada. There are, however, alternatives. Can opportunities be created within existing nursing roles, which will increase satisfaction and encourage nurses to take on new tasks—such as leading a clinical group or being a change agent? Although such activities do not constitute formal advancement, the intrinsic rewards could still have a positive effect.

A comparison of NWI-PES results (top 10 and bottom five) with that of a previous study by Harwood et al. (2007) are presented in Table Two. The earlier study by Harwood et al. (2007) represented data from one tertiary care HD centre in Canada and, interestingly, the percentage of nurses agreeing across the various items are similar.

Results of the CWEQ-II provided information concerning the state of nephrology nursing work environments and empowerment as defined by Kanter's (1977) theory. Overall, empowerment scores were good. Further examination of the CWEQ-II subscales would suggest that respondents had varying access to Kanter's (1977) empowerment structures within their organizations. Access to opportunities to learn and grow and strong network relationships were rated most favourably, while the job activities subscale had the lowest mean score. This would suggest that nephrology nurses have opportunities for challenging work, to gain new knowledge and skills, and serve on committees. Certainly, with the evolution of new technology in providing renal replacement therapies, there are ongoing opportunities to learn new skills. Organizational relationships amongst team members and collaboration with physicians are paramount in caring for a chronic renal population, so these results are encouraging. On the negative side, the low rating for the job activities subscale suggests that there are few rewards for innovation, lack

Table Five. Health outcomes and burnout
Pressure Management Indicator

Part I **Physical Symptoms** (%)	**Never**	**Very Infrequently**	**Infrequently**	**Sometimes**	**Frequently**	**Very Frequently**
Physical Symptoms	28	35.9	26.6	8.7	0	0.8
Lack of Energy	12.5	11.7	28.0	34.4	9.4	3.9
Part II **Mental Health** (%)	**All of the time**	**Most of the time**	**A good bit of the time**	**Some of the time**	**A little of the time**	**None**
Nervous	0	1.6	8.6	10.1	45.3	34.4
Down in the dumps	0	0.8	6.3	12.4	28.9	51.6
Blue	0	3.9	10.9	21.9	44.5	2.7
Calm and Peaceful	0	27.6	28.3	28.3	12.6	3.1
Happy	3.1	48.4	24.2	14.8	8.6	0.8

Table Six. Burnout
Maslach Burnout Inventory

	% of Time Experienced by Nurses						
Subscales (%)	**Never**	**A few times a year**	**Once a month/less**	**A few times a month**	**Once a week**	**A few times/week**	**Every day**
Emotional Exhaustion	9.4	26.3	23.4	19.6	12.5	7.9	0.8
Personal Accomplishment	0	0	0.8	12.6	26.6	48.3	11.7
Cynicism	31.8	25.7	19.5	12.5	5.6	4.8	0

of flexibility, and less than optimal visibility of one's work within the organizations in which participants worked.

A large number of the participants (n = 76) reported preceptorship programs for new nurses. Preceptorship programs would provide new nurses with a positive initiation to the nephrology area and could prove to be rewarding and empowering for experienced nurses where they have opportunities to share their knowledge, be visible amongst their peers, be regarded as an expert nurse, and be offered new challenges in their day-to-day work.

Given the negative press surrounding the state of the health care system, the health outcomes of the participants were somewhat reassuring. Scores from the Pressure Management Indicator and the Maslach Burnout Inventory were generally good. However, the results also indicate that some of our colleagues are experiencing difficulties. The fact that 40.8% of respondents who completed the Maslach Burnout Inventory reported emotional exhaustion a few times a month or more frequently is concerning. Nursing continues to be a predominantly female profession and, as such, nurses must continue to fulfill many roles both personally and professionally. Most health care organizations have employee assistance programs available. Nurses need to be encouraged to access these programs and learn how to balance their personal and professional lives. However, as burnout is a systems issue, we need to take heed and address contributing factors in the work environment as well.

Open-ended questions pertaining to perceived quality of care yielded some interesting results. Most were happy with the quality of care delivered in their respective areas and the majority (79.2%) would recommend their facility to family. It was encouraging to see that 16.5% of respondents felt that the care provided had improved over the past year. This is consistent with the National Survey of the Work and Health of Nurses (CIHI, 2005) in which 15.4% of nurses in Canada felt that care had improved in their institution over the previous year. Of concern, however, was the fact that a quarter of respondents (25.2%) believed that care had deteriorated in the same time period. Furthermore, where non-regulated workers were employed in nephrology areas, 20% of nurses reported that care had remained the same and 16% felt that it had deteriorated. At the time of the survey, 62.4% of respondents did not have unregulated workers in their areas. As hospital administrations look at ways to cut costs, consideration needs to be given to outcomes associated with the addition of non-regulated workers and comparison to the benefits of maintaining an all-professional nursing staff in the management of renal patients across the care continuum.

The average age of nephrology nurses participating in this study was 46 years, which is slightly older than the national average of 45 years in 2006 (Canadian Nurses Association, 2008). Participants had more years experience in nursing (23.2 versus 18.7 years) than the national average in Canada (CIHI, 2005) and many years of nephrology experience as well (mean 12.6 years). It is disconcerting to note that many of these experienced nephrology nurses are within nine years of retirement. Furthermore, almost one quarter (23.3%) of participants reported plans to leave their current position. The importance of generating and implementing recruitment and retention strategies cannot be sufficiently stressed.

Care based on a nursing, as opposed to a medical model, was rated as being present by 72% of the respondents. This raises questions about the remaining 28%. How does nursing care delivery look in these areas? Is this related in any way to the low scoring items of written up-to-date plans of care and assignments that foster continuity of care? These results are disconcerting, but rectifiable.

Study limitations

A number of limitations must be considered when interpreting the results of this study. First, the small sample size and large Ontario representation needs to be taken into account, as it may not be reflective of the perceptions of nurses in other parts of the country. Second, respondents were asked to complete a number of surveys at one point in time. Local events and organizational changes around the time surveys were completed may have impacted nurses' responses. Third, while the response rate was adequate at 48.1%, one needs to consider that only nephrology nurses who were members of CANNT were mailed surveys. By virtue of being members of CANNT, a professional association for nephrology nurses, participants' answers may not reflect perceptions of all individuals working with nephrology patients. Furthermore, nurses feeling overwhelmed and exhausted at the time surveys were mailed may have chosen not to complete them for fear of adding additional burden to an already hectic schedule.

Implications for practice and research

The results of this study provide a valuable description of nurses' work environments, health outcomes, and perceived quality of care in a variety of nephrology settings across Canada. It identifies areas where things are going well, as well as opportunities for improvement. This information may assist nephrology leadership teams in the design and delivery of their programs, as well as the development of future goals, and directions for structuring care delivery. It will assist in generating strategies that promote recruitment and retention of future nephrology nurses. A study exploring quality of worklife on a national level with a sample of nurses who may or may not be members of a professional association would be important. More research in this area is critical, as strategies to ameliorate the nursing shortage and provide adequate patient care should be based on evidence.

Conclusion

In conclusion, the results of this study support previous research on nursing work environments and empowerment. The results also provide a glimpse into the state of the Canadian nephrology nursing scene. While there are many positives, there are also areas that need to be addressed. Improving on aspects of the work environment could promote the retention of nephrology nurses. As always, there is the need for further research in this area.

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References

Aiken, L., & Patrician, P.A. (2000). Measuring organizational traits of hospitals: The revised nursing work index. **Nursing Research, 49**(3), 146–153.

Aiken, L., Smith, H., & Lake, E. (1994). Lower Medicare mortality among a set of hospitals known for good nursing care. **Medical Care, 35**(11, Suppl.), NS6–NS18.

American Association of Critical Care Nurses. (2005). **AACN Standards for establishing and sustaining healthy work environments. Executive summary**. Retrieved January 16, 2009, from www.classic.aacn.org

American Nephrology Nurses' Association. (2007). **Position statement: The impact of the national nursing on quality nephrology nursing care**. Retrieved January 16, 2009, from www.annanurse.org/

Arikan, F., Koksal, C.D., & Gokce, C. (2007). Work-related stress, burnout, and job satisfaction of dialysis nurses in association with perceived relations with professional contacts. **Dialysis & Transplantation, 36**(4), 182–191.

Canadian Institute for Health Information. (2005). **A summary of highlights from the 2005 national survey of the work and health of nurses.** Ottawa, ON: Author.

Canadian Nurses Association. (2008). **2006 workforce profile of registered nurses in Canada**. Retrieved January 16, 2009, from www.cna-nurses.ca/cna/

Cohen-Katz, J., Wiley, S.D., Capuano, T., Baker, D.M., & Shapiro, S. (2005). The effects of mindfulness based stress reduction on nurse stress and burnout, Part II. **Holistic Nursing Practice, 19**(1), 26–35.

Edwards, D., Burnard, P., Coyle, D., Fothergill, A., & Hannigan, B. (2001). A stepwise multivariate analysis of factors that contribute to stress for mental health nurses working in the community. **Journal of Advanced Nursing, 36**(6), 805–813.

Gardner, J.K., Thomas-Hawkins, C., Fogg, L., & Latham, C.E. (2007). The relationship between nurses' perceptions of the hemodialysis work environment and nurse turnover, patient satisfaction, and hospitalizations. **Nephrology Nursing Journal, 34**(3), 271–281.

Gilmore, J. (2007). Health Work Environments. **Nephrology Nursing Journal, 34**(1), 11.

Haddad, A. (2006). Ethics in action: An ethical view of burnout. (Acute care decisions). **RN, 65**(9), 25–27.

Harwood, L., Ridley, J., Lawrence-Murphy, J.A., Laschinger, H.K.S., Bevan, J., O'Brien, K., & White, S. (2007). Nurses' perceptions of the impact of a renal nursing professional practice model on nursing outcomes, characteristics of practice environments and empowerment. Part I. **CANNT Journal, 17**(1), 22–29.

Kanter, R.M. (1977). **Men and women of the corporation.** New York: Basic Books.

Lake, E. (2002). Development of the practice environment scale of the nursing work index. **Research in Nursing & Health, 25**, 176–188.

Laschinger, H.K.S., Almost, J., & Tuer-Hodes, D. (2003). Workplace empowerment and magnet hospital characteristics. **Journal of Nursing Administration, 33**(7/8), 410–422.

Laschinger, H.K.S., Shamian, J., & Thomson, D. (2001). Impact of magnet hospital characteristics on nurses' perceptions of trust, burnout, quality of care, and work satisfaction. **Nursing Economics, 19**(5), 209–219).

Laschinger, H.K.S., Finegan, J., Shamian, J., & Wilk, P. (2001). Impact of structural and psychological empowerment on job strain in nursing work settings: Expanding Kanter's model. **Journal of Nursing Administration, 31**(5), 260–272.

Laschinger, H.K.S., Wong, C., McMahon, L., & Kaufmann, C. (1999). Leader behaviour impact on staff nurse empowerment, job tension, and work effectiveness. **Journal of Nursing Administration, 29**(5), 28–39.

Laschinger, H.K.S., & Havens, D.S. (1997). The effect of workplace empowerment on staff nurses' occupational mental health and work effectiveness. **Journal of Nursing Administration, 27**(6), 42–50.

Laschinger, H.K.S. (1996). A theoretical approach to studying work empowerment in nursing: A review of studies testing Kanter's theory of structural power in organizations. **Nursing Administration Quarterly, 20**(2), 25–41.

Leiter, M.P., Harvie, P., & Frizzell, C. (1998). The correspondence of patient satisfaction and burnout. **Social Science & Medicine, 47**(10), 1611–1617.

Little, L. (2007). Unhealthy work environments take a toll: Real change a must. **Canadian Nurse, 103**(2), 32.

Maslach, C. (2003). Job burnout: New directions in research and intervention. **Current Directions in Psychological Science, 12**(5), 189–192.

Maslach, C., Jackson, S.E., & Leiter, M.P. (1996). **Maslach burnout inventory manual** (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.

Maslach C., & Leiter, M.P. (1997). **The truth about burnout**. San Francisco: Jossey-Bass.

McDaniel, C, & Stumpf, L. (1993). The organizational culture: Implications for nursing service. **Journal of Nursing Administration, 23**(4), 54–60.

Morehouse, R.E., Colvin, E., & Maykut, P. (2001). Nephrology nurse-patient relationships in the outpatient dialysis setting. **Nephrology Nursing Journal, 28**(3), 295–300.

Sadovich, J. (2005). Work excitement in nursing: An examination of the relationship between work excitement and burnout. **Nursing Economics, 23**(2), 91–96.

Sarmiento, T.P., Laschinger, H.K.S., & Iwasiw, C. (2004). Nurse educators' workplace empowerment, burnout and job satisfaction: Testing Kanter's theory. **Journal of Advanced Nursing, 46**(2), 134–143.

Scarrow, J. (2007, January/February). Building healthy work environments. **Registered Nurse Journal,** 12–15.

Scott, J.G., Sochalski, J., & Aiken, L. (1999). Review of magnet hospital research: Findings and implications for professional nursing practice. **Journal of Nursing Administration, 29**(1), 9–19.

Thomas-Hawkins, C., Currier, H., Denno, M., & Wick, G. (2003). Staff nurses' perceptions of the work environment in freestanding hemodialysis facilities. **Nephrology Nursing Journal, 30**(6), 330–335.

Williams, S., & Cooper, C.L., (1998). Measuring occupational stress: Development of the pressure management indicator. **Journal of Occupational Psychology, 3**(4), 306–321.

Wilson, B., & Laschinger, H.K.S. (1994). Staff nurse perceptions of job empowerment and organizational commitment. **Journal of Nursing Administration, 24**(4S), 39–47.

Rethinking and integrating nephrology palliative care: A nephrology nursing perspective

By Susan Young, RN, MN

Abstract

Mortality rates for people with chronic kidney disease are worse than most cancers. High symptom burden, multiple comorbidities and advanced age are common among people receiving renal care. It is, therefore, not surprising that among the nephrology community, awareness is growing regarding the need for nephrology palliative care. This article offers a perspective of the current "state of the art" of nephrology palliative care and its relationship to nephrology nursing. A literature review and communication with experts in the field inform this perspective. Understanding the emerging field of nephrology palliative care gives nephrology nurses a clearer position from which to rethink their role in integrating nephrology and palliative care. Implementing compassionate, ethical and effective palliative care for patients and families living with kidney disease offers hope for improved quality of living and of dying for these patients and their families, and for the renal professionals who care for them.

Key words: palliative care, nephrology/renal palliative care, quality of life, pain and symptom management, advanced care planning, bereavement

During the American Civil War, Abraham Lincoln sent the following letter of condolence to a young woman on the death of her father:

It is with deep grief that I learn of the death of your kind and brave Father; and, especially that it is affecting your young heart beyond what is common in such cases. In this sad world of ours, sorrow comes to all: and, to the young it comes with bitterest agony, because it takes them unawares. The older have learned ever to expect it. (Lincoln, 1953, p. 16)

With this simple act of kindness, a life is remembered, a life is honoured. Imagine the relationship and commitment to basic humanitarian values motivating this letter. Imagine, also, the impact on this young woman as she reads Lincoln's letter.

In the context of the values and relationships associated with this letter, nephrology nursing comes to mind. Like the long-term relationship Lincoln had with his military colleague and his colleague's family, long-term relationships with patients and their families are the norm in nephrology nursing. Fundamental to these relationships are basic humanitarian values including honouring of personhood and a deep commitment to providing safe, competent and ethical care.

Given this, it seems to follow that nephrology nurses would be interested in expanding their understanding of end-of-life care with the view to its integration in the care of patients and families living with kidney disease. To gain a perspective of the current "state of the art" of nephrology palliative care and its relationship to nephrology nursing, a review of clinical and empirical literature around end-of-life care and its application to nephrology was performed. The Cumulative Index to Nursing and Allied Health Literature (CINAHL) and MedLine databases were accessed (search details available on request), reference lists of retrieved articles were scanned and personal communication with experts in the field was conducted.

Why is palliative care important to the renal community?

Mortality rates for people with chronic kidney disease (CKD) are higher than most cancers. Advanced age, multiple comorbidities, and high symptom burden are common among people receiving renal care.

Most people living with kidney disease, except those who have received a renal transplant, have a significantly shortened life expectancy. Canadian survival data for patients receiving dialysis reveals that as age and length of time on dialysis increase, life expectancy decreases (Table One). Long-term (five-year) survival decreases rapidly in patients over 45 years of age, with those in the 75-and-older age group showing the most compromised survival at 18.2% (Canadian Institute for Health Information [CIHI], 2007, p. 17; Moss, 2003).

Table One: Canadian dialysis patient survival—1996 to 2000 (followed to 2005)

Age (years)	3 Months (% survival)	1 Year (% survival)	5 Years (% survival)
18–44	98.6	95.7	72.8
45–54	97.5	91.2	57.5
55–64	95.8	85.5	44.3
65–74	92.8	78.3	30.4
75+	88.7	69.2	18.2

(Adapted from CIHI, 2007, p. 17)

Increasingly, patients who initiate renal replacement therapy are elderly. From 1996 to 2005, age-specific rates in Canadian patients receiving dialysis increased for all adult age groups. In patients 75 years and older, the rate almost doubled and in those 65 to 74 years of age, the rate increased by 27% (CIHI, 2007, p. 28). In 2005, more than half of the patients (54.7%) initiating renal replacement therapy were 65 years or older, an increase of 9.6% over the previous 10 years (CIHI,

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2007, p. 8). From 2001 to 2002, almost one-third (28.1%) of Canadian patients starting dialysis were 75 years of age or older (CIHI, 2005). Older patients have the lowest life expectancy at one-quarter of age-matched non-renal patients (Moss, 2003). They also have the most comorbid conditions, are at the greatest risk of developing illness during their course on dialysis and are the most likely to stop dialysis. Yet, insufficient research exists exploring the benefits of dialysis in terms of quality of life and survival in older patients. In addition, further study is needed to identify the supportive and palliative care needs of older patients and their families living with all stages of CKD (Burns & Carson, 2007; Jassal, Trpeski, Zhu, Fenton, & Hemmelgarn, 2007; Kurella, Covinsky, Collins, & Chertow, 2007; Murtagh et al., 2007; Tattersal, 2005).

Individuals living with kidney disease have a high incidence of comorbidity. Diabetic nephropathy accounts for the largest proportion of Canadian patients across all stages of chronic kidney disease (25.1%), increasing to 29.4% in patients receiving peritoneal dialysis and 32.4% on hemodialysis (CIHI, 2007, p. 26).

Comorbid conditions have a powerful effect on patients' health-related quality of life (HRQOL) (Brown, 2007; Molzhan, 2006; Lamping, 2004) and increase the complexity of patients' care (Miskulin et al., 2003; Sands et al., 2006). Highlighting the impact of comorbidities, a study of patients in eight Canadian and U.S. dialysis units found that three-quarters of the patients had from three to seven comorbid conditions, half experienced failure to thrive, and all patients experienced a high prevalence of complications including neuropathies (34%), blindness (18%), gastroparesis (14%) and malignancies (12%) (Poppel, Cohen, & Germain, 2003).

Comorbid conditions also have a direct impact on life expectancy (National Institute of Health NIDDK/DKUHD, 2001). Diabetes and renal vascular disease as causes of renal failure in Canadian patients are associated with poor long-term (five-year) survival rates of 32.2% and 24.8% respectively (CIHI, 2007, p. 21). Cardiac failure is the leading cause of death for Canadian patients new to renal replacement therapy, although social causes including treatment withdrawal, treatment refusal and suicide are a close second (CIHI, 2007, p. 11).

Of people living with chronic illness, those with chronic kidney disease are one of the most symptomatic groups, experiencing a wide range of symptoms that cause them distress on a daily basis (Germain & McCarthy, 2004; Jablonski, 2007b; Kimmel, Emont, Newmann, Danko, & Moss, 2003; Mercus et al., 1999; Molzhan, 2006; Thomas-Hawkins, 2000; Weisbord et al., 2003; Weisbord et al., 2005). The high prevalence of symptoms is due to a combination of symptoms from chronic uremia, other comorbid conditions, and from renal replacement therapy itself (Brown, Chambers, & Eggeling, 2007; Moss, 2003; Weisbord et al., 2003 and 2005).

Patients with early stages of renal failure have an increased frequency and severity of symptoms, with those most commonly reported including: tiring easily, weakness, lack of energy, difficulty sleeping, and abdominal bloating (Rocco, Gassman, Wang, & Kaplan, 1997). An extensive systematic review of symptoms experienced by British patients undergoing dialysis found that fatigue, pruritus, and constipation occur in more than half of patients, and more than 40% experience anorexia, pain, and sleep disturbance (Murtagh, Addington-Hall, & Higginson, 2007). British patients with Stage 5 CKD choosing conservative care (without renal replacement therapy) showed a similar incidence of symptoms of fatigue, pruritus, anorexia, and sleep disturbance. However, pain was experienced by a greater proportion of patients (Murtagh et al., 2007).

Informed by data about the impact of age, comorbidity and symptom burden on quality of life (QOL) and survival, it is not surprising that among the nephrology community, awareness is growing regarding the need for nephrology palliative care (Arnold & Liao, 2006; Brown, 2007; Brown et al., 2007 and 2008; Chambers, Germain, & Brown, 2004; Cohen, Moss, Weisbord, & Germain, 2006; Davison, 2001; Germain & Cohen, 2007; Gunda, Thomas, & Smith, 2005; Hudson, Weisbord, & Arnold, 2007; Moss, 2003; Poppel et al., 2003).

The renal community's perspective on integrating palliative care in nephrology care

The report of the American ESRD Workgroup on End-of-Life Care, part of the Robert Wood Johnson Foundation national program, "Promoting Excellence in End-of-Life Care", outlines the need for palliative care in the renal patient population and presents methods, findings and recommendations (Moss, 2003). Dr. Alvin Moss, chair of the workgroup concludes: because of shortened life expectancy, end-of-life care is particularly relevant for patients with end stage renal disease (ESRD). Due to the nature of ESRD, end-of-life care needs to be part of the continuum of quality patient care. While palliative care offers the treatment most patients and families want, it does present a new way of thinking. Fortunately, knowledge and skills to provide palliative care for renal patients are available even though they are not currently in widespread use in nephrology care (Moss, 2003).

A Canadian perspective advocates for renal end-of-life care developed primarily from the patients' perspective if it is to adequately address their needs (Davison, 2001). Evidence suggesting that patients value honest, early discussions about prognoses and outcomes underscores the need to learn how to talk to patients about their limited time of survival, their end-of-life concerns, and about dying. Although denial is a defence mechanism that gives patients and families time to adjust to the diagnosis of chronic kidney disease, prolonged denial can hinder patients' ability to request and receive quality end-of-life care.

"Quality" dimensions of end-of-life care: Quality of living, quality of dying, and quality from the patient and family perspective

Quality of living—*quality of life* (QOL) is highly subjective—well being as defined by each individual (Ferris et al., 2002; Lamping, 2004; Molzhan, 2006). QOL relates to experiences that are meaningful and valuable to the individual, and his or her capacity to have such experiences. Health-related quality of life (HRQOL) expands this definition to include how a person's health affects his or her ability to carry out normal physical and social activities (Lamping, 2004; Mapes et al., 2004). Major factors related to HRQOL of individuals living with chronic kidney disease (CKD) include: transplantation, erythropoietin therapy, health and functional status, ability to work, social support, comorbidities and symptoms (Molzhan, 2006).

Health-related quality of life is highly relevant to end-of-life care of individuals living with kidney disease (Brown et al., 2007; Chambers et al., 2004; Cohen et al., 2006; Davison, 2001; Germain & Cohen, 2007; Lamping, 2004; Molzhan,

2006; Reiter & Chambers, 2004). Not only does it reflect the patient's view of their life overall, it also has a close relationship to health status, morbidity, and mortality (Lowrie, Curtin, LePain, & Schatell, 2003; Molzhan, 2006). People with Stage 5 CKD who have a higher HRQOL live longer and better regardless of the treatment modality they select (Molzhan, 2006). HRQOL of a person with kidney disease is directly correlated with that of their spouse (Dunn, Louis, Bonner, & Meize-Grochowski, 1994), so optimizing the patient's HRQOL can benefit the entire family. Poor HRQOL is an independent risk factor for mortality in patients with chronic kidney disease (DeOreo, 1997; Mapes et al., 2004; McClellan, Anson, Birkeli, & Tuttle, 1991; Parkerson, Broadhead, & Tse, 1995). American reports indicate almost half of withdrawals from dialysis are due to poor HRQOL (Moss, 2003).

Assessing HRQOL of patients living with kidney disease could have a tremendous impact on end-of-life care by identifying aspects of patients' lives that could be ameliorated to maintain an acceptable QOL. Since QOL is subjective—what the individual says it is—therefore, it is paramount that nephrology nurses and other nephrology professionals discuss QOL with patients to determine what would make a difference to them. For those factors that may be irreversible, especially those related to comorbid conditions or complications of renal disease, implementing a palliative approach characterized by symptom management and provision of social, psychological and spiritual support offers an effective strategy to improve patients' QOL within the context of what is important to them (Abed Sekkarie & Swartz, 2004; Brown, 2007; Curtin, Bultman, Thomas-Hawkins, Walters, & Schatell, 2002; Jablonski, 2007a; Molzhan, 2006).

Several renal-specific HRQOL tools are available (Fink et al., 1995; Hays, Kallich, Mapes, Coons, & Carter, 1994; Laupacis, Muirhead, Keown, & Wong, 1992; Sadler, Blagg, & Wasson, 1994). Finding practical ways to use these tools in clinical practice offers the potential to identify how patients are doing based on their own perspective of well being (Kimmel, 2000).

Quality of dying – *what is known?* For patients and their families living with kidney disease, a pervasive lack of correct information concerning the process of dying creates a significant obstacle to optimum end-of-life care and decision-making. Despite this lack of literature, existing anecdotes and research indicate inadequate treatment of pain and other symptoms; emotional stress on patient and family; insufficient attention to family dynamics; absent or inadequate patient and family education about end-of-life care and advanced care planning; and failure to address issues of religion, race, and cultural diversity as they relate to life completion and closure as possible contributors to poor experience for dying patients and families receiving renal care (Moss, 2003). Improving these could enhance the experience of dying for patients and their families (Billings, 2000; Cassel, 1982; Hutchinson, 2005; Kuhl, 2002; Noble, Chesser, & Kelly, 2005).

While dialysis is a successful life-prolonging therapy, preparing for death and caring for patients who are dying is often delayed or neglected. For patients receiving dialysis, end-of-life care is commonly perceived as something to be initiated at the time of dialysis withdrawal. However, for these patients, dying can be a prolonged process that may start long before the decision to withdraw from dialysis is made. In addition, most patients do not die in a phase that is clearly "active dying". Consequently, initiation of end-of-life care is often delayed, resulting in unnecessary suffering for patients and their families (Davison, 2001; Moss, 2003).

Quality end-of-life care: *The patient and family perspective.* Little attention has been given to patients' perspectives on end-of-life care. However, issues of communication and QOL appear to be of equal concern to issues of control over specific treatment decisions. Pain and symptom management, relieving burdens of loved ones, avoiding inappropriate prolongation of dying, and not being abandoned as they die are reported as important aspects of end-of-life care (Alexander & Sehgal, 1998; Cohen, Poppel, Cohn, & Reiter, 2001; Hanson, Danis, & Garrett, 1997; Heyland et al., 2006; Lynn et al., 1997; Roberts, Snyder, & Kjellstrand, 1998; Rubin et al., 1997; Singer, Martin, & Kelner, 1999; Steinhauser et al., 2001).

Research indicates that patients and families value honest discussions early in their illness, particularly at the initiation of dialysis. Patients report that they often feel that physicians are unrealistically optimistic, difficult to contact, and likely to withdraw from patients as they become more chronically ill and approach death. Physicians, on the other hand, report that they are often uncomfortable with frank, early discussions, fearing it may destroy hope. Consequently, patients receiving dialysis often have poor medical knowledge of their disease and insufficient information to make decisions consistent with their values and goals (Cohen, Germain, Woods, Mirot, & Burleson, 2005; Lynn et al., 1997; Roberts et al., 1998; Teno et al., 2004).

Hope, when effectively mobilized, has been identified as a powerful support to healing at the end of life (Cutcliffe & Herth, 2002; Feudtner, 2005). Increasingly, the concept of hope and its relationship to adapting to and coping with chronic illness, QOL, and setting goals of care is beginning to appear in the nephrology literature (Bullard, 2004; Weil, 2000). A Canadian qualitative study adds to the understanding of hope in the context of facilitated advanced care planning with renal patients and demonstrates that, through providing timely and appropriate information, patients' hope can be enhanced rather than diminished (Davison & Simpson, 2006). Communicating more effectively and sooner with patients, their values and needs can be identified to enable better planning and facilitation of their end-of-life care, therefore improving their experience of dying (Davison, 2001; Holley, 2004; Kirk, Kirk, & Kristjanson, 2004; Moss, 2003).

Components of nephrology palliative care

Palliative care aims to relieve suffering and improve quality of life—quality of living and of dying. Provided by an interdisciplinary team, palliative care focuses on "whole-person care" and, as such, is broad in scope, encompassing multiple domains including pain and symptom management, communication around goals of care, spiritual and psychosocial aspects, ethical issues, grief and bereavement (Abrahm, 2005; Billings, 2000; Ferris et al., 2002).

A common misconception about palliative care is that it is synonymous with end-of-life care. While palliative care grew out of "care of the dying", a palliative approach can guide care at any point during an acute, chronic or life-threatening illness, *or* bereavement (Ferris et al., 2002).

Well beyond end-of-life management, nephrology palliative care is beginning to be understood as a "pathway of care over time" focused on relieving suffering, promoting health-related

quality of life, and facilitating dignity at the end of life. Humanitarian values and ethical principles underpin nephrology palliative care and demonstrate the commitment to understand the values, wishes and beliefs of the patient and family, and how these shape their decision-making and definition of health-related quality of life (Brown et al., 2007; Cohen et al., 2006; Davison, 2001; Germain & Cohen, 2007; Mazanec & Tyler, 2003; Moss, 2003; Poppel et al., 2003; Tani, Recine, Werner, & Sperstad, 2006; Walton, 2002).

Facilitating this understanding of nephrology palliative care is a growing body of literature reflecting an emerging focus on palliative care clinical practice by nephrology health professionals including collaboration with the palliative care community, and nephrology-specific palliative care research. Nephrology-specific clinical guidelines (Renal Physicians Association and American Society of Nephrology [RPA/ASN], 2000), palliative care education (Davison, Jhangri, Holley, & Moss, 2006; Ferrell, 2006; Fischer, Gozansky, Kutner, Chomiak, & Kramer, 2003; Holley et al., 2003; Moss et al., 2004), and commitment to provide clinically excellent and compassionate renal care inform and enrich this work.

Pain and symptom management, advanced care planning, and bereavement support are identified as key components of nephrology palliative care (Brown et al., 2007 and 2008; Cohen et al., 2006; Chambers et al., 2004; Moss, 2003; Poppel et al., 2003). Developing education and system supports, and garnering resources are key to implementing this care across the renal care continuum. Honing communication skills that facilitate advanced care planning, treatment decision-making, breaking bad news, and bereavement support enables engagement with patients and families in ways that honour our commitment to understand their values, wishes and beliefs (Buckman, 1992; Coulehan et al., 2001; Fine, 2007; Griffie, Nelson-Marten, & Muchka, 2004; Levinson, Cohen, Brady, & Duffy, 2001; Lo, Quill, & Tulsky, 1999).

Pain and symptom management

A study comparing symptoms and quality of life in patients with cancer and those with end stage renal disease found that patients with advanced renal failure experience a symptom burden and QOL impairment similar to that of patients with terminal malignancy (Saini et al., 2006). Understanding the physical and emotional symptom burden in all patients living with chronic kidney disease including those on dialysis and those receiving conservatively managed care is essential for the successful improvement of their HRQOL (Davison, 2001; Jablonski, 2007a; Weisbord et al., 2004).

While regular symptom assessment is fundamental to palliative care, it is not yet routine in nephrology care (Davison, 2003 and 2007; Moss, 2003; Weisbord et al., 2004). Integrating assessment tools such as the Edmonton Symptom Assessment System modified for use in nephrology care (Davison, Jhangri, & Johnson, 2006a and 2006b) or the Dialysis Symptom Index (Weisbord et al., 2004) into everyday clinical care offers the potential of providing reliable and valid assessment of symptom prevalence and severity, and effectiveness of management in patients receiving renal care.

Further research is required focusing on the treatment of the most common and distressing symptoms such as pruritis, pain, and dyspnea, and on the functionally disabling symptoms of fatigue, drowsiness, and poor concentration (Moss, 2003; Murtagh et al., 2007). In addition, the need to develop and evaluate models of conservative care is crucial given the growing number of patients with Stage 5 CKD and the associated need for conservative care as a desired and effective treatment option (Burgess, 1999; Burns, 2003; Burns & Carson, 2007; Murtagh et al., 2007; Smith et al., 2003).

Forging links with palliative care specialists and facilities offers the potential to develop understanding and skill around palliative care for renal patients including pain and symptom management. Facilitating relationships with these professionals will improve the quality of palliative care for renal patients (Meier & Beresford, 2007).

Advanced care planning

Advanced care planning (ACP) is a process of communicating with patients, health care providers, families, and other important individuals about appropriate future medical care in anticipation of a time when the patient is unable to make his or her own decisions (Ferris et al., 2002). An advance directive (AD) is a written document completed by a capable person stipulating a surrogate decision-maker in the event the patient becomes incapable of making his or her own health care decisions (proxy directive) and/or health care decisions to be made (instructional directive). A "Do Not Resuscitate" (DNR) order is an example of an instructional directive.

Despite more than a decade of experience with ADs, most empirical studies have yielded disappointing results. Modern approaches to ACP have been designed to correct the shortcomings of ADs by shifting the emphasis to communication about values, goals and beliefs, and how these may affect medical decisions (Fried, Bradley, & Towle, 2002; Holley, 2004; Meier & Morrison, 2002; Singer, 1999; Singer, Martin, & Kelner, 1999; Swartz & Perry, 1993 and 1998). Values-based directives are identified as more appropriate than treatment-based directives and are a more acceptable foundation for developing instructional directives (Hammes, 2001 and 2003; Martin, Emanuel, & Singer, 2000; Pendergast, 2001). An advanced care planning process that emphasizes communication, building trust over time and working within the patient's most important relationships offers a hopeful model (Briggs, 2004; Briggs, Kirchoff, Hammes, Song, & Colvin, 2004; Davison, 2006; Davison & Torgunrud, 2007; Ditto et al., 2001; Holley, 2004 and 2005; Pendergast, 2001; Quill, 2001).

Most dialysis patients welcome ACP discussions. They expect their physicians to initiate such discussions (Holley, 2004; Holley, Stackiewicz, Dacko, & Rault, 1997; Perry et al., 1995; Singer, 1999) and centre the process within the patient-family relationship rather than the physician-patient relationship. However, only 7% to 35% complete written ADs (Holley et al., 1997; Singer, 1999). Patients modify their preferences for life-sustaining treatments based on expected functional and cognitive impairments resulting from illness and therapeutic interventions (Quill, 2001). Consequently, appropriate times to review advance care plans include when a change in health status occurs, during an acute illness and following discharge from hospital (Davison, 2007; Quill, 2001).

Specific issues for which ACP is a focus for patients receiving renal care include resuscitation status, and withholding or withdrawing dialysis (Holley, 2004; Moss, Hozayen, King, Holley & Schmidt, 2001; Osterman & Nelson, 2003).

Knowledge about outcomes of cardiopulmonary resuscitation (CPR) in renal patients is essential to ACP discussions. However, current literature is limited regarding precipitating factors of sudden cardiac arrest and survival following CPR for patients with renal disease (Lafrance, Nolin, Senecal, & Leblanc, 2006; Ostermann, 2008). For the general population experiencing in-hospital CPR, a meta-analysis reported a 40.7% chance of immediate effectiveness of CPR and a 13.4% rate of survival until discharge (Ebell, Becker, Barry, & Hagen, 1998). In a study of 221 American dialysis patients experiencing cardiac arrest in hospital, eight per cent of patients were alive six months after the arrest (Moss, Holley, & Upton, 1992). A study of American patients who arrested while dialyzing in a community dialysis unit (CDU) found that 60% of patients died within 48 hours of the arrest (Karnik et al., 2001). A review of 110 Emergency Medical Services calls for American patients experiencing cardiac arrest while in a CDU found that 76% of patients died immediately post-arrest or later in hospital, and only 15% survived at least one year (Davis et al., 2008). A Canadian study of CPR calls occurring in a hospital-based hemodialysis unit found somewhat better survival rates for both 24 "real" cardiopulmonary arrests and 14 events requiring emergency medical intervention. Of the 24 cardiac arrests, four patients (17%) died within 48 hours and 18 patients (75%) were alive at 30 days and discharged from hospital. Survival was attributed, in part, due to emergency response resources readily available in the hospital setting, although the researchers acknowledged that the small sample size limits the study findings and that further research is indicated (Lafrance et al., 2005).

Withholding and withdrawing from dialysis, and dialysis trials for patients in whom the relative benefits of renal replacement therapy are unclear, are identified as appropriate topics for nephrologists to discuss with their patients (Bargman, 2007; Chater, Davison, & Cohen, 2006; Cohen et al., 2007; Cohen, Germain, & Poppel, 2003; Germain, Cohen, & Davison, 2007; Noble et al., 2005). An American guideline for shared decision-making in the initiation and withdrawal of dialysis in adult patients with either acute renal failure (ARF) or end stage renal disease (ESRD) has been developed based on medical evidence and expert opinion (RPA/ASN, 2000). Shared decision-making is the recommended process for patients and health care professionals to reach agreement on a course of action based on a common understanding of goals of care and risks and benefits of the chosen course compared with any reasonable alternative. A patient-physician relationship promoting shared decision-making is recommended for all patients with either ARF or ESRD with the decision-making process involving at least the patient and their physician. With the patient's consent, shared decision-making may also involve family members or friends, and other nephrology team members. When a patient lacks decision-making capacity, the patient's legal agent is involved.

Withdrawal of dialysis has become an accepted practice for most nephrologists, accounting for 17% to 22% of all deaths in American patients receiving chronic hemodialysis (Cohen et al., 2006; Fainsinger, Davison, & Brenneis, 2003; Fried et al., 2002; Holley, 2005; Moss, 2003; Perry et al., 1995; Singer et al., 1999; Steinhauser et al., 2001). Surveys of nephrologists demonstrate that ADs facilitate decisions to withhold and withdraw dialysis (Holley, Foulks, & Moss, 1991; Moss, Stocking, Sachs, & Siegler, 1993). Small studies of patients with Stage 5 Chronic Kidney Disease suggest that ADs increase the likelihood of reconciled or "good deaths" and reduce the chances of inappropriate interventions (Cohen et al., 2000; Swartz & Perry, 1993) even though a major study of hospitalized patients failed to show a benefit of ACP (The SUPPORT Principal Investigators, 1995).

Understanding how patients view withdrawal of dialysis, how they make the difficult decision to withdraw from life-sustaining therapy and how this impacts end-of-life care is limited. What is known is that patients receiving dialysis do not view themselves as having a terminal illness, so issues relating to death and dying are rarely considered until a medical crisis occurs (Davison, 2006; Holley et al., 1999; Meier et al., 2002; Roberts & Kjellstrand, 1998). Renal palliative care offers the possibility of a comfortable death by discontinuing dialysis (Cohen et al., 2000; Germain et al., 2007). Focusing ACP discussions on HRQOL, goals and values allows consideration of discontinuation of dialysis as part of life assessment rather than as a difficult "crisis" event (Cohen et al., 2000; Davison, 2001; Fried et al., 2002; Holley, 2004; McCole Phillips, Brennan, Schwartz, & Cohen, 2005; Thompson, Bhargava, Bachelder, Bova-Collis, & Moss, 2008).

Bereavement support

Bereavement is the state of having suffered the death of someone significant. While disease affects an individual, the resulting illness also affects the patient's family and anyone who lives or works with the patient, or provides care. When families deal with the multiple losses and changes associated with a death, and make the transition through their bereavement experience safely, survivors rebuild their lives successfully and reintegrate into society. When the transition is not successful, surviving family members may become patients themselves in the health care system, burdens on society, or ineffective employees (Ferris et al., 2002).

Given the gradual physical decline and often protracted process of dying experienced by renal patients, anticipatory grief is a phenomenon that may be experienced by the patient, their family, other patients and families in the unit, and by the staff caring for them. Recognizing anticipatory grief and provision of support for patients, families and staff is critical for this phase of bereavement, just as it is following patient deaths (Casarett, Kutner, & Abrahm, 2001).

After the death of a patient receiving dialysis, contact by the renal care team with a patient's family often ceases abruptly. Staff and patients may be left unsure about what has happened to the patient. Practices used by dialysis units to acknowledge death vary and may include notices in the waiting room, posting obituaries, and placing flowers and a card at the nursing station (Bedell, Cadenhead, & Graboys, 2001; Cohen et al., 2006; Penson, Gren, Chabner, & Lynch, 2002). A significant approach involves holding renal memorial services, similar to those commonly held by palliative care units (Poppel et al., 2003).

Patient and family suffering and the quality of their lives are identified as a Canadian public health issue. By focusing on relieving suffering and improving quality of life, palliative care aims to promote health: physical, psychological, social and spiritual well-being in everyone affected by illness and bereavement, including those who provide care (Ferris et al., 2002).

Conclusion

Kidney disease presents many challenges to patients and families, and to the health care professionals who care for them. Its chronicity and associated morbidity, often including difficult and intractable symptoms, make palliative care a natural accompaniment to its management. This patient population wants and needs an improved approach to symptom assessment and management, as well as advanced care planning. Families need support during the lifetime and after the death of their loved ones (Moss, 2003; Poppel et al., 2003).

Understanding what the emerging field of nephrology palliative care entails gives nephrology nurses a clearer position from which to rethink their role in integrating nephrology and palliative care. Implementing compassionate, ethical and effective palliative care for patients and families living with kidney disease offers hope for improved quality of living and dying for these patients and their families, and for the renal professionals who care for them.

References

Abed Sekkarie, M., & Swartz, R. (2004). Symptoms of renal disease: The treatment and palliation of symptoms due to co-morbidity in end-stage renal disease. In E.J. Chambers, M. Germain, & E. Brown (Eds.), **Supportive care for the renal patient** (pp. 95–104). New York, NY: Oxford University Press.

Abrahm, J.L. (2005). **A physician's guide to pain and symptom management in cancer patients** (2nd ed.). Baltimore, MD: The Johns Hopkins University Press.

Alexander, G.C., & Sehgal, A.R. (1998). Dialysis patient ratings of the quality of medical care. **American Journal of Kidney Disease, 32**, 284–289.

Arnold, R.M., & Liao, S. (2006). Renal palliative care: Supporting our colleagues, patients, and family. **Journal of Palliative Medicine, 9**, 975–976.

Bargman, J.M. (2007). Is there more to living than not dying? A reflection on survival studies in dialysis. **Seminars in Dialysis, 20**, 50–52.

Bedell, S.E., Cadenhead, K., & Graboys, T.B. (2001). The doctor's letter of condolence. **New England Journal of Medicine, 344**, 1162–1163.

Billings, A.J. (2000). Palliative care. **British Medical Journal, 321**, 555–558.

Briggs, L. (2004). Shifting the focus of advance care planning: Using an in-depth interview to build and strengthen relationships. **Journal of Palliative Medicine,** 7, 341–349.

Briggs, L.A., Kirchoff, K.T., Hammes, B.J., Song, M.K., & Colvin, E.R. (2004). Patient-centered advance care planning in special patient populations: A pilot study. **Journal of Professional Nursing, 20**, 47–58.

Brown, E.A. (2007). Epidemiology of renal palliative care. **Journal of Palliative Medicine, 10**, 1248–1252.

Brown, E., Chambers, E.J., & Eggeling, C. (2007). **End of life care in nephrology: From advanced disease to bereavement**. New York, NY: Oxford University Press.

Brown, E.A., Chambers, E.J., & Eggeling, C. (2008). Palliative care in nephrology. **Nephrology Dialysis Transplantation, 23**(3), 789–791.

Buckman, R. (1992). **How to break bad news: A guide for health care professionals**. Baltimore, MD: Johns Hopkins University Press.

Bullard, J. (2004). Palliative philosophy—A missing element in holistic ESRD care. **CANNT Journal, 14**, 32–34.

Burgess, E. (1999). Conservative treatment to slow deterioration of renal function: Evidence-based recommendations. **Kidney International, 55**(Suppl. 70), S17–25.

Burns, A. (2003). Conservative management of end stage renal failure: Masterly inactivity or benign neglect? **Nephron Clinical Practice, 25**, C37–C39.

Burns, A., & Carson, R. (2007). Maximum conservative management: A worthwhile treatment for elderly patients with renal failure who choose not to undergo dialysis. **Journal of Palliative Medicine, 10**, 1245–1247.

Canadian Institute for Health Information (CIHI). (2005). **Treatment of end-stage organ failure in Canada, 2002 and 2003**. Canadian Organ Replacement Register. Ottawa, ON: Author.

Canadian Institute for Health Information (CIHI). (2007). **2007 Annual report—Treatment of end-stage organ failure in Canada, 1996 to 2005**. Ottawa, ON: Author.

Cassel, E.J. (1982). The nature of suffering and the goals of medicine. **New England Journal of Medicine, 306**, 639–645.

Casarett, D., Kutner, J.S., & Abrahm, J. (2001). Life after death: A practical approach to grief and bereavement. **Annals of Internal Medicine, 134**, 208–215.

Chambers, E.J., Germain, M., & Brown, E. (Eds.) (2004). **Supportive care for the renal patient**. New York, NY: Oxford University Press.

Chater, S., Davison, S.N., & Cohen, L.M. (2006). Withdrawal from dialysis: A palliative care perspective. **Clinical Nephrology, 66**, 364–372.

Cohen, L.M., Bostwick, M., Mirot, A., Garb, J., Braden, G., & Germain, M. (2007). A psychiatric perspective of dialysis discontinuation. **Journal of Palliative Medicine, 10**, 1262–1265.

Cohen, L.M., Germain, M.J., & Poppel, D.M. (2003). Practical considerations in dialysis withdrawal. "To have that option is a blessing". **Journal of the American Medical Association, 289**, 2113–2119.

Cohen, L.M., Germain, M., Poppel, D.M., Woods, A., & Kjellstrand, C.M. (2000). Dialysis discontinuation and palliative care. **American Journal of Kidney Disease, 36**, 140–144.

Cohen, L.M., Germain, M.J., Woods, A.L., Mirot, A., & Burleson, J.A. (2005). The family perspective of ESRD deaths. **American Journal of Kidney Diseases, 45**, 154–161.

Cohen, L.M., Germain, M.J., Poppel, D.M., Woods, A.L., Pekow, P.S., & Kjellstrand, C.M. (2000). Dying well after discontinuing the life-support treatment of dialysis. **Archives of Internal Medicine, 160**, 2513–2518.

Cohen, L.M., Moss, A.H., Weisbord, M.D., & Germain, M.J. (2006). Renal palliative care. **Journal of Palliative Medicine, 9**, 977–992.

Cohen, L.M., Poppel, D.M., Cohn, G.M., & Reiter, G.S. (2001). A very good death: Measuring quality of dying in end-stage renal disease. **Journal of Palliative Medicine, 4**, 167–172.

Coulehan, J.L., Platt, F.W., Egener, B., Frankel, R., Lin, C.T., Lown, B., & Salazar, W.H. (2001). "Let me see if I have this right…": Words that help build empathy. **Annals of Internal Medicine, 135**, 221–227.

Curtin, R.B., Bultman, D.C., Thomas-Hawkins, C., Walters, B.A., & Schatell, D. (2002). Hemodialysis patients' symptom experiences: Effects on physical and mental functioning. **Nephrology Nursing Journal, 29**, 562, 567–574.

Cutcliffe, J.R., & Herth, K. (2002). Concept of hope. The concept of hope in nursing 1: Its origins, background and nature. **British Journal of Nursing, 11**, 832, 834–840.

Davis, T.R., Young, B.A., Eisenberg, M.S., Rea, T.D., Copass, M.K., & Cobb, L.A. (2008). Outcome of cardiac arrests attended by emergency medical services staff at community outpatient dialysis centers. **Kidney International, 73**, 933–939.

Davison, S.N. (2001). Quality end-of-life care in dialysis units. **Seminars in Dialysis, 15**, 41, 44.

Davison, S.N. (2003). Pain in hemodiaysis patients: Prevalence, cause, severity, and management. **American Journal of Kidney Diseases, 42**, 1239–1247.

Davison, S.N. (2006). Facilitating advance care planning for patients with end-stage renal disease: The patient perspective. **Clinical Journal of the American Society of Nephrology, 1**, 1023–1028.

Davison, S.N. (2007). Chronic kidney disease: Psychosocial impact of chronic pain. **Geriatrics, 62**, 17–23.

Davison, S.N., Jhangri, G.S., Holley, J.L., & Moss, A.H. (2006). Nephrologists' reported preparedness for end-of-life decision-making. **Clinical Journal of the American Society of Nephrology, 1**, 1256–1262.

Davison, S.N., Jhangri, G.S., & Johnson, J.A. (2006a). Cross-sectional validity of a modified Edmonton symptom assessment system in dialysis patients: A simple assessment of symptom burden. **Kidney International, 69**, 1621–1625.

Davison, S.N., Jhangri, G.S., & Johnson, J.A. (2006b). Longitudinal validation of a modified Edmonton symptom assessment system (ESAS) in haemodialysis patients. **Nephrology Dialysis Transplantation, 21**, 3189–3195.

Davison, S.N., & Simpson, C. (2006). Hope and advance care planning in patients with end stage renal disease: Qualitative interview study. **British Medical Journal, 333**(7574), 886–889.

Davison, S.N., & Torgunrud, C. (2007). The creation of an advance care planning process for patients with ESRD. **American Journal of Kidney Diseases, 49**, 27–36.

DeOreo, P.B. (1997). Hemodialysis patient-assessed functional health status predicts continued survival, hospitalization, and dialysis-attendance compliance. **American Journal of Kidney Disease, 30**, 204–212.

Ditto, P.H., Danks, J.H., Smucker, W.D., Bookwala, J., Coppola, K.M., Dresser, R., et al. (2001). Advance directives as acts of communication: A randomized controlled trial. **Archives of Internal Medicine, 161**, 421–430.

Dunn, S.A., Louis, S.L., Bonner, P.N., & Meize-Grochowski, R. (1994). Quality of life for spouses of CAPD patients. **ANNA Journal, 21**, 237–246, 257.

Ebell, M.H., Becker, L.A., Barry, H.C., & Hagen, M. (1998). Survival after in-hospital cardiopulmonary resuscitation: A meta-analysis. **Journal of General Internal Medicine, 13**, 805–816.

Fainsinger, R.L., Davison, S.N., & Brenneis, C. (2003). A supportive care model for dialysis patients. **Palliative Medicine, 17**, 81–82.

Ferrell, B. (2006). Evaluation of the end-of-life nursing education consortium project in the USA. **International Journal of Palliative Nursing, 12**(6), 269–276.

Ferris, F.D., Balfour, H.M., Bowen, K., Farley, J., Hardwick, M., Lamontagne, C., et al. (2002). **A model to guide hospice palliative care**. Ottawa, ON: Canadian Hospice Palliative Care Association.

Feudtner, C. (2005). Hope and the prospects of healing at the end of life. **The Journal of Alternative and Complementary Medicine, 11**(Suppl. 1), S23–S30.

Fine, R.L. (2007). Language matters: "Sometimes we withdraw treatment but we never withdraw care." **Journal of Palliative Medicine, 10**, 1239–1240.

Fink, N.E., Wu, A.W., Cagney, K.A., Meyer, K.B., Herbert, R.J., Jenekes, M.W., et al. (1995). Development/testing of the Choice Health Experience Questionnaire (CHEQ): An ESRD and dialysis-specific quality of life measure [Abstract]. **Journal of the American Society of Nephrology, 6**, 528.

Fischer, S.M., Gozansky, W.S., Kutner, J.S., Chomiak, A., & Kramer, A. (2003). Palliative care education: An intervention to improve medical residents' knowledge and attitudes. **Journal of Palliative Medicine, 6**, 391–399.

Fried, T.R., Bradley, E.H., & Towle, V.R. (2002). Understanding the treatment preferences of seriously ill patients. **New England Journal of Medicine, 346**, 1061–1066.

Germain, M., & Cohen, L.M. (2007). Renal supportive care: View from across the pond: The United States perspective. **Journal of Palliative Medicine, 10**, 1241–1244.

Germain, M.J., Cohen, L.M., & Davison, S.N. (2007). Withholding and withdrawal from dialysis: What we know about how our patients die. **Seminars in Dialysis, 20**, 195–199.

Germain, M., & McCarthy, S. (2004). Symptoms of renal disease: Dialysis-related symptoms. In E.J. Chambers, M. Germain, & E. Brown (Eds.), **Supportive care for the renal patient** (pp. 75–87). New York, NY: Oxford University Press.

Griffie, J., Nelson-Marten, P., & Muchka, S. (2004). Acknowledging the "elephant": Communication in palliative care—Speaking the unspeakable when death is imminent. **American Journal of Nursing, 104**, 48–57.

Gunda, S., Thomas, M., & Smith, S. (2005). National survey of palliative care in end-stage renal disease in the UK. **Nephrology Dialysis and Transplantation, 20**, 392–395.

Hammes, B.J. (2001). What does it take to help adults successfully plan for future medical decisions? **Journal of Palliative Medicine, 4,** 453–456.

Hammes, B.J. (2003). **Update on respecting choices. Innovations in end-of-life, 5**. Retrieved September 1, 2008, from http://www2.edc.org/lastacts/archives/archivesMarch03/respective.asp

Hanson, L.C., Danis, M., & Garrett, J. (1997). What is wrong with end-of-life care? Opinions of bereaved family members. **Journal of the American Geriatric Society, 45,** 1339–1344.

Hays R.D., Kallich, J.D., Mapes, D.S., Coons, S.J., & Carter, W.B. (1994). Development of the Kidney Disease Quality of Life (KDQOL) Instrument. **Quality of Life Research, 3**, 329–338.

Heyland, D.K., Dodek, P., Rocker, G., Groll, D., Gafni, A., Pichora, D., et al. (2006). What matters most in end-of-life care: Perceptions of seriously ill patients and their family members. **Canadian Medical Association Journal, 174**, 627–633.

Holley, J.L. (2004). Advance directives and advance care planning in patients with end-stage renal disease. In E.J. Chambers, M. Germain, & E. Brown (Eds.), **Supportive care for the renal patient** (pp. 35–42). Oxford, UK: Oxford University Press.

Holley, J.L. (2005). Palliative care in end-stage renal disease: Focus on advance care planning, hospice referral, and bereavement. **Seminars in Dialysis, 18**, 154–156.

Holley, J.L., Carmody, S.S., Moss, A.H., Sullivan, A.M., Cohen, L.M., Block, S.D., & Arnold, R.M. (2003). The need for end-of-life care training in nephrology: National survey results of nephrology fellows. **American Journal of Kidney Diseases, 42**, 813–820.

Holley, J.L., Foulks, C.J., & Moss, A.H. (1991). Nephrologists' reported attitudes about factors influencing recommendations to initiate or withdraw dialysis. **Journal of the American Society of Nephrology, 1**, 1284–1288.

Holley, J.L., Hines, S.C., Glover, J.J., Babrow, A.S., Badzek, L.A., & Moss, A.H. (1999). Failure of advance care planning to elicit patients' preferences for withdrawal from dialysis. **American Journal of Kidney Disease, 33**, 688–693.

Holley, J.L., Stackiewicz, L., Dacko, C., & Rault, R. (1997). Factors influencing dialysis patients' completion of advance directives. **American Journal of Kidney Diseases, 30**, 356–360.

Hudson, M., Weisbord, S., & Arnold, R.M. (2007). Prognostication in patients receiving dialysis #191. **Journal of Palliative Medicine, 10**, 1402–1404.

Hutchinson, T.A. (2005). Transitions in the lives of patients with end stage renal disease: A cause of suffering and an opportunity for healing. **Palliative Medicine, 19**, 270–277.

Jablonski, A. (2007a). Level of symptom relief and the need for palliative care in the hemodialysis population. **Journal of Hospice and Palliative Nursing, 9**, 50–58.

Jablonski, A. (2007b). The multidimensional characteristics of symptoms reported by patients on hemodialysis. **Nephrology Nursing Journal, 34**, 29–37.

Jassal, S.V., Trpeski, L., Zhu, N., Fenton, S., & Hemmelgarn, B. (2007). Changes in survival among elderly patients initiating dialysis from 1990 to 1999. **Canadian Medical Association Journal, 177**, 1033–1038.

Karnik, J.A., Young, B.S., Lew, N.L., Herget, M., Dubinsky, C., Lazarus, J.M., et al. (2001). Cardiac arrest and sudden death in dialysis units. **Kidney International, 60,** 350–357.

Kimmel, P.L. (2000). Just whose quality of life is it anyway? Controversies and consistencies in measurements of quality of life. **Kidney International, 57**, S113–S120.

Kimmel, P.L., Emont, S.L., Newmann, J.M., Danko, H., & Moss, A.H. (2003). ESRD patient quality of life: Symptoms, spiritual beliefs, psychosocial factors, and ethnicity. **American Journal of Kidney Diseases, 42**, 713–721.

Kirk, P., Kirk, I., & Kristjanson, L.J. (2004). What do patients receiving palliative care for cancer and their families want to be told? A Canadian and Australian qualitative study. **British Medical Journal, 328**(7452), 1343–1347**.**

Kuhl, D. (2002). **What dying people want: Practical wisdom at the end of life**. Toronto, ON: Doubleday Canada.

Kurella, J., Covinsky, K.E., Collins, A.J., & Chertow, G.M. (2007). Octogenarians and nonagenarians starting dialysis in the United States. **Annals of Internal Medicine, 146**, 177–183.

Lafrance, J.P., Nolin, L., Senecal, L., & Leblanc, M. (2005). Predictors and outcome of cardiopulmonary resuscitation (CPR) calls in a large haemodialysis unit over a seven-year period. **Nephrology Dialysis Transplantation, 21**, 1006–1012.

Lamping, D.L. (2004). Health-related quality of life in chronic renal failure. In E.J. Chambers, M. Germain, & E. Brown (Eds.), **Supportive care for the renal patient** (pp. 63–74). New York, NY: Oxford University Press.

Laupacis, A., Muirhead, N., Keown, P., & Wong, C. (1992). A disease-specific questionnaire for assessing quality of life in patients on hemodialysis. **Nephron 60**, 302–306.

Levinson, W., Cohen, M.S., Brady, D., & Duffy, E.D. (2001). To change or not to change: "Sounds like you have a dilemma". **Annals of Internal Medicine, 135**, 386–391.

Lincoln, A. (1953). Letter of condolence to Fanny McCullough, December 23, 1862. In M.D. Basler, M.D. Pratt, & L.A. Dunlap (Eds.), **Collected works of Abraham Lincoln** (Vol. 6, 1862–1863, pp. 16–17). New Brunswick, NJ: Rutgers University Press.

Lo, B., Quill, T., & Tulsky, J. (1999). Discussing palliative care with patients. **Annals of Internal Medicine, 130**, 744–749.

Lowrie, E.G., Curtin, R.B., LePain, N., & Schatell, D. (2003). Medical Outcomes Study Short Form: A consistent and powerful predictor of morbidity and morality in dialysis patients. **American Journal of Kidney Diseases, 41**, 1286–1292.

Lynn, J., Teno, J.M., Phillips, R.S., Wu, A.W., Desbiens, N., Harold, J., et al. (1997). Perceptions by family members of the dying experience of older and seriously ill patients. **Annals of Internal Medicine, 126**, 97–106.

Mapes, D.L., Bragg-Gresham, J.L., Bommer, J., Fukuhara, S., McKevitt, P., Wilkstrom, B., et al. (2004). Health related quality of life in the Dialysis Outcomes and Practice Patterns Study (DOPPS). **American Journal of Kidney Disease, 44**(Suppl. 5), 54–60.

Martin, D.K., Emanuel, L.L., & Singer, P.A. (2000). Planning for the end of life. **The Lancet, 356**, 1672–1676.

Mazanec, P., & Tyler, M.K. (2003). Cultural considerations in end-of-life care: How ethnicity, age, and spirituality affect decisions when death is imminent. **American Journal of Nursing, 103**, 50–58.

McClellan, W.M., Anson, C., Birkeli, K., & Tuttle, E. (1991). Functional status and quality of life: Predictors of early mortality among patients entering treatment for end stage renal disease. **Journal of Clinical Epidemiology, 44**, 83–89.

McCole Phillips, J., Brennan, M., Schwartz, C.E., & Cohen, L.M. (2005). The long-term impact of dialysis discontinuation on families. **Journal of Palliative Medicine, 8**, 79–85.

Meier, D.E., & Beresford, L. (2007). Hospitals and hospices partner to extend the continuum of palliative care. **Journal of Palliative Medicine, 10**, 1231–1235.

Meier, D.E., & Morrison, R.S. (2002). Autonomy reconsidered. **New England Journal of Medicine, 346**, 1087–1089.

Mercus, M.P., Jager, K.J., Dekker, F.W., de Haan, R.J., Boeschoten, E.W., & Krediet, R.T. (1999). Physical symptoms and quality of life in patients on chronic dialysis: Results of The Netherlands Cooperative Study on Adequacy of Dialysis (NECOSAD). **Nephrology Dialysis Transplantation, 14**, 1163–1170.

Miskulin, D.C., Meyer, K.B., Martin, A.A., Fink, N.E., Coresh, J., Powe, N.R., et al., for the Choice for Health Outcomes in Caring for End-Stage Renal Disease (CHOICE) Study. (2003). Comorbidity and its change predict survival in incident dialysis patients. **American Journal of Kidney Diseases, 41**, 149–161.

Molzhan, A. (2006). Quality of life and chronic kidney disease: Living long and living well. In A.E. Molzhan, (Ed.), **Contemporary nephrology nursing: Principles and practice** (2nd ed., pp. 343–368). New York, NY: American Nephrology Nurses Association.

Moss, A.H. (2003). **Completing the continuum of nephrology care. End Stage Renal Disease Peer Workgroup, recommendations to the field. The Robert Wood Johnson Foundation**. Washington, DC: Renal Physicians Association.

Moss, A.H., Holley, J.L., Davison, S.N., Dart, R.A., Germain, M.J., Cohen, L., et al. (2004). Core curriculum in nephrology: Palliative care. **American Journal of Kidney Diseases, 43**, 172–185.

Moss, A.H., Holley, J.L., & Upton, M.B. (1992). Outcomes of cardiopulmonary resuscitation in dialysis patients. **Journal of American Society of Nephrology, 3**, 1238–1243.

Moss, A.H., Hozayen, O., King, K., Holley, J.L., & Schmidt, R.J. (2001). Attitudes of patients toward cardiopuomonary resuscitation in the dialysis unit**. American Journal of Kidney Disease, 38,** 847–852.

Moss, A.H., Stocking, C.B., Sachs, G.A., & Siegler, M. (1993). Variation in the attitudes of dialysis unit medical directors toward decisions to withhold and withdraw dialysis. **Journal of the American Society of Nephrology, 4**, 229–234.

Murtagh, F.E.M., Addington-Hall, J., & Higginson, I.J. (2007). The prevalence of symptoms in end-stage renal disease: A systematic review. **Advances in Chronic Kidney Disease, 14**, 82–99.

Murtagh, F.E.M., Addington-Hall, J.M., Edmonds, P.M., Donohoe, P., Carey, I., Jenkins, K., et al. (2007). Symptoms in advanced renal disease: A cross-sectional survey of symptom prevalence in Stage 5 Chronic Kidney Disease managed without dialysis. **Journal of Palliative Medicine, 10**, 1266–1276.

Murtagh, F.E.M., Marsh, J.E., Donohoe, P., Ekbal, N., Sheerin, N.S., & Harris, F.E. (2007). Dialysis or not? A comparative survival study of patients over 75 years with Chronic Kidney Disease Stage 5. **Nephrology Dialysis Transplantation, 22**, 1955–1962.

National Institute of Health NIDDK/DKUHD. (2001). Excerpts from the United States Renal Data System 2001 annual data report. **American Journal of Kidney Disease, 38**(Suppl. 3).

Noble, H., Chesser, A., & Kelly, D. (2005). The cessation of dialysis in patients with end-stage renal disease: Developing an appropriate evidence base for practice. **EDTNA/ERCA Journal, XXX14,** 208–211.

Ostermann, M. (2008). Cardiac arrests in hemodialysis patients: An ongoing challenge. **Kidney International, 73**, 907–908.

Ostermann, M.E., & Nelson, S.R. (2003). Haemodialysis patients' views on their resuscitation status. **Nephrology Dialysis Transplantation, 18,** 1644–1647.

Parkerson, G.R. Jr., Broadhead, W.E., & Tse, C.K. (1995). Health status and severity of illness as predictors of outcomes in primary care. **Medical Care, 33**, 53–66.

Pendergast, T.J. (2001). Advance care planning: Pitfalls, progress, promise. **Critical Care Medicine, 29**(Suppl.), N34–N39.

Penson, R.T., Gren, K.M., Chabner, B.A., & Lynch, T.J. (2002). When does the responsibility of our care end: Bereavement. **The Oncologist,** 7, 251–258.

Perry, E., Buck, C., Newsome, J., Berger, C. Messana, J., & Swartz, R. (1995). Dialysis staff influence patients in formulating their advance directives. **American Journal of Kidney Disease, 25**, 262–268.

Poppel, D.M., Cohen, L.M., & Germain, M.J. (2003). The Renal Palliative Care Initiative. **Journal of Palliative Medicine, 6**, 321–326.

Quill, T.E. (2001). Perspectives on care at the close of life. Initiating end-of-life discussions with seriously ill patients: Addressing the "elephant in the room". **Journal of American Medical Association, 284**, 2502–2507.

Reiter, G.S., & Chambers, J. (2004). The concept of supportive care for the renal patient. In E.J. Chambers, M. Germain, & E. Brown (Eds.), **Supportive care for the renal patient** (pp. 15–26). New York, NY: Oxford University Press.

Renal Physicians Association and American Society of Nephrology (RPA/ASN). (2000). **Shared decision-making in the appropriate initiation of and withdrawal from dialysis. Clinical practice guideline, number 2**. Washington, DC: Author.

Roberts, J.C., & Kjellstrand, M. (1998). Choosing death: Withdrawal from chronic hemodialysis without medical reason. **Acta Medica Scandanivica, 223**, 181–186.

Roberts, J.C., Snyder, R., & Kjellstrand, C.M. (1998). Withdrawing life support—The survivors. **Acta Medica Scandinavica, 224**, 141–148.

Rocco, M.V., Gassman, J.J., Wang, S.R., & Kaplan, R.M. (1997). Cross-sectional study of quality of life and symptoms in chronic renal disease patients: The modification of diet in renal disease study. **American Journal of Kidney Diseases, 29**, 888–896.

Rubin, H.R., Jenckes, M., Fink, N.E., Meyer, K., Wu, A.W., Bass, E.B., et al. (1997). Patient's view of dialysis care: Development of a taxonomy and rating of importance of different aspects of care. CHOICE Study. Choices for Health Outcomes in Caring for ESRD. **American Journal of Kidney Disease, 30**, 793–801.

Sadler, H., Blagg, C.R., & Wasson, J.H. (1994). New dialysis-specific COOP carts may improve ESRD patient assessment. **Nephrology News & Issues, 8**(6), 5–58.

Saini, T., Murtagh, F.E.M., Dupont, P.J., McKinnon, P.M., Hatfield, P., & Saunders, Y. (2006). Comparative pilot study of symptoms and quality of life in cancer patients and patients with end stage renal disease. **Palliative Medicine, 20**, 631–636.

Sands, J.J., Etheredge, G.D., Shankar, A., Graff, J., Loeper, J., McKendry, M., et al. (2006). Predicting hospitalization and mortality in end-stage renal disease (ESRD) patients using an Index of Coexisting Disease (ICED)-based risk stratification model. **Disease Management, 9**, 224–235.

Singer, P.A. (1999). Advance care planning in dialysis. **American Journal of Kidney Disease, 33**, 980–991.

Singer, P.A., Martin, D.K., & Kelner, M. (1999). Quality end-of-life care: Patients' perspectives. **Journal of the American Medical Association, 281**, 163–168.

Singer, P.A., Martin, D.K., Lavery, J.V., Thiel, E.C., Kelner, M., & Mendelssohn, D.C. (1998). Reconceptualizing advance care planning from the patient's perspective. **Archives of Internal Medicine, 158**, 879–884.

Smith, C., DaSilva-Gane, M., Chandna, S., Warwicker, P., Greenwood, R., & Farrington, K. (2003). Choosing not to dialyse: Evaluation of planned non-dialytic management in a cohort of patients with end-stage renal failure. **Nephron Clinical Practice, 95**, C40–C46.

Steinhauser, K.D., Christakis, N.A., Clipp, E.C., McNeilly, M., Grambow, S., Parker, J., et al. (2001). Preparing for the end of life: Preferences of patients, families, physicians, and other care providers. **Journal of Pain and Symptom Management, 22,** 727–737.

Stevens, L.A., Coresh, J., & Levey, A.S. (2008). CKD in the elderly—Old questions and new challenges: World Kidney Day 2008. **American Journal of Kidney Diseases, 51**, 353–357.

The SUPPORT Principal Investigators. (1995). A controlled trial to improve care for seriously ill hospitalized patients: The study to understand prognoses and preferences for outcomes and risks of treatement (SUPPORT). **Journal of the American Medical Association, 274**, 1591–1598.

Swartz, R.D., & Perry, E. (1993). Advance directives are associated with 'good deaths'. **Journal of the American Society of Nephrology, 3**, 1623–1630.

Swartz, R., & Perry, E. (1998). Advance directives in end-stage renal disease inherently involve family and staff. **Advances in Renal Replacement Therapy, 5**, 109–119.

Tanyi, R.A., Werner, J.S., Recine, A.C., & Sperstad, R.A. (2006). Preceptions of incorporating spirituality into their care: A phenomenological study of female patients on hemodialysis. **Nephrology Nursing Journal, 33**, 532–538.

Tattersal, J. (2005). Dialysis in the over-80s. **Age and Ageing, 34**, 100–101.

Teno, J.M., Clarridge, B.R., Casey, V., Welch, L.C., Wetle, T., Shield, R., et al. (2004). Family perspectives on end-of-life care at the last place of care. **Journal of the American Medical Association, 291**, 88–93.

Thomas-Hawkins, C. (2000). Symptom distress and day-to-day changes in functional status in chronic hemodialysis patients. **Nephrology Nursing Journal, 27**, 369–379.

Thompson, K.F., Bhargava, J., Bachelder, R., Bova-Collis, R., & Moss, A. (2008). Hospice and ESRD: Knowledge deficits and underutilization of program benefits. **Nephrology Nursing Journal, 35**, 461–468.

Walton, J. (2002). Finding a balance: A grounded theory study of spirituality in hemodialysis patients. **Nephrology Nursing Journal, 29**, 447–456.

Weil, C.M. (2000). Exploring hope in patients with end stage renal disease on chronic hemodialysis. **Nephrology Nursing Journal, 27**, 219–224.

Weisbord, S.D., Carmody, S.S., Bruns, F.J., Rotondi, A.J., Cohen, L.M., Zeidel, M.L, et al. (2003). Symptom burden, quality of life, advance care planning and the potential value of palliative care in severely ill haemodialysis patients. **Nephrology Dialysis Transplantation, 18**, 1345–1352.

Weisbord, S.D., Fried, L.F., Arnold, R.M., Fine, M.J., Levenson, D.J., Peterson, R.A., et al. (2005). Prevalence, severity, and importance of physical and emotional symptoms in chronic hemodialysis patients. **Journal of the American Society of Nephrology, 16**, 2487–2494.

Weisbord, S.D., Fried, L.F., Arnold, R.M., Rotondi, A.J., Fine, M.J., Levenson, D.J., et al. (2004). Development of a symptom assessment instrument for chronic hemodialysis patients: The Dialysis Symptom Index. **Journal of Pain and Symptom Management, 27**, 226–240.

Renal Administrative Leaders' Network of Ontario 2008/2009 Conference, September 26–27, 2008 Managing the Issues Today, Planning for a Better Future

By Helen Brenner, RN, MBA, Chair, Renal Administrative Leaders' Network of Ontario

On September 26 and 27, 2008, the Renal Administrative Leaders' Network of Ontario (RALNO) hosted its annual conference, which was attended by renal leaders from 24 of the 26 provincial renal programs across Ontario.

In keeping with RALNO's Vision and Mission, the conference was organized around the theme of "Managing the Issues Today—Planning for a Better Future."

The RALNO 2008/2009 annual conference commenced with a dinner and presentation on the evening of September 26 with invited guest Dr. David Mendelssohn, who spoke on the topic of "Predialysis care and the vexing problem of suboptimal starts."

Dr. Mendelssohn reviewed the literature and data on why the focus is on pre-end stage renal disease care. He reviewed the various methods patients present to a program, e.g., planned start versus late referral to acute/unplanned starts. He challenged our thinking regarding late to unplanned patient starts, suggesting that we refer to them as "suboptimal" starts. The literature and the benefits of referral and education/monitoring by a multidisciplinary team were reviewed. Canada is one of the few countries that funds pre-end stage renal disease care. Our care has been shown to be superior. However, we were challenged to improve the patient outcomes by defining targets and continually improving our processes and care by using a quality framework approach.

Dr. Mendelssohn encouraged attendees to review the article, "The Right Start Program: Reduction of mortality in incident end-stage renal disease (ESRD) patients with early intervention" (Wingard et al., 2007), and suggested a case management approach for patient management may be adaptable to the Canadian environment. He identified that retrospective and prospective studies are underway and the data should help define the "right road" in patient care and monitoring.

The full-day conference on September 27 commenced with an informal breakfast/networking session followed by a full-day of guest speakers, a RALNO business meeting, and a panel discussion.

Starting the day off, Dr. Rob Quinn provided an overview of his studies from the Institute of Clinical Evaluative Studies (ICES), "Projecting dialysis growth and hitting peritoneal dialysis prevalence targets." Dr. Quinn gave an overview of this research and the outcomes to date. The key message was predicting the number of hemodialysis dialysis patients at a provincial level appears reliable. Predicting the number of peritoneal dialysis, new dialysis starts, and the number of patients in small Local Health Integration Networks (LHINs) with small numbers is less reliable. As a result of the large volume and large costs associated with renal programs, accountability measures are coming. High-quality data are essential to improving quality, efficiency and demonstrating accountability.

Following this presentation, a panel discussion ensued. The members of the panel included: Joy Bevan, VP Patient Services, Grand River Hospital, Natalie Diduch, Senior Program Consultant, Ontario Ministry of Health and Long-Term Care, Jeanne Thomas, Senior Integration Consultant, Central East LHIN, and Dr. Robert Quinn, ICES. Natalie identified that, provincially, the number of PD patients has grown to 20%. She reinforced the

RALNO Vision

Consistent, safe, accessible renal care for Ontarians in a system that is accountable for excellent health outcomes and the most effective utilization of resources.

RALNO Mission

The Renal Administrative Leaders Network of Ontario works together to:

1. Provide a common advisory/advocacy voice with other professional associations and government bodies.
2. Advocate for the consistent development and application of renal care policy and funding methodology throughout Ontario that is based on sound evidence-based practice and research.
3. Promote fiscal responsibility and efficient and effective use of resources.
4. Raise awareness of common issues that impact the administration of nephrology programs and services.

Ministry objective for 30% to 40% of patients on home therapies. Joy gave an overview of strategies that were put in place at Grand River and the outcomes of their efforts to grow their PD program. Jeanne stressed the need for planning at the local level to make positive changes in the community and the need to think beyond our narrow disease state parameters to an integrated model. She encouraged participants to review the Ministry of Health framework for Chronic Disease Management and the Wagner Model.

Following lunch, the meeting reconvened for the RALNO business discussions. Helen Brenner, RALNO Chair, provided an overview of the activities that have been undertaken by the RALNO executive on behalf of the membership over the course of the year, and engaged the membership in discussions to help guide the work of the RALNO executive over the 2009/2010 fiscal year.

The conference concluded with an insightful presentation by Dr. Brian Schwartz, Scientific Advisor to the Ontario Ministry of Health and Long-Term Care Emergency Management Unit. Dr. Schwartz's key messages were: a) Be prepared, and b) Review your level of preparedness from three perspectives:

- Self and family
- Hierarchy of controls
- Issues specific to disease populations.

In all scenarios, Dr. Schwartz stressed be ready, be watchful, be decisive and be transparent in communication to health care partners and patients/families. He emphasized that hand hygiene is the single most effective means of infection control, and in a pandemic, it may be the only means of protection in the later stages due to the challenges obtaining resources (e.g., gloves, masks, etc.).

If you are interested in learning more about RALNO, please visit our website at www.cannt.ca/ralno

If you would like to have your name added to the RALNO e-mail list, please contact: Jane Cornelius, RALNO Secretary, Phone: (905) 682-6411 Ext. 63157 or e-mail: jane.cornelius@niagarahealth.on.ca

Reference

Wingard, R.L., Pupim, L.B., Krishnan, M., Shintani, A., Ikizler, T.A., & Hakim, R.M. (2007). Early intervention improves mortality and hospitalization rates in incident hemodialysis patients. **Clinical Journal of the American Society of Nephrology, 2**, 1170–1175.

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Les gens étant au cœur de nos préoccupations, nous améliorons la qualité de vie des patients, de leur famille et des aidants. L'engagement de nos employés nous permet de faire la différence en matière de santé pour les Canadiens et leurs communautés.

Nous sommes fiers de nous associer à l'Association canadienne des infirmières et infirmiers et des technologues de néphrologie.

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Pharmacy news and reviews

New agent update

Sitagliptin (Januvia®)

What is it?

Sitagliptin is a novel class of oral antihyperglycemic agents known as a dipeptidyl-peptidase-4 (DPP-4) inhibitors or incretin enhancers for the treatment of type 2 diabetes mellitus.

How does it work?

It has been shown that the increase in plasma insulin in response to an elevation in plasma glucose is approximately three times greater when glucose is administered orally compared with intravenously. This enhancement of insulin release is known as the "incretin" effect (Richter, Bandeira-Echtler, Bergerhoff, & Lerch, 2008). Incretins are secretory hormones of the intestine that influence beta cell function. Sitagliptin inhibits gastrointestinal mediated DPP-4, which is responsible for the inactivation and degradation of incretin hormones. This enhanced action of incretin stimulates insulin release and decreases glucagon secretion. The result is a decrease in A1C and lower pre and postprandial glucose levels. This action enhances the body's response to food while minimizing hypoglycaemia (RX files, 2008).

Efficacy

Richter et al. conducted a Cochrane systematic review including 11 studies using sitagliptin and more than 6,000 patients. They found that sitagliptin reduced A1C levels by an average of 0.7%, with similar efficacy when used as monotherapy or add-on therapy. Sitagliptin has also demonstrated significant reduction in fasting and postprandial glucose (PPG) levels (Richter et al, 2008).

Adverse effects

Common side effects include (compared to placebo) (RxFiles, 2008): upper respiratory tract infection, nasopharyngitis, urinary tract infection, headache, and arthralgias. Other side effects may include sore throat, cough, fatigue, dizziness, edema, nausea, and diarrhea. Rarely reported side effects include hypersensitivity reactions such as anaphylaxis, angioedema, and exfoliative skin conditions.

Long-term effects are still unknown. In addition to stabilizing incretins, DPP inhibitors also prolong the effects of other neuropeptides in the body including neuropeptide Y, growth hormone-releasing hormone and chemokinines. Potential related side effects may include enhanced inflammation or allergic response and increased blood pressure. DPP-4 also contributes to T-cell activation raising the possibility that these compounds could have a negative effect on immune function (Richter et al., 2008). This may explain some of the reported infections with this agent.

Place in therapy

In Canada, sitagliptin is only indicated in type 2 diabetes in combination therapy with metformin when diet and exercise plus metformin does not provide adequate control (MerckFrosst, 2008). The U.S. monograph has more extensive indications including monotherapy (Merck, 2008). Sitagliptin has not been studied in combination with insulin.

The Canadian Diabetes Association 2008 guidelines do not specifically limit sitagliptin's use to combination therapy with metformin. It is simply listed as another oral alternative, second line after metformin (Canadian Diabetes Association, 2008).

Treatment in patients with kidney disease

Interestingly, in the U.S., sitagliptin has been marketed in three dosage forms (100 mg, 50 mg, 25 mg) with the following dosing recommendations (Merck, 2008):

- 100 mg once daily for CrCl > 50 ml/min
- 50 mg once daily for CrCl < 50 ml/min
- 25 mg once daily for CrCl < 30 ml/min

However, in Canada, MerckFrosst has only marketed the drug as a 100 mg tablet. The company does not support splitting this tablet. Therefore, in Canada, it is not recommended in patients with moderate to severe renal function (< 50 ml/min) (MerckFrosst, 2008). This truly limits the use of this agent for many of our patients.

by Dr. Jennifer Lynn Ryan, BSc Pharm, Pharm D, ACPR, Nephrology Pharmacist, Atlantic Health Sciences Corporation, Saint John, NB

Address correspondence to: Dr. Jennifer Lynn Ryan, BSc Pharm, Pharm D, ACPR, Nephrology Pharmacist, Atlantic Health Sciences Corporation, 400 University Avenue, Saint John, NB E5K 3Y2. E-mail: cryan54@hotmail.com

Aliskiren (Rasilez®)

What is it?

Aliskiren is a novel agent, a direct renin inhibitor. It is available in 150 mg and 300 mg tablets and may be taken without regard to food.

How does it work?

The renin-angiotensin aldosterone system is a major regulator in cardiovascular and renal homeostasis. Agents such as angiotensin converting enzyme inhibitors (ACEI) and angiotensin II receptor blocking agents (ARBs) have been found to lower blood pressure and improve outcomes for patients at high risk of cardiovascular disease and to delay the progression of renal disease. However, these agents do not block the renin-angiotensin-aldosterone system (RAAS) completely. Aliskiren inhibits the formation of renin, inhibiting the RAAS from the first step and preventing all future steps in the process. It is estimated that renin inhibitors might provide more effective blockade of the RAAS than either ACEIs or ARBs (Musini, Fortin, Bassett, & Wright, 2008).

Efficacy

Musini et al. conducted a Cochrane systemic review including six double-blinded, placebo-controlled trials of aliskiren and more than 3,000 patients (Musini et al., 2008). This meta-analysis demonstrated that aliskiren has a dose-related effect on both systolic and diastolic blood pressure compared to placebo. The authors concluded that the effect appears to be similar to that determined by ACEIs and ARBs.

Animal studies and some preliminary human studies suggest that direct renin-inhibitors may play a role in combination with ACEIs and ARBs in reducing urinary albumin levels and potentially protecting renal function (Krishna, Oparil, & Oparil, 2008).

It is important to note that direct renin inhibitors have yet to be evaluated for their efficacy in reducing cardiovascular morbidity and mortality. Therefore, they do not represent a replacement agent for current established risk-reduction therapies.

Adverse effects

The most commonly reported adverse effects with aliskiren include headache, nasopharyngitis, diarrhea and back pain. However, in the review by Musini et al., these were not significantly different than placebo (Musini et al., 2008). Keep in mind that these studies were not powered to demonstrate a difference in adverse effects. It would be prudent to monitor patients started on aliskiren for serious adverse effects that could be related to RAAS blockade such as decreased glomerular filtration rate (GFR), hyperkalemia and angioedema until long-term safety studies and data can rule these out.

Place in therapy

At the present time, aliskiren may be an effective option for the treatment of hypertension in adult patients. However, it should not be considered a first-line agent in patients at high cardiovascular risk, as it has not yet been proven to prevent hard outcomes.

Treatment in patients with kidney disease

In a recent study by Parving et al., aliskiren was found to decrease urinary albumin levels by 20% when added to losartan in patients with moderate diabetic nephropathy (Parving, 2008). This study included patients with moderate renal function (>30 ml/min) without adverse outcomes. However, these numbers were small and patients with severe kidney disease were excluded. Further evaluation of this agent is required to fully evaluate the safety of aliskiren in patients with impaired renal function. Caution should be exercised in using this drug in patients with renal impairment. The company does not offer recommendations for dosing adjustment in renal impairment, but it would be prudent to start with the lowest possible dose and monitor creatinine and potassium closely upon initiation.

References

Canadian Diabetes Association. (2008). **Canadian Diabetes Association 2008 Clinical Practice Guidelines**. Retrieved January 15, 2009, from http://www.diabetes.ca/for-professionals/resources/2008-cpg/

Krishna, K., Oparil, G., & Oparil, S. (2008). Renin inhibition: Should it supplant ACE inhibitors and ARBS in high-risk patients? **Current Opinion in Nephrology and Hypertension**, 17, 484-490.

Merck. (2008) **About JANUVIA**. Retrieved January 13, 2009, from http://www.januvia.com/sitagliptin/januvia/hcp/januvia/about_januvia/about_januvia.jsp?WT.svl=2

MerckFrosst. (2008). **Januvia® Product Monograph**. Retrieved January 13, 2009, from http://www.merckfrosst.ca/mfcl/en/corporate/products/januvia.html

Musini, V.M., Fortin, P.M., Bassett, K., & Wright, J.M. (2008). Blood pressure lowering efficacy of renin inhibitors for primary hypertension. [Systematic Review] **Cochrane Hypertension Group Cochrane Database of Systematic Reviews**. 4.

Novartis. (2008). **Resilez® Prescribing Information**. Retrieved January 14, 2009, from http://www.novartis.ca/products/en/pharmaceuticals-r.shtml

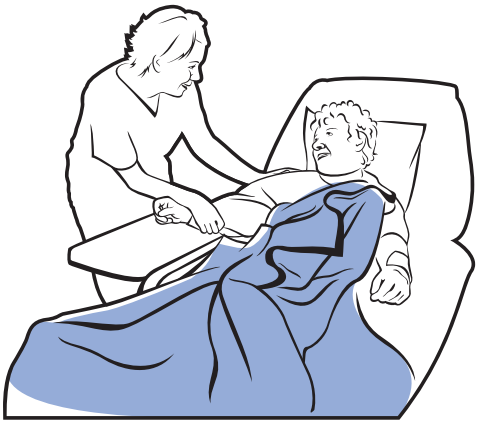
Parving, H., Persson, F., Lewis, J.B., Lewis, J.L., & Hollenberg, N.K. (2008). Aliskiren combined with losartan in type 2 diabetes and nephropathy. **New England Journal of Medicine, 358**, 2433-2446.

Richter, B., Bandeira-Echtler, E., Bergerhoff, K., & Lerch, C.L. (2008). Dipeptidyl peptidase-4 (DPP-4) inhibitors for type 2 diabetes mellitus (Review) **Cochrane Database of Systematic Reviews 2008**, Issue 2.

RxFiles. (2008). **Sitagliptin (JANUVIA®)**. Retrieved January 13, 2009, from www.rxfiles.ca

Bedside Matters…

Picking up on the cues



You met them while doing an hourly assessment in the hemodialysis unit. Sam was having his third hemodialysis. As you introduced yourself as an RN, you also learned about his field of work, his cardiac history, and his sense of humour. He mentioned, " I'm not sure I can handle life on dialysis." That was your cue.

You told him that we do our best to help people make choices, and that we talk to every patient to explore what living life well means to them, what dialysis can offer and if we can meet the goals they have in mind. This sometimes includes end-of-life treatment decisions.

"That reminds me," he said, " I have a living will."

You encouraged his wife to bring it in, pointing out that people often keep these documents hidden away when, really, medical professionals should be aware of the wishes.

At his next treatment, you saw that Sam was much sicker. He had no energy to talk. You offered support to his wife. She gave you a copy of his living will, which you pointed out to the doctor and filed in the front of his chart, along with your notes in a greensleeve, which contains all advance care planning information.

Four days later, Sam was still very ill. He had asked his cardiologist to disable his internal defibrillator, which was done. You took his wife aside to offer her support and to update on how things were going. " I know what he wants." she confided. You asked her what was keeping her from talking to him more about it. "Is there some way I can help?" You offered.

"I think he is giving me the time to accept what he is choosing," she answered. She gave you a hug and returned to her husband's side.

That day, a nephrologist who had never met Sam came to do rounds. You briefed him on the situation. He spoke with the couple and within the hour a decision was made by Sam, with his wife's support, to stop dialysis. A referral to palliative care was made immediately. Sam was transferred to the palliative care unit that evening and died peacefully the next day.

What if?

What if you had chosen to ignore his cue when he said," I don't know if I can handle life on dialysis?"

Sam had already lived for years with a restricted life due to cardiac failure. He and his wife might have been swept up in the new crisis of dialysis treatment, without a prompt of advance care planning conversation to review what mattered most to his quality of life.

He might easily have ended up with a severe stroke, or on a ventilator in ICU. Without a voice, without control, without dignity and good-byes.

What if you had not followed through on his cue?

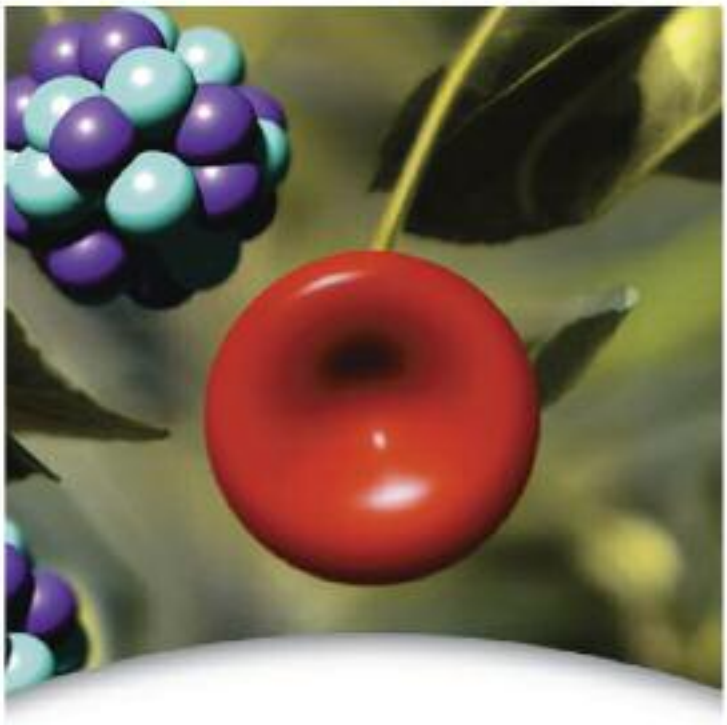
Think of the benefits to everyone because you did.

Advance care planning training is available through Fraser Health internet.

If you "Google" Fraser Health advance care planning, you can find various articles and resources to further your information. Website: www.fraserhealth.ca

Please share a meaningful moment of learning from your professional life. Send me your idea and I'll help you publish it. Send to Lee at lee.beliveau@fraserhealth.ca

Lee Beliveau, RN, CNeph(C), staff nurse, hemodialysis unit, at Surrey Hospital, Surrey, British Columbia



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Profiling...

Meet the 2008 CANNT bursary, award and research grant winners

Sandra Lagacé, recipient of the CANNT 2008 Award of Excellence in Clinical Practice

By Sandra Lagacé, BSN, CNeph(C), Infirmière conseillère en hémodialyse
Hemodialysis Resource Nurse, George Dumont Hospital, Moncton, New Brunswick

Je suis présentement à ma 9e année comme infirmière en néphrologie. Je suis Infirmière Conseillère en Hémodialyse depuis 2003 et j'apprécie encore chaque journée. J'apprécie travailler en collaboration avec tout le personnel en néphrologie, l'équipe multidisciplinaire, les patients et leurs familles.

« Patients en premier » est une valeur commune dans notre programme, où le « caring » et le support des patients est d'une importance énorme.

Je tiens à remercier l'ACITN d'offrir ces nombreuses reconnaissances à ses membres. J'encourage les nominations du personnel qui se démarquent et qui méritent d'être soulignés. Nous devons supporter et célébrer le travail ardu effectué.

C'est un honneur pour moi de recevoir une reconnaissance clinique dans ma pratique infirmière. L'équipe de Moncton, NB, est une équipe formidable, dévouée et toujours prête à accepter de nouveaux défis. C'est grâce à ce travail d'équipe que nous sommes capables de continuer d'améliorer les soins des patients hémodialysés et de leurs familles.

I am, at present, in my ninth year in nephrology nursing. I've been a Hemodialysis Resource Nurse since 2003, and still loving every minute of it! I appreciate working collaboratively with all nephrology personnel, the multidisciplinary team, the patients and their families to try to improve every aspect of their care.

"Patients first" is a common value in our program, where caring and support is of the utmost importance.

I want to thank CANNT for making this and all other awards available to its membership. I also take this opportunity to encourage everyone who knows a deserving person to nominate them. We need to support and celebrate all our hard work.

It is an honour for me to accept this clinical award in my nursing practice. The Moncton, New Brunswick, nephrology team is great, devoted and always ready to accept new challenges. Our teamwork gives us the opportunity to improve the care given to our dialysis patients and their families.

Nicole Veronovici, recipient of the CANNT 2008 Award of Excellence, Novice Practitioner

By Nicole Veronovici, RN, BScN, Home Peritoneal Dialysis Nurse, University of Alberta Hospital, Edmonton, Alberta

Winning the CANNT Award of Excellence (Novice Practitioner) is an honour and a huge compliment! This accomplishment reflects the quality of guidance and mentorship that I continually receive from my peers in the Edmonton University of Alberta Home Peritoneal Dialysis Unit. My colleagues' combined years of experience has enabled me, and the team as a whole, to provide excellence in patient care.

Finding initial interests in first aid and medical sciences, I began my nursing studies in 2001 and graduated from the University of Alberta in 2004 with a Bachelor's of Science in Nursing with distinction. After gaining work experience and knowledge at the University of Alberta Hospital Emergency Department, I came to realize I desired a position that would allow me to spend more time working with and teaching patients about their conditions, treatments, and future preventative measures.

After searching through various position openings and careful consideration, I was fortunate to obtain a position with the Edmonton Home Peritoneal Dialysis Unit. The position promised to have a strong focus on patient education and, more importantly, self-care. This position was attractive, as we are in a time faced with a growing epidemic of self-induced illness that requires patient ownership and patient care management.

Once hired, I was quickly greeted by a great preceptor who took personal ownership of my learning and was the catalyst in providing the early knowledge that has allowed me to succeed within my practice. Now entering my second year with the unit, I continue to enjoy my patients, coworkers and the variety and challenge within home peritoneal dialysis.

I would like to take this opportunity to thank the inspirational group of nurses within my unit. It is an absolute pleasure working with these nurses on a daily basis. Thank you, CANNT, for recognizing and supporting novice nurses in the nephrology field.

Jill Campbell, recipient of the CANNT 2008 Award of Excellence in Administration/Leadership

By Jill Campbell, MHSc, CNeph(C), CHE, Program Director, Diabetes Comprehensive Care, St. Michael's Hospital, Toronto, Ontario

It was an unexpected and wonderful surprise to receive notification that I was the recipient of the 2008 CANNT Administration/Leadership Excellence Award. I graduated from University of Toronto with a bachelor's degree in sociology/psychology and had worked as a social worker for almost two years before making a career change to nursing. It was providential that instead of getting a job in cardiology, which was my first choice, I was offered a position in nephrology instead. I was fortunate to work at St. Michael's Hospital, which gave me the opportunity to develop broad-based nephrology experience on the renal/transplant ward, post-transplant clinic, and home dialysis. During these years, I was able to complete my Canadian Nurses Association nephrology nursing certification CNeph(C), and my master's degree in health sciences/management.

Before the Wellesley-Central Hospital closed, I also learned hemodialysis and went to work at Scarborough General Hospital in 1999 as the Clinical Educator/Renal. The following year, I returned to St. Michael's as the Clinical Leader/Manager, Hemodialysis. I was the CANNT unit liaison for one year, taught the Humber College Nephrology Nursing course in 2000 and 2001, and served as a member of the Kidney Foundation's Ontario Government Relations Committee from 2004 to 2008. I was seconded to the Ministry of Health and Long-Term Care in 2006–2007, as an expert nurse consultant to develop its Priority Program/Renal knowledge transfer resource for the incoming Local Health Integration Networks. I have also been a member of the Renal Administrators Leadership Network of Ontario since 2003.

I am currently employed as the Program Director, Diabetes Comprehensive Care Program at St. Michael's Hospital, with leadership responsibilities for the nephrology, urology, and endocrinology services. I received my Canadian Health Executive (CHE) designation in 2008 from the Canadian College of Health Service Executives and am entering my second year of the Doctoral in Health Administration program through the University of Phoenix. I don't have a definite thesis yet, but know that it will focus on health human resources, which has been a strong area of interest for me. I enjoy travelling and watching movies with my husband William and teenaged children Renee and Richard, and am grateful for their support in allowing me to continually grow and develop. I am also indebted to many nephrology nurses, technologists, physicians, administrators, professional discipline colleagues and patients whom I have had the pleasure to work with and learn from. To participate in the 40th anniversary celebration of CANNT and to receive this distinguished recognition was the highlight of my 21 years as a nephrology nurse.

Cynthia Yam, recipient of the CANNT 2008 Award of Excellence in Mentorship

By Cynthia Yam, RN, BScN, CNeph(C), Clinical Nurse Educator of the Northern Alberta Renal Program, Edmonton, Alberta

My journey in nephrology nursing began in 1972 at the Royal Free Hospital in London, England. After I graduated from nursing in Hong Kong, without knowing what I was getting myself into, I enrolled in the six-month course in "Renal Transplantation and Hemodialysis". Yes, I have to admit that I worked with the Kiil dialyzers and learned to rebuild them when the patients came off dialysis. As a young nurse, exposure to formalin fumes was not a concern of mine at the time. I gladly learned new skills and seemed to have no fear.

In January 1975, I began my career at the University of Alberta Hospital in Edmonton, Alberta. As soon as I entered the hemodialysis unit, I immediately felt the camaraderie and this drew me to stay on for the next 33 years, going on to 34. During this time, I have had the opportunities to work as a dialysis nurse, a unit manager and, at present, as a clinical nurse educator. Each role has presented me with challenges and rewards. I would, however, not trade my career as a nephrology nurse for any other profession. Over the years, management has changed many times, personnel has come and gone, and technology and treatment have advanced. I feel that my connection with the patients though has remained unchanged. It is through them I have learned to be a better nurse.

I am honoured to be acknowledged by CANNT. This award of Excellence in Mentorship is not only for me to receive, it is also for those many mentors I have had in the past who have helped shape my career. Without their guidance, support and encouragement, I would not have come this far. I am also one of those lucky people who have found my niches in life—one is finding fulfillment in nursing and the other in teaching. I am extremely thankful for the recognition CANNT has offered me. In this age of nursing, I hope I can continue to be a role model for other nurses and assist them with finding satisfaction in nephrology nursing, as I have.

Katie Nikl, recipient of the CANNT 2008 Award of Excellence in Education

By Katie Nikl, RN, CNeph(C), at the time of this award was Clinical Nurse Educator, Renal Services Program, Surrey Memorial Hospital, Surrey, British Columbia. She is now a nurse at the Abbotsford Regional Hospital and Cancer Centre, Abbotsford, British Columbia.

I have been a renal nurse for more than 20 years. If I say it quickly, you might miss that it is almost a generation's worth of commitment to nephrology nursing. I have been blessed with a varied renal experience working with in-centre acute and chronic hemodialysis and peritoneal dialysis for Fraser Health Authority (FHA), home hemodialysis (yes, it existed back in the late 1980s and early 1990s) for Kidney Dialysis Services, pediatric hemodialysis at BC Children's Hospital, and community hemodialysis, back in its infancy working in the basement of the old Abbotsford Public Health Unit armed with the knowledge that I brought with me, a phone for technical support and a screw driver to fine tune the pH on the old Cobe 2000.

Ten years ago, I took a giant risk and applied for and was awarded the Clinical Nurse Educator position at the new Surrey Memorial Hospital Renal Unit. Those were exciting times! A brand new unit! Amazing achievements and equally amazing challenges were my constant companions. Long hours to support the learning needs of our many "new to hemodialysis" team members, both nurses and technicians, plus the learning needs of a growing community hospital staff that now care for our hemodialysis patients and their complex needs rather than transferring them to other "hemodialysis-savvy" centres.

My hat goes off to the 'A' team, as they often call themselves, the founding staff that accepted the unknown challenges of opening a new hemodialysis frontier in a growing community hospital. No challenge was or is too great for these founding members, or the new staff that has joined our team. We have evolved through four physical expansions and amalgamated with a growing community unit, expanding our service from 42 community-based hemodialysis patients, prior to the opening of the in-centre unit, to approximately 230 to 250 hemodialysis patients. The nephrology nurses have grown into keen, positive and respectful mentors supporting our growing program, and many have taken on key leadership positions within the FHA Renal Services Program.

As one of the founding members of the BC Renal Educator Group, it has been a learning journey, as we collectively elevated BC's provincial renal care through educational achievements, standardizing clinical practice guidelines and developing educational supports for smaller northern programs that did not have education staff resources.

Education is growth. Education is empowerment. To be nominated by my peers, and be chosen to win the Award of Excellence in Nephrology Nursing Education is an ultimate honour. Thank you to CANNT for the recognition of the countless hours dedicated to education, which, ultimately, enriches the lives of those we care for and those we work with.

James McDougall, recipient of the CANNT 2008 Award of Excellence, Technical

By James McDougall, BSc., Technologist, Clinical Technology, St. Michael's Hospital, Toronto, Ontario

Thank you very much for honouring me with the CANNT Award of Excellence (Technical) during the 2008 conference in Quebec City. This was, indeed, a very pleasant surprise.

After obtaining a Bachelor of Science in 1979, I started working as a dialysis technologist in the hemodialysis unit at the Kitchener Waterloo Hospital in Kitchener, Ontario. Chris Durken (Linski) was the head nurse of the five-bed unit. Everyone working there was under 30 and very enthusiastic. We all greatly appreciated Chris's excellent teaching style.

At the time, we were using Drake-Willock 4015 dialysis machines with plug-in electronic modules with pots to tweak instead of the PCB of today. The blood and heparin pumps were auxiliary equipment and were not a part of the actual dialysis machine. One of my tasks was to rebuild the proportioning unit, which was always a very greasy job. I could only get started on that once I had completed putting my patients on dialysis. The nurses in the unit would complete the hourly checks on the patients if the technologists were busy, but we were always there to discontinue dialysis. One of my areas of expertise was cannulating with 14-gauge angiocaths. My hands were large enough to hold both the steel and the hub at the same time! As this was a non-teaching hospital, we were expected to know and practise all aspects of hemodialysis from fixing equipment to patient care, both sides of the dialyzer.

Over the past 30 years, I have been awed by the advancements in dialysis technology. As advancements were made in nephrology, advancements were made in technology. This was a challenge for the dialysis technologist, as computer components were more evident in the equipment being manufactured. It wasn't possible to stay in the technology lab isolated from the front line. We had to be members of the team. We juggled patient care, machine care, water care, and research and management components.

I like to think that this is still crucial to our role as dialysis technologists. We are key players in the delivery of exemplary care to the dialysis patient. There are many ways to get involved and have a voice in decisions made to elevate the delivery of care to our patients. I have been a member of various advisory committees, liaisons and subcommittees, as well as the "technical member-at-large" for two terms with CANNT. Being a part of a Canada-wide nephrology organization has certainly provided me with a wonderful learning experience and has greatly expanded my knowledge.

Robert Haché, recipient of the CANNT 2008 Award of Excellence, Technical

By Robert Haché, Technologiste en équipement de dialyse/dialysis equipment technologist, Hôpital régionale Dr Georges-L Dumont/Dr Georges-L Dumont regional Hospital, Moncton, New Brunswick

I have worked in the dialysis department since 1987. I've been involved in almost every aspect of this unit. This includes repair of dialysis machines, water treatment, construction, research, etc. I am also involved with presentations, education and organization for the technical department.

When I started working here, I had not a clue what dialysis was about but, as soon as I started, I found a special world where you work with machines and PEOPLE. It's a world where everything changes rapidly and where the challenge is constant.

This year, I won the Award of Excellence (Technical). This is an honour for me because it is from the same people I have worked with for many years and from an association that I really respect.

Thank you very, very much for this honour.

Billie Hilborn, recipient of the CANNT 2008 Franca Tantalo (post graduate) Bursary

By Billie Hilborn, RN, CNeph(C), BScN, MHSc (Bioethics), casual nurse in the hemodialysis unit at Sunnybrook Health Sciences Centre, Toronto, Ontario. Enrolled full-time in a Collaborative PhD Program with the Lawrence S. Bloomberg Faculty of Nursing and Joint Centre for Bioethics at the University of Toronto, Toronto, Ontario

Thank you to CANNT and Fresenius Medical Care, sponsoring partners for the Franca Tantalo Bursary for graduate study in nephrology, for selecting me as this year's recipient. The intent of this bursary is to honour Franca, a pioneer in nephrology nursing, and to provide inspiration for the recipient to embrace the challenge and commitment of further education with the same spirit that Franca demonstrated throughout her career (Chan & Dunn, 2004, CANNT Journal, 14(3), p. 11). It means a great deal to me to receive this award from my peers in the nephrology nursing field. Some of the award was used to fund my attendance at the 2008 CANNT symposium in Quebec City, to allow me to remain current with nephrology nursing news and to network.

I graduated with my diploma in 1970 from St. Mary's School of Nursing in Kitchener, Ontario, and immediately began working at St. Mary's on a very hectic female surgery ward. I learned something new every day, including how to wrap a scultetus abdominal binder and cook a linseed poultice. Team nursing was the model of care delivery, and we rotated through days, evenings and nights doing eight-hour shifts, often seven in a row with only one day off in between. Times and care delivery models have changed, and nursing itself has changed since "the good old days", but quality patient care has always been the main goal of nursing.

Over the years, I have worked on a variety of units, primarily acute adult medicine, both in Canada and the United States, and was eventually drawn to nephrology. I completed the nephrology courses offered through Humber College, and began working full-time in hemodialysis in 1999. I had the opportunity to be the team leader for the renal unit in the patient safety initiative launched by our organization, and the transfer form designed and implemented during that process remains in use today, to provide written communication between the hemodialysis and inpatient units before and after patients have their dialysis treatments.

I had always wanted my nursing degree, and was finally able to go back to school in 2002 for the Ryerson University 19-month post-RN Bachelor of Science in Nursing degree, a gruelling program that I completed while working full time. Two things of major importance happened to me during that program. The first is that I became certified in nephrology from the Canadian Nurses Association, which allowed me to receive credit for a required lengthy practicum. The certification was by far the most difficult examination I have ever written, but I was successful in 2003 on my first attempt, and was recertified in 2008. The second is that I took my first ethics course, which sparked something in me. I was told that I had been bitten by the ethics bug. Following graduation with my BScN in 2004, I went directly into the Master of Health Science degree program at the Joint Centre for Bioethics at the University of Toronto, and changed my working status to casual so that I could focus on schoolwork. During the master's, I was able to expand my knowledge about ethics through reading, writing, and completing a qualitative study that I designed, examining front-line nurses perceptions of patient-centred care, and also through my practicum, which involved designing and launching Canadian Nurses Interested in Ethics, an associate group of the Canadian Nurses Association, of which I was the first elected president. Before I graduated in 2006, I knew that I wanted to keep going in school, and was accepted into a collaborative PhD program at the University of Toronto Faculty of Nursing and Joint Centre for Bioethics, in which I am currently enrolled. I continue to do several shifts per month on a casual basis in hemodialysis, which allows me to keep up to date with nephrology nursing while maintaining my clinical skills.

The field of nephrology is filled with a broad range of dramatic ethical issues, most notably those of transplantation and the initiation/withholding/withdrawal of dialysis. Although those issues require nephrology nurses to use their ethical knowledge and skills, it is the ethical issues of everyday nephrology nursing, particularly the impact of technology, which are of interest to me in my current work. This topic has not been empirically addressed in Canada, and I will be interviewing front-line hemodialysis nurses to discover how they identify and manage these challenges, as my way of embracing the commitment to further education.

Karen MacDonald, recipient of the CANNT 2008 Frances Boutilier Bursary (Baccalaureate)

By Karen MacDonald, RN, CNeph(C), Hemodialysis Nurse, Cape Breton Regional & Northside General Renal Dialysis Units, Sydney & North Sydney, Nova Scotia

I am writing to express my appreciation as the recipient of the Frances Boutilier Bursary through CANNT 2008. I have been a CANNT member at different intervals for many years. I have been involved in various committees for both Atlantic and national CANNT conferences. I exhibited a poster presentation at the recent CANNT 2008 in Quebec entitled, Nursing Responsibilities for Vascular Access, Primary Nurse versus Assigned Nurse: Two Views—One Direction. I have in worked nephrology nursing for approximately 20 years now, including acute in-patient nephrology nursing, clinic setting, peritoneal dialysis, transplantation and, currently, hemodialysis.

I became certified in nephrology nursing in 1993 and have maintained my certification working in the nephrology field. I am currently a committee member for organ donor awareness, which focuses on education of the public. I have been an active participant in preceptoring new staff and continuing education through such avenues as in-services, self-study, and journal club. I am working towards my nursing degree by taking distance courses via Athabasca University of Alberta. I hope to continue taking courses and achieve my undergraduate degree in nursing to facilitate the pursuit of my own professional goals.

I had the pleasure of meeting Frances Boutilier early in my career under the nephrology umbrella at the Victoria General Hospital in Halifax. Her consistent demonstration of professionalism and compassionate manner made her an excellent role model for the nursing profession. I am extremely grateful for the honour of receiving this bursary in her name and extend my appreciation to both CANNT and Fresenius Medical care for their sponsorship.

Barbara Wilson, Lori Harwood and Bonita Thompson, recipients of the CANNT 2008 Research Grant

By Barbara Wilson, RN, MScN, CNeph(C), Advanced Practice Nurse, Dialysis, London Health Sciences Centre, London, Ontario

Vascular access has often been referred to as the "lifeline" for individuals receiving hemodialysis. In our hemodialysis unit, like others, arteriovenous (AV) fistula use for those receiving chronic hemodialysis is less than optimal. While recognizing there are a number of factors that contribute to low AV fistula use, we hypothesize that nursing interventions may contribute positively to AV fistula use. To date, there is very little research conducted from the nursing perspective, and even less studied is the everyday experience of cannulation from the perspective of the dialysis nurse.

It is an honour to receive the CANNT 2008 Research Grant for our study entitled, "The Culture of Vascular Access Cannulation among Nurses in a Chronic Hemodialysis Unit". The aim of the project will be to describe the experience of vascular access cannulation from the perspective of the dialysis nurse. We will be using a qualitative design with the goal of interviewing 15 dialysis nurses who currently work in our incentre hemodialysis unit. We hope that results of this study will provide insight into nurses' experiences with cannulation and will contribute to a greater understanding of the subjective nursing experience around this skill. The research grant money will be predominantly used to hire a research assistant to conduct the interviews with nurses and allow us to hire secretarial support to transcribe the interviews. Without support from CANNT, this study would not be possible.

From left to right: Bonita Thompson, Barb Wilson, and Lori Harwood.

Susan Young, recipient of the CANNT 2008 Manuscript Award

By Susan Young, RN, MN, Clinical Nurse Specialist, Nephrology, Providence Health Care—St. Paul's Hospital Renal Program, Vancouver, British Columbia

Nursing has a rich oral tradition. Sharing stories about what it is like to journey with patients and their families, as they live with chronic kidney disease, comprises a significant way nurses learn about, and make meaning of this wonderful profession of nephrology nursing. Recording these stories creates another way for nurses to communicate with one another. For authors, "putting pen to paper" involves a process of gathering and organizing thoughts and information, then engaging in the pure joy of writing a manuscript for others to read. For readers, reflecting on what the author has written and, ideally, engaging in discussion about it, enables a process that clarifies, challenges and enriches the author's perspective and, in turn, that of the broader nephrology nursing community.

Canadian nephrology nurses have both opportunity and support to make the transition from oral to written "story telling". This is in large part due to the vision of our national nursing association, CANNT and, in particular, to the editorial philosophy of the CANNT Journal editor, Gillian Brunier. In addition to actively encouraging nurses to write, Gillian provides supportive, practical assistance to those interested in doing so. The peer-reviewed status of the CANNT Journal is a testament to the quality of that support.

An example of how Gillian enacts her editorial philosophy is the invitation she extends to all nephrology nurses to write an article out of their CANNT National Symposium presentation, and to submit that manuscript for consideration of publication in the CANNT Journal. As a nephrology nurse who responded to this invitation, it was an honour and a joy to receive the 2008 Manuscript Award. It was especially meaningful to receive this award in the year CANNT celebrated 40 proud years as the professional association of Canadian nephrology nurses and technologists. I cannot thank Gillian and CANNT enough.

Thinking back to the 2008 CANNT National Symposium in Quebec City, I would also like to thank Denise Gaudet for introducing my presentation, *Rethinking and Integrating Nephrology Palliative Care*, and for the kind and thoughtful response she gave at its conclusion. Following my presentation, it was humbling and enriching to speak with so many nursing colleagues and to hear their response to my presentation. The most common themes that emerged were nurses' identification of an urgent need for nephrology palliative care and their need to learn about their role in doing so.

It is my hope that, as nephrology nurses across Canada read my article, *Rethinking and Integrating Nephrology Palliative Care: A Nephrology Nursing Perspective,* they will find the information informative and thought-provoking. I welcome communication with anyone interested in this emerging aspect of nephrology care. I also encourage others to take the "leap of faith" associated with transitioning from an oral to written tradition—a strong safety net exists to support you, and I, for one, would love to read your stories. **sueyoung@telus.net**

Lori Harwood, Barbara Wilson, Bonita Thompson, Elizabeth Brown and Danae Young, recipients of the CANNT Journal 2008 Award

By Lori Harwood, RN, MSc, CNeph(C), Advance Practice Nurse, Adam Linton Hemodialysis Unit, London Health Sciences Centre, London, Ontario

We were very pleased to hear the news that we were the recipients of the CANNT 2008 Journal Award for our manuscript entitled, *Predictors of Hemodialysis Central Venous Catheter Exit Site Infections.* This study was made possible by funding provided as recipients of the CANNT 2005 Research Grant. The idea for this study originated from our clinical practice where we, as Advance Practice Nurses (APNs), noticed we were reviewing many negative central venous catheter (CVC) exit-site culture results. It raised questions that there must be a great deal of subjectivity with nursing assessments of what constitutes a potentially infected CVC exit site and specific patient characteristics and exit-site appearances that are predictive of an infection.

This study and subsequent publication is an example of how three different nursing roles—staff nurses, a vascular access case manager and APNs—worked together sharing their areas of expertise with CVCs and research methods to complete this study and publish the manuscript. We were also able to present a paper based on this study at the CANNT 2008 conference in Quebec City. We would like to thank CANNT for providing the competition for research funding and for providing the forum by which we could communicate the study findings and influence nursing practice.

Back row left to right: Bonita Thompson, Barbara Wilson, Danae Young and Lori Harwood. Front row: Elizabeth Brown

Barbara Wilson, Lori Harwood, Bonita Thompson, Gail Barbour, Mike Berta, Lisa Hannah, Betty Herman, Elaine Liston, Margaret Robb, Nola Rowland and Twylla Dawn Wyton

By Barbara Wilson, RN, MScN, CNeph(C), Advanced Practice Nurse, Dialysis, London Health Sciences Centre, London, Ontario

"The Impact of Single-Needle Hemodialysis on New Chronic Dialysis Starts for Individuals with Arteriovenous Fistulae"

The poster entitled "Impact of Single-Needle Hemodialysis on New Chronic Dialysis Starts for Individuals with Arteriovenous Fistulae" represents a group effort among many members of our renal nursing team. The impetus for the project was derived from a need to evaluate implementation of single-needle dialysis across our in-centre hemodialysis (HD) program. In May 2006, our dialysis centre began using single-needle dialysis on a routine basis for the first six HD treatments for patients starting treatment with an AV fistula. The purpose of our initiative was to evaluate the impact of implementing single-needle dialysis on a number of outcomes and compare the outcomes realized to patients who received double-needle dialysis during the previous year.

A number of HD nurses participated in this project and were involved in completing most of the data collection. Bonita Thompson, our vascular access case manager at the time, was involved in the coordination of education across the in-centre HD program. One of our nurses took the lead in learning single needle and was instrumental in teaching the technique to her nursing peers across the program. A number of the individuals who participated in the project were able to attend the 2008 CANNT conference in Quebec City and answered questions from conference participants during the poster display sessions.

It is with extreme gratitude that our group accepted a Poster Award at the 2008 CANNT conference. Recognition at a national conference has been rewarding to all who participated. Presenting our initiative at the conference reaffirmed to the nurses involved that their expertise in nephrology nursing is extremely valued. Many thanks to CANNT for sponsoring this award.

Left to right back row: Betty Herman, Twylla Dawn Wyton, Barb Wilson, Gail Barbour and Bonita Thompson. Nola Rowland is standing in the front.

Debra Appleton, Sharron Izatt, Elizabeth Kelman, Fatima Benjamin-Wong, Wendy Clarke, Cathy Dickenson, Kay McGarvey, Judith Ferguson, Emily Harrison, Linda Nasso, Mina Kashani, Ramona Cook, Estrella Mercurio, Cenona Wilson, Pat Pollard, Christina Rajsic, Jannette Solomon, Patricia Trieu, Sharon Fairclough and Saverina Sanchez

By Debra Appleton, RN, MN, CNeph(C), Chair—City-Wide Peritoneal Dialysis Interest Group, Toronto, Ontario

"Building Partnerships: Promoting Peritonitis Prevention"

The City-Wide Peritoneal Dialysis Interest Group (CWPDIG) is a group of dynamic nurses from more than 25 peritoneal dialysis (PD) centres in southern Ontario. It provides a forum for nurses to standardize education and practices for patient care in peritoneal dialysis (PD). In 2004, work commenced on a quality initiative project to develop strategies for prevention of peritonitis and improving peritonitis rates. A standardized data collection process was implemented to provide a benchmark for peritonitis rates and the outcomes continue to inspire ongoing improvement in each of our programs. Peritonitis prevention is just one of many guidelines being developed by this innovative group.

The CWPDIG gives each program, regardless of size, the opportunity to collaborate, examine similarities and differences, and work together to improve patient outcomes. Our monthly meetings are at a central location, bringing together nurses with a passion for PD. We inspire each other, share and acknowledge individual expertise, create bonds, and have developed a synergy that often amazes even ourselves.

Some of the members of the CDPDIG. Back row left to right: Judith Ferguson (York Central Hospital), Gerry Henry (Credit Valley Hospital), Pat Pollard (St. Joseph's Health Centre), Wendy Clarke (Credit Valley Hospital), Deb Grant (Baxter), Sharron Izatt (University Health Network), Emily Harrison (Lakeridge Health). Front row left to right: Sharon Fairclough (William Osler Health Centre), Patricia Trieu (Niagara Health System), Elizabeth Kelman (University Health Network), Glady Garcia (University Health Network), Kay McGarvey (Saint Elizabeth Health Care), Debra Appleton (University Health Network), Linda Nasso (Lakeridge Health).

Recipients of CANNT 2008 Poster Awards

Sylvie Bureau et Nicole Mathieu

By Sylvie Bureau, RN, Bsc., infirmière clinicienne de dialyse péritonéale, et Nicole Mathieu, RN, infirmière responsable de la dialyse péritonéale, Hôpital Maisonneuve- Rosemont Centre hospitalier affilié à l'Université de Montréal, Montréal, Québec

"Achieving Patient and Management Expectations through an Interdisciplinary Peritoneal Dialysis Approach"

Le prix que nous avons gagné pour notre affiche intitulée « Achieving patient and management expectations through an interdisciplinary peritoneal dialysis approach » nous a fait énormément plaisir.

Lors du colloque de l'Association canadienne des infirmières et techniciens en néphrologie à Québec nous avons été agréablement surprises de l'intérêt que notre affiche a suscité. On ne croyait pas que notre projet prendrait une si grande envolée. Le fait d'avoir gagné ce prix au niveau national fût très flatteur et a augmenté notre popularité au sein de l'hôpital Maisonneuve-Rosemont. Nous avons été félicitées personnellement par l'Équipe du programme-clientèle médecine qui a publicisé l'obtention de ce prix dans le journal local de notre centre hospitalier.

Nous sommes très fières de notre réalisation. La reconnaissance de nos pairs est une expérience très valorisante et une grande source de motivation. Notre engagement et notre détermination soutenus au niveau de notre travail en dialyse péritonéale expliquent en partie notre succès.

Ce qui est également essentiel à ce grand succès c'est la collaboration de l'équipe interdisciplinaire de notre centre hospitalier qui nous a permis d'atteindre un si grand objectif. Nous avons donc décidé d'investir le montant d'argent gagné au niveau de la fondation de l'hôpital Maisonneuve Rosemont.

Merci à cette belle et grande équipe de l'ACITN pour son dévouement dans la planification à l'exécution de cet événement qui nous permet de poursuivre nos efforts au quotidien et nous enrichi de belles expériences et de souvenirs inoubliables lors de notre carrière.

Nicole Mathieu et Sylvie Bureau

Diane Desmarais et Lyse Pelletier

By Diane Desmarais, BSc., DESS Sc inf., et Lyse Pelletier, BSc, AIC, Clinique de précaution rénale et Clinique de dialyse péritonéale, CHU Sainte-Justine, Montréal, Québec

"Le réseau vasculaire: un capital à préserver pour le futur"

Au CHU Sainte-Justine, nous soumettons, annuellement, des projets afin d'améliorer la qualité de nos soins. Riches des discussions avec d'autres infirmières rencontrées lors des congrès, une problématique revenait souvent : le développement inadéquat de la veine lors de la création d'une fistule artério-veineuse. Que pouvions-nous faire pour préserver l'intégrité des veines des membres supérieurs? Nous souhaitions avoir une vision pro-active : protéger le réseau vasculaire des jeunes insuffisants rénaux.

Prélèvements, injections, cathéters intraveineux font partie de la réalité des jeunes insuffisants rénaux. Plus l'enfant est jeune, plus les prélèvements sont difficiles et plus nombreuses seront ces agressions au cours de sa vie. Ces traumatismes répétés altèrent le réseau veineux et peuvent créer des obstacles irréversibles lors de la réalisation d'un abord vasculaire pour l'hémodialyse. Suite à ces données probantes, il était donc primordial d'adopter, le plus tôt possible, une stratégie de protection du réseau vasculaire chez notre clientèle pédiatrique et ainsi éviter d'hypothéquer leur avenir.

À notre unité de dialyse et greffe rénale, nous avons créés des outils (affiches, étiquettes et cartes personnalisées) qui sont des véhicules d'informations pour préserver le capital vasculaire. Ces outils ont été mis en place chez tous les patients (prédialyse, dialyse péritonéale, hémodialyse et greffe rénale) depuis 2006. La réussite de ce projet a été rendu possible grâce à la participation des différents intervenants impliqués dans la prise en charge de ces patients (anesthésistes, chirurgiens, infirmières, inhalothérapeutes, radiologistes), mais surtout par la famille et le patient.

Ces outils ont été appréciés et ont permis de véhiculer l'information dans nos différents services ainsi que dans le réseau de santé. La présentation de notre affiche : *Le réseau vasculaire : un capital à préserver pour le futur* nous a permis de diffuser notre projet a une plus grande échelle.

Nous sommes honorées de la reconnaissance et remercions les membres du comité CANNT 2008 pour ce prix. Mais le plus important à nos yeux ont été les échanges avec nos pairs ainsi que la relance téléphonique de différents centres qui voulait adapter nos outils après notre présentation au congrès.

Diane Desmarais et Lyse Pelletier

Recipients of CANNT 2008 Poster Awards

Lori Paille and Colin White

By Lori Paille, RN, BSN, CNeph(C), Clinical Coordinator-Nephrology, British Columbia Children's Hospital, Vancouver, British Columbia

"Achieving the 2006 Pediatric Kidney Disease Outcomes Quality Initiative Anemia Targets in Hemodialysis: Outcomes Following a Nurse-Driven Anemia Protocol"

Despite smaller numbers of patients and, in some cases, much smaller patients (think 3 kg), children on hemodialysis share many of the problems seen in adult units. Due to the small numbers of patients, it is often possible for the doctors and nurses to literally "know" everything about any patient, including their latest blood work, medication lists, school marks and what they want for Christmas. While this type of holistic care is of value in many ways, one thing that children do miss out on is some of the processes that are part and parcel of the larger scale adult units, including the use of protocols to maintain a consistency across decision-making and ensure best practices are followed.

Anemia management, both erythropoietic salvage agents and iron therapies, are complex but vital aspects of care for the child on hemodialysis (HD). A number of adult algorithms exist but, at the time we set out to develop ours, no pediatric protocols were published.

This project (i.e., development of a pediatric nurse-driven anemia protocol) was designed to address the following needs: first, lead to improved patients care (consistency); second, foster and support an expanded scope of practice for our excellent HD nursing staff in caring for its patients; third, ongoing quality assurance monitoring; fourth, potentially develop cost savings from more consistent application of erythropoiesis stimulating agents (ESAs) and iron protocols; and fifth, provide a teaching tool for management of these complex, but vital patient medical issues.

The process required buy-in from ALL members of our medical, nursing and allied health staff and we are very appreciative of their enthusiasm and support. As of December 2008, it has been running for 2.5 years with excellent results. We have ~ 75% of our monthly hemoglobins in our target range while having 80% of the patients inside the targeted transferrin saturation (TSAT) range.

We are very appreciative to CANNT for the opportunity to present this work to our Canadian colleagues at your annual meeting.

Saverina Sanchez and Annette Weeres

By Saverina Sanchez, RN, MScN, Patient Care Manager of the Renal Program and Annette Weeres, RN, BScN, MN (candidate), Director of Nursing, Centre for Clinical Excellence, William Osler Health Centre, Toronto, Ontario

"Picture This...Putting a Face to Positive Patient Identification"

We were very proud of this innovative initiative ("Picture this… Putting a face to positive patient identification"), as it supports the needs of our diverse patient population and includes our patients in the patient identification process. Our organization focuses on enhancing our patient experience through clinical excellence. Photo identification supports a patient-centred approach for the renal population, as these patients are bound to recurring visits. In a highly diverse population, where language barriers can impact identification and same names and birthdates have occurred, the additional identification offered by the photograph provides a visual confirmation of the patient's identity. By instituting permanent photo identification, it eliminates recurrent and lengthy registration times, is patient-centred and empowers patients to become partners in the identification process.

In today's health care system, all organizations are challenged with meeting quality and safety standards while remaining fiscally responsible. This process has resulted in significant cost savings, as 30,000 visits per year at 35 cents per arm band results in $10,500.00 per annum in comparison to photo identification that costs $2.00 per patient/card equating to a savings of $10,100.00 per year in the first year with no additional costs in subsequent years.

Being recognized by CANNT reaffirms that this quality initiative supports patient safety, is applicable to practice and provides a framework for other organizations with unique patient needs. Since presenting at CANNT, we have received many requests from organizations for additional information on this initiative, as photo identification extends beyond the boundaries of our organization and specialty area supporting all patients that requires recurrent visits and enhances the patient experience.

Annette Weeres and Saverina Sanchez

CANNT Nominations

Call for nominations

The nominations committee is calling for nominations for the position of:

President-Elect
Vice-President Atlantic Region
Vice-President Quebec Region
Website Coordinator/Treasurer

Eligibility for office: Member in good standing.

General requirements:

Each candidate must:

- ✓ Understand the responsibilities of each position.
- ✓ Must be willing to commit the required amount of time to fulfil the duties of office.
- ✓ Must be winning to work within parliamentary procedure which is used to ensure an effecient and fair voting procedure by self-governing organizations.
- ✓ Will submit a National Officer Candidate Information Form available online at www.cannt.ca or from the National Office (see address below).

Position descriptions:

1. **President-Elect:** Elected by membership for a period of one year after which he/she will become president, then past-president. Assists the president in the overall administration of the association while becoming familiar with the operation of CANNT in preparation to assume the presidency. The total commitment would be for a three-year period.

2. **Regional Vice-President:** Elected by membership for a two-year period. Promotes and facilitates the goals and objectives of the association throughout the region. The vice-president represents his or her region's concerns and acts as a liaison between the board of directors and the membership.

3. **Website Coordinator/Treasurer:** Elected by membership for a period of two years. Monitors and controls the financial affairs of the association. in conjunction with the president, provides financial reports to the executive, board members and for the Annual General Meeting. Ensures the CANNT website is responsive to the needs of the membership.

Deadline for nominations is May 15, 2009.
Ballots will be sent to all members after May 15, 2009.

Please submit nominations to:

CANNT
336 Yonge St., Ste 222
Barrie, ON L4N 4C8
Telephone: 705-720-2819
Toll-free: 1-877-720-2819
Fax: 705-720-1451
E-mail: cannt@cannt.ca

Nominating Form

Position:

_____

Name of Candidate:

_____

Membership Number:

_____

Nominated by*:

1. Name:

_____

2. Membership Number:

_____

*Nominations can only be made by current members.

I agree to let my name stand for office and if elected, I agree to serve my term of office.

_____

Signature of candidate

Date: _____

Nomination de l'ACITN

Appel de mises en candidature

Le comité de nomination lance un appel de mises en candidature pour les postes suivants:

Président(e)-élu(e)
Vice-président(e) de l'Atlantique
Vice-président(e) du Québec
Coordonnateur(rice) du site Web/Trésorier(ière)

Critère d'éligibilité: Être membre en règle

Exigences générales :

Chaque candidat(e) doit :

- ✓ Comprendre les responsabilités associées au poste.
- ✓ S'engager à consacrer le temps nécessaire afin de s'acquitter des tâches inhérentes au poste.
- ✓ Suivre les règles et procédures parementaires qui sont utilisées par les organismes indépendants afin d'assurer un processus de votation efficace et équitable.
- ✓ Remplir et soumettre un Formulaire de mise en candidature qui est accessible en ligne à www.cannt.ca ou envoyer le Formulaire dûment remplir au Bureau national à l'adresse ci-dessous.

Descriptions des postes :

1. **Président(e)-élu(e) :** Élu(e) par les membres pour une période d'un an après quoi il/elle devient Président(e), puis, Président(e) sortant(e). Aide le/la Président(e) dans l'administration générale de l'Association, tout en se familiarisant avec le déroulement des activités de l'ACITN dans le but d'assumer le rôle présidentiel.

2. **Vice-président(e) régional :** Élu(e) par les membres pour une période de deux ans. Fait la promotion et facilite l'atteinte des buts et des objectifs de l'Association dans leur région respective. Représente les intérêts de la région et agit à titre de liaison entre le Conseil d'administration et les membres.

3. **Coordonnateur(rice) du site Web/Trésorier(ière) :** Élue(e) par les membres pour une période de deux ans. Accepte la responsabilité du contrôle financier de l'Association. En collaboration avec le/la Président(e), prépare et transmet les états financiers aux membres du Conseil d'administration et en fait la présentation lors de l'assemblée générale annuelle des membres. S'assure que le site Web répond aux besoins et aux attentes des membres.

La date limite pour les mises en candidature est le 15 mai, 2009. Les bulletins de vote seront envoyés à tous les membres après cette date.

Faites parvenir votre mise en candidature à:

ACITN
336 Yonge St. Ste 322
Barrie, ON L4N 4C8
Téléphone : 705-720-2819
Sans frais : 1-877-720-2819
Télécopieur : 705-720-1451
Courriel : cannt@cannt.ca

CANNT ACITN

Demande de mise en candidature

Poste :

_____

Nom du/de la candidat(e) :

_____

Numéro de membre :

_____

Proposé par* :

1. Nom :

_____

2. Numéro de membre :

_____

*Les mises en nomination ne peuvent être faite que par les membres en règles.

J'accepte la nomination du poste mentionné çi-haut. Si je suis élu(e), j'accepte d'assumer les responsabilités du poste dans son intégralité.

_____

Signature de/du la candidat(e)

Date : _____

Guidelines for authors

The **CANNT Journal** invites letters to the editor and original manuscripts for publication in its quarterly journal. We are pleased to accept submissions in either official language – English or French.

Which topics are appropriate for letters to the editor?

We welcome letters to the editor concerning recently published manuscripts, association activities, or other matters you think may be of interest to the CANNT membership.

What types of manuscripts are suitable for publication?

We prefer manuscripts that present new clinical information or address issues of special interest to nephrology nurses and technologists. In particular, we are looking for:

- original research papers
- relevant clinical articles
- innovative quality improvement reports
- narratives that describe the nursing experience
- interdisciplinary practice questions and answers
- reviews of current articles, books and videotapes
- continuing education articles.

How should the manuscript be prepared?

Form: The manuscript should be typed, double-spaced, single-sided on 8.5 x 11 inch white paper. One-inch margins should be used throughout, and the pages should be numbered consecutively in the upper right-hand corner. More formal research or clinical articles should be between five and 15 pages. Less formal narratives, question and answer columns, or reviews should be fewer than five pages.

Style: The style of the manuscript should be based on the **Publication Manual of the American Psychological Association** (**APA**), Fifth Edition (2001), available from most college bookstores.

Title page: The title page should contain the manuscript title, each author's name (including full first name), professional qualifications [i.e. RN, BScN, CNeph(C)], position, place of employment, address, telephone and fax numbers, and e-mail address. The preferred address for correspondence should be indicated.

Abstract: On a separate page, formal research or clinical articles should have an abstract of 100 to 150 words. The abstract should summarize the main points in the manuscript.

Text: Abbreviations should be spelled out the first time they are used with the abbreviation following in brackets, for example, the Canadian Association of Nephrology Nurses and Technologists (CANNT). Generic drug names should be used. Measurements are to be in Standards International (SI) units. References should be cited in the text using APA format. A reference list containing the full citation of all references used in the manuscript must follow the text.

Tables/Figures: Manuscripts should only include those tables or figures that serve to clarify details. Authors using previously published tables and figures must include written permission from the original publisher. Such permission must be attached to the submitted manuscript.

How should the manuscript be submitted?

Please forward three copies of your manuscript to: The Editor, CANNT National Office, 336 Yonge St., Ste. 322, Barrie, ON, L4N 4C8. You should retain a personal copy of the manuscript.

How are manuscripts selected for the CANNT Journal?

Each manuscript will be acknowledged following receipt. Research and clinical articles are sent out to two members of the **CANNT Journal** review panel to be reviewed in a double-blind review process. All manuscripts may be returned for revision and resubmission. Those manuscripts accepted for publication are subject to copy editing; however, the author will have an opportunity to approve editorial changes to the manuscript. The criteria for acceptance for all articles include originality of ideas, timeliness of the topic, quality of the material, and appeal to the readership.

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Checklist for authors

√ Cover letter

√ Three copies of the manuscript

- Title page to include the following:
  - title of article
  - each author's name (including full first name)
  - professional qualifications
  - position
  - place of employment
  - author to whom correspondence is to be sent, including address, phone and fax number, and e-mail address
- Text of article, with abstract if applicable, **double-spaced, pages numbered**
- References (on a separate sheet)
- Tables (one per page)
- Illustrations (one per page)
- Letters of permission to reproduce previously published material.

Renagel® Tablets

(sevelamer hydrochloride)

800 mg tablets

INDICATIONS AND CLINICAL USE

RENAGEL (sevelamer hydrochloride) is indicated for the control of hyperphosphatemia in patients with end-stage renal disease (ESRD) undergoing dialysis.

CONTRAINDICATIONS

RENAGEL (sevelamer hydrochloride) is contraindicated in the following situations:

- patients with hypophosphatemia
- patients with bowel obstruction
- patients hypersensitive to sevelamer hydrochloride or one of the other ingredients in the product (colloidal silicon dioxide, stearic acid).

WARNINGS AND PRECAUTIONS

General

RENAGEL (sevelamer hydrochloride) tablets should be swallowed intact and should not be crushed, chewed, or broken into pieces.

Patients with renal insufficiency may develop hypocalcemia. As RENAGEL does not contain calcium, serum calcium levels should be monitored and elemental calcium should be supplemented whenever considered necessary. In cases of hypocalcemia, patients should be given an evening calcium supplement. Approximately 1000 mg elemental calcium is recommended.

Caution should be exercised to avoid hypophosphatemia, a serum phosphorus of < 0.8 mmol/L (see DOSAGE AND ADMINISTRATION).

The safety and efficacy of RENAGEL in patients with renal disease who are not undergoing dialysis has not been studied.

Gastrointestinal

The safety and efficacy of RENAGEL in patients with dysphagia, swallowing disorders, severe gastrointestinal (GI) motility disorders, or major GI tract surgery have not been established. Caution should be exercised when RENAGEL is used in patients with these GI disorders.

Special Populations

Pregnant Women: The safety of RENAGEL has not been established in pregnant women. In preclinical studies, there was no evidence that RENAGEL induced embryolethality, fetotoxicity or teratogenicity at the doses tested (up to 1 g/kg/day in rabbits; up to 4.5 g/kg/day in rats). RENAGEL should only be given to pregnant women if the benefits outweigh the risks.

Nursing Women: There have been no adequate, well-controlled studies in lactating, or nursing women.

Pediatrics: The safety and efficacy of RENAGEL has not been established in pediatric patients. The minimum age of patients treated with RENAGEL in clinical trials was 18 years old.

Geriatrics: No special considerations are needed for elderly patients.

Monitoring and Laboratory Tests

Serum phosphorus and serum calcium should be monitored every 1 to 3 weeks until the target phosphorus level is reached. The dose of RENAGEL should be adjusted based on serum phosphorus concentration and titrated to a target serum phosphorus of < 1.8 mmol/L.

RENAGEL does not contain calcium or alkali supplementation; serum calcium, bicarbonate, and chloride levels should be monitored.

ADVERSE REACTIONS

Clinical Trial Adverse Drug Reactions

Because clinical trials are conducted under very specific conditions the adverse reaction rates observed in the clinical trials may not reflect the rates observed in practice and should not be compared to the rates in the clinical trials of another drug. Adverse drug reaction information from clinical trials is useful for identifying drug-related adverse events and for approximating rates.

In a combined safety database comprised of 483 patients with end-stage renal disease undergoing hemodialysis, adverse events reported at an incidence ≥10% are provided in Table 1. From this database, adverse events are also presented separately from a single long-term randomized clinical study for RENAGEL and calcium. The adverse events presented in the table below are not necessarily attributed to RENAGEL treatment. The incidence of these events was not dose related.

Table 1: Adverse Events in Patients with End-Stage Renal Disease undergoing Hemodialysis

	Total AEs reported.	52 weeks Study of RENAGEL vs. calcium (calcium acetate and calcium carbonate)	
System Organ Class Event	RENAGEL N = 483 %	RENAGEL N = 99 %	calcium N = 101 %
Gastrointestinal Disorders			
Vomiting	28.4	22.2	21.8
Nausea	25.3	20.2	19.8
Diarrhea	21.1	19.2	22.8
Dyspepsia	15.7	16.2	8.9
Constipation	13.3	8.1	11.9
Infections and Infestations			
Nasopharyngitis	13.9	14.1	7.9
Bronchitis	5.4	11.1	12.9
Upper Respiratory Tract Infection	7.0	5.1	10.9
Musculoskeletal, Connective Tissue and Bone Disorders			
Pain in Limb	13.7	13.1	14.9
Arthralgia	11.4	12.1	17.8
Back Pain	8.0	4.0	17.8
Skin Disorders			
Pruritus	10.4	13.1	9.9
Respiratory, Thoracic and Mediastinal Disorders			
Dyspnea	15.7	10.1	10.8
Cough	11.8	7.1	12.9
Vascular Disorders			
Hypertension	8.3	10.1	5.9
Nervous System Disorders			
Headache	18.4	8.1	15.8
General Disorders and Site Administration Disorders			
Dialysis Access Complication	4.3	8.1	10.9
Pyrexia	8.7	5.1	10.9

In one hundred and forty three patients with end-stage renal disease undergoing peritoneal dialysis with treatment duration of 12 weeks, adverse events reported at an incidence ≥10% are provided in Table 2 below. The adverse events presented in the table below are not necessarily attributed to RENAGEL treatment. The incidence of these events was not dose related.

Table 2: Adverse Events in Patients with End-Stage Renal Disease Undergoing Peritoneal Dialysis

System Organ Class Event	RENAGEL (N=87) %	calcium (N=46) %
Gastrointestinal disorders		
Dyspepsia	17.2	8.7
Vomiting	11.5	4.3
Peritonitis	11.5	4.3

The most frequently occurring serious adverse event with RENAGEL use was peritonitis at 8.2%, compared to 4.3 % with calcium. Patients receiving dialysis are subject to certain risks for infection specific to the dialysis modality. Peritonitis is a known complication in patients receiving peritoneal dialysis (PD). Therefore, patients on PD should be closely monitored to ensure the reliable use of appropriate aseptic technique with the prompt recognition and management of any signs and symptoms associated with peritonitis.

Less common clinical trial adverse events

The following adverse events have been observed with RENAGEL use with an incidence of <10%, but greater than calcium and without attribution to causality, including: abdominal distension, constipation, diarrhea, nausea, chest pain, fatigue, pyrexia, catheter site infection, anorexia, headache, cough and pruritis.

Some patients experienced adverse events related to hypercalcemia in the calcium group but not in the RENAGEL group.

Post-Market Adverse Drug Reactions

During post marketing experience with RENAGEL, the following have been reported without attribution to causality: pruritis, rash, and abdominal pain.

OVERDOSAGE

Since RENAGEL (sevelamer hydrochloride) is not absorbed, the risk of systemic toxicity is minimal. RENAGEL has been given to healthy volunteers at doses up to 14 grams per day for 8 days with no adverse effects. The maximum average daily dose of RENAGEL that has been given to hemodialysis patients is 13 grams.

DOSAGE AND ADMINISTRATION

Dosing Considerations

- The tablets should not be bitten, chewed or broken apart prior to dosing.
- RENAGEL (sevelamer hydrochloride) should be taken immediately prior to or with meals, since its action is to bind ingested phosphate (see ACTION AND CLINICAL PHARMACOLOGY, Mechanism of Action).
- When administering any other medication where a reduction in the bioavailability of that medication would have a clinically significant effect on safety or efficacy, the physician should consider monitoring blood levels or dosing that medicine apart from RENAGEL to prevent GI binding (at least one hour before or three hours after RENAGEL).

Recommended Dose and Dosage Adjustment

The recommended dosing to be used when initiating RENAGEL in patients not using another phosphate binder are outlined below:

When switching from calcium-based phosphate binders to RENAGEL,

Starting Dose	
Initial Serum Phosphorus	RENAGEL Tablets 800mg
> 1.8 and < 2.4 mmol/L	3 tablets per day (2.4 grams)
≥ 2.4 mmol/L	6 tablets per day (4.8 grams)

an equivalent starting dose on a mg/weight basis of RENAGEL should be prescribed. Dosage adjustments, when necessary should be recommended every 1 to 3 weeks by increasing one tablet per meal (3 per day) until the target serum phosphorus levels are met.

The total daily dose should be divided according to meal portions during the day.

Average Maintenance Dose: Dosage should be adjusted based upon the target serum phosphorus levels. The dose may be increased or decreased by one tablet per meal at two week intervals as necessary. The average final dose in the chronic phase of a 52 week Phase 3 clinical trial designed to lower serum phosphorous to 1.6 mmol/L or less was approximately 7.1 grams, (approximately nine 800 mg tablets per day equivalent to three 800 mg tablets per meal). The maximum average daily RENAGEL dose studied was 13 grams.

Missed Dose

- If a dose is forgotten, it should be skipped. Double dosing is not advisable.

DOSAGE FORMS, COMPOSITION AND PACKAGING

RENAGEL (sevelamer hydrochloride) tablets are film-coated compressed tablets containing 800 mg of sevelamer hydrochloride. RENAGEL contains the following excipients: colloidal silicon dioxide and stearic acid. The RENAGEL tablet coating contains hypromellose and diacetylated monoglyceride. The printing ink contains iron oxide black (E172), propylene glycol, isopropyl alcohol and hypromellose (hydroxypropyl methylcellulose).

RENAGEL 800 mg Tablets are supplied as oval, film coated tablets, imprinted with "RENAGEL 800," on the crown, single side.

RENAGEL 800 mg Tablets are available in bottles of 180 tablets.

STORAGE AND STABILITY

Store at controlled room temperature 15°C to 30°C. Protect from moisture.

Product monograph available on request.

genzyme
CANADA INC.

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Tel. 1-877-220-8818

Venofer® Iron Sucrose Injection, USP
20 mg elemental iron/mL

DIN 02243716

Prescribing Summary

Patient Selection Criteria

THERAPEUTIC CLASSIFICATION: Hematinic

INDICATIONS AND CLINICAL USE

VENOFER (Iron Sucrose Injection, USP) is indicated in the treatment of iron deficiency anemia in the following patients:

- non dialysis dependent chronic kidney disease (NDD-CKD) patients receiving an erythropoietin
- non dialysis dependent chronic kidney disease (NDD-CKD) patients not receiving an erythropoietin
- hemodialysis dependent chronic kidney disease (HDD-CKD) patients receiving an erythropoietin
- peritoneal dialysis dependent chronic kidney disease (PDD-CKD) patients receiving an erythropoietin.

__Special Populations__

Pregnant Women: Teratology studies performed in rats at IV doses up 13 mg iron/kg/day (more than 9 times the maximum recommended human dose for a 70 kg person) and rabbits at IV doses up to 13 mg/iron/kg on alternate days (approximately 9 times the maximum recommended human dose for a 70 kg person) have not revealed definite evidence of impaired fertility. Fetal growth effects at these doses appeared related to low maternal food consumption and low body weight gain. There are, however, no adequate and well controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, VENOFER should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

When iron sucrose was administered at deliberate overdoses to rabbit dams (up to 21.5 mg/kg/day) marked fetal/placental iron overload was noted. It is unlikely that significant fetal iron overload would occur in iron deficient pregnant women receiving therapeutic doses of VENOFER to correct iron deficiency (see **General**).

Nursing Women: VENOFER is excreted in the milk of rats. It is not known whether VENOFER is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when VENOFER is administered to nursing women.

Pediatrics: The safety and effectiveness of VENOFER in pediatric patients has not been established. In a country where VENOFER is available for use in children, at a single site, five premature infants (weight less than 1,250 g) developed necrotizing enterocolitis and two of the five expired during or following a period when they received VENOFER, several other medications and erythropoietin. Necrotizing enterocolitis may be a complication of prematurity in very low birth weight infants. No causal relationship to VENOFER or any other drugs could be established.

Geriatrics (> 65 years of age): Clinical studies with VENOFER have not identified differences in unintended responses between elderly and younger patients. Nevertheless, dose selection for an elderly patient should be cautious, usually starting with lower doses, reflecting the greater frequency of decreased hepatic, renal or cardiac function, and of concomitant disease or other drug therapy.

CONTRAINDICATIONS

The use of VENOFER (Iron Sucrose Injection, USP) is contraindicated in patients with evidence of iron overload, patients with known hypersensitivity to VENOFER, and patients with anemia not caused by iron deficiency.

Safety Information

WARNINGS AND PRECAUTIONS

General

Because body iron excretion is limited and excess tissue iron can be hazardous, caution should be exercised in the administration of parenteral iron formulations, and treatment should be withheld when there is evidence of tissue iron overload. Patients receiving VENOFER (Iron Sucrose Injection, USP) require periodic monitoring of hematologic parameters, including hemoglobin, hematocrit, serum ferritin and transferrin saturation. Generally accepted guidelines recommend withholding administration of intravenous iron formulations from patients demonstrating a transferrin saturation > 50% or a serum ferritin > 800 ng/mL (see **DOSAGE AND ADMINISTRATION** and **OVERDOSAGE**). Transferrin saturation values increase rapidly after IV administration of iron sucrose; thus, serum iron values may be reliably obtained 48 hours after IV dosing.

Local Reactions

Care must be taken to avoid paravenous infiltration. If this occurs, the infusion of VENOFER should be discontinued immediately. Ice may be applied to cause local vasoconstriction and decrease fluid absorption. Massage of the area should be avoided.

__Carcinogenesis and Mutagenesis__

No long-term studies in animals have been performed to evaluate the carcinogenic potential of VENOFER.

The Ames test, with or without metabolic activation, in vitro mouse lymphoma forward mutation test, mouse micronucleus test, and in vitro human lymphocyte chromosome aberration test were conducted with iron sucrose. No mutagenicity or genotoxicity was demonstrated.

__Cardiovascular__

Hypotension has been reported frequently in hemodialysis dependent chronic kidney disease patients receiving intravenous iron. Hypotension also has been reported in non-dialysis dependent (NDD-CKD) and peritoneal dialysis dependent (PDD-CKD) chronic disease kidney patients receiving intravenous iron. Hypotension following administration of VENOFER may be related to the rate of administration and total dose administered. Caution should be taken to administer VENOFER according to recommended guidelines (see **DOSAGE AND ADMINISTRATION**).

__Sensitivity/Resistance__

Serious hypersensitivity reactions have been rarely reported in patients receiving VENOFER. No life-threatening hypersensitivity reactions were observed in pivotal studies, although there were several cases of mild to moderate hypersensitivity reactions characterized by wheezing, dyspnea, hypotension, rash and/or pruritis in these studies. Anaphylactoid reactions have been reported in worldwide spontaneous post-marketing reports (see **ADVERSE REACTIONS**).

__Sexual Function/Reproduction__

VENOFER at IV doses up to 15 mg iron/kg/dose (about 10 times the maximum recommended human dose for a 70 kg person) given three times a week was found to have no effect on fertility and reproductive performance of male and female rats.

ADVERSE REACTIONS

Adverse Events observed in all treated populations

The frequency of adverse events associated with the use of VENOFER has been documented in six randomized clinical trials involving 231 hemodialysis dependent, 139 non-dialysis dependent, and 75 peritoneal dialysis dependent patients; and in two post-marketing safety studies involving 1051 hemodialysis dependent patients for a total of 1496 patients. In addition, over 2000 patients treated with VENOFER have been reported in the medical literature.

Adverse Events Observed in Hemodialysis Dependent Chronic Kidney Disease (HDD-CKD) Patients

Adverse reactions, whether or not related to VENOFER administration, reported by >5% of treated patients from a total of 231 patients in HDD-CKD studies were as follows: hypotension (39.4%), muscle cramps (29.4%), nausea (14.7%), headache (12.6%), graft complications (9.5%), vomiting (9.1%), dizziness (6.5%), hypertension (6.5%), chest pain (6.1%), and diarrhea (5.2%).

Adverse Events Observed in Non-Dialysis Dependent Chronic Kidney Disease (NDD-CKD) Patients

Among the 182 treated NDD-CKD patients, 91 were exposed to VENOFER. Adverse events, whether or not related to VENOFER, reported by ≥5% of the VENOFER exposed patients were as follows: dysgeusia (7.7%), peripheral edema (7.7%), diarrhea (5.5%), constipation (5.5%), nausea (5.5%), dizziness (5.5%), and hypertension (5.5%). One serious related adverse reaction was reported (hypotension and shortness of breath not requiring hospitalization in a VENOFER patient). Two patients experienced possible hypersensitivity/allergic reactions (local edema/hypotension) during the study. Of the 5 patients who prematurely discontinued the treatment phase of the study due to adverse events (2 oral iron group and 3 VENOFER group), three VENOFER patients had events that were considered drug-related (hypotension, dyspnea and nausea).

In an additional study of VENOFER with varying erythropoietin doses in 96 treated NDD-CKD patients, adverse events, whether or not related to VENOFER reported by ≥5% of VENOFER exposed patients are as follows: diarrhea (16.5%), edema (16.5%), nausea (13.2%), vomiting (12.1%), arthralgia (7.7%), back pain (7.7%), headache (7.7%), hypertension (7.7%), dysgeusia (7.7%), dizziness (6.6%), extremity pain (5.5%), and injection site burning (5.5%). No patient experienced a hypersensitivity/allergic reaction during the study. Of the patients who prematurely discontinued the treatment phase of the study due to adverse events (2.1% oral iron group and 12.3% VENOFER group), only one patient (VENOFER group) had events that were considered drug related (anxiety, headache, and nausea). Ninety one (91) patients in this study were exposed to VENOFER either during the treatment or extended follow up phase.

Adverse Events Observed in Peritoneal Dialysis Dependent Chronic Kidney Disease (PDD-CKD) Patients

Among the 121 treated PDD-CKD patients, 75 were exposed to VENOFER. Adverse events, whether or not related to VENOFER, reported by ≥5% of these patients were as follows: vomiting (8.0%), diarrhea (8.0%), hypertension (8.0%), peritoneal infection (8.0%), pharyngitis (6.7%), nausea (5.3%) and peripheral edema (5.3%). The only drug related adverse reaction to VENOFER administration reported by ≥2% of patients was diarrhea (2.7%). No serious drug related adverse reactions were reported during the treatment phase of study. Two VENOFER patients experienced a moderate hypersensitivity / allergic reaction (rash or swelling/itching) during the study. Three patients in the VENOFER study group discontinued study treatment due to adverse events (cardiopulmonary arrest, peritonitis, myocardial infarction, hypertension) which were considered to be not drug-related.

__*Post-Market Adverse Drug Reactions:*__

Hypersensitivity Reactions: See WARNINGS AND PRECAUTIONS.

From the post-marketing spontaneous reporting system, there were 108 reports of anaphylactoid reactions including patients who experienced serious or life threatening reactions (anaphylactic shock, loss of consciousness or collapse, bronchospasm with dyspnea, or convulsion) associated with VENOFER administration between 1992 and August, 2006 based on estimated use in more than 4.5 million patients.

Among the 517,736 patients (estimated on the basis of 10,354,715 ampoules sold) who received VENOFER between September 1, 2005 and February 28, 2006 through market exposure, 61 patients were reported to have experienced 104 adverse reactions considered at least "possibly related" to VENOFER. A review of all the symptoms concluded that 90 symptoms are listed, 38 serious and 52 non-serious; 14 symptoms are unlisted, 5 serious and 9 non-serious.

Considering the number of patients exposed to VENOFER, the number of adverse events at least possibly related to the product has been very limited. There was a moderate increase in the frequency of unlisted symptoms and no changes in the nature of the listed ones. During this period no overdose of misuse have been reported.

Regarding the **serious and listed** cases: no particular change or trend in severity, outcome or involved populations could be observed. A total of 38 adverse reactions were reported in 18 patients. No reaction was considered to be life threatening. The symptoms observed were: dyspnea (5), hypotension (4), pyrexia (3), injection site reaction (3), erythema (2), rash (2), arthralgia (2), chills (1), circulatory collapse (1), nausea (1), vomiting (1), tachycardia (1), myalgia (1), malaise (1), abdominal pain (1), exanthema (1), oedema peripheral (1), urticaria (1), loss of consciousness (1), dizziness (1), back pain (1), headache (1).

There was no particular evolution regarding the **non-serious and listed** events. A total of 51 adverse symptoms were reported in 37 different patients. The symptoms observed were: urticaria (5), headache (5), dizziness (4), injection site extravasation (4), exanthem (3), tachycardia (3), chills (3), dyspnoea (3), rash (2), flushing (2), pruritus (2), pyrexia (2), paraesthesia (2), malaise (2), hypotension (1), vomiting (1), injection site pain (1), injection site reaction (1), oedema peripheral (1), arthralgia (1), myalgia (1), asthenia (1), skin discolouration (1), erythema (1).

In total, eight non-serious and anaphylactoid reactions have been reported during 6-month period out of the literature. Cumulatively 116 anaphylactoid reactions have been reported out of the exposure of 5,120,348 patient years' patient to VENOFER which results in a relative prevalence of 0.0023 %.

There were 5 **serious and unlisted** adverse symptoms, involving 4 different patients. The symptoms observed were: asthma, pulmonary test decreased, abortion, respiratory failure, arthritis.

In addition, 7 patients experienced **10 non-serious and unlisted** adverse symptoms brought to the attention of the manufacturer during the period between September 1, 2005 and February 28, 2006: oedema (2), burning sensation (2), throat tightness (1), blood iron abnormal (1), arthritis (1), bone pain (1), feeling hot (1), influenza like illness (1).

DRUG INTERACTIONS

Interactions with other drugs, food, herbal products and laboratory tests have not been established.

Oral iron should not be administered concomitantly with parenteral iron preparations. Like other parenteral iron preparations VENOFER may be expected to reduce the absorption of concomitantly administered oral iron preparations.

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October 2008 to September 2009

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For Effective IV Iron Therapy

Get VERSATILE

Demonstrated Efficacy in Various Patient Types

A versatile IV iron for patients with chronic kidney disease (CKD), Venofer® is indicated in the treatment of iron deficiency anemia for[1]:

- Non-dialysis dependent (NDD) patients receiving or not receiving an erythropoietin
- Hemodialysis dependent (HDD) patients receiving an erythropoietin
- Peritoneal dialysis dependent (PDD) patients receiving an erythropoietin

...With Excellent Convenience

- Flexible dosing regimens (minimum total cumulative dose 1000 mg)
  - —100 to 400 mg dosing as per indication*
  - —slow IV push or infusion
- Available in vials, for expedient administration
- Over 50 years of worldwide clinical experience[2,3]

IMPORTANT SAFETY INFORMATION

Venofer® is contraindicated in patients with evidence of iron overload, patients with know hypersensitivity to Venofer, and patients with anemia not caused by iron deficiency. No life-threatening hypersensitivity reactions were observed in pivotal studies, although there were several cases of mild to moderate hypersensitivity reactions characterized by wheezing, dyspnea, hypotension, rash and/or pruritus in these studies. Anaphylactoid reactions have been reported in worldwide spontaneous post-marketing reports (see ADVERSE REACTIONS).

The most frequent adverse events (≥ 5%) whether or not related to Venofer administration, reported by: *hemodialysis dependent-CKD patients*, hypotension, muscle cramps, nausea, headache, graft complications, vomiting, dizziness, hypertension, chest pain, and diarrhea; *non-dialysis dependent-CKD patients*, dysgeusia, peripheral edema, diarrhea, constipation, nausea, dizziness, and hypotension; *peritoneal dialysis dependent-CKD patients*, vomiting, diarrhea, hypertension, peritoneal infection, pharyngitis, nausea, and peripheral edema. Hypotension has been reported frequently in hemodialysis dependent-CKD patients receiving IV iron, and has also been reported in non-dialysis dependent and peritoneal dialysis dependent-CKD patients receiving IV iron. Hypotension following administration of Venofer may be related to the rate of administration and total dose delivered.

VERSATILE IV IRON

Venofer®

iron sucrose injection, USP

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*There is limited experience with administration of an infusion of 500 mg of Venofer® over 3.5–4 hours; hypotension occurred in 2 of 30 patients treated. See product monograph for complete dosing administration recommendations.
†Venofer® is not dialyzable through CA210 (Fresenius High Efficiency or Fresenius F80A High Flux dialysis membranes.

References: 1. Venofer® product monograph, revised November 20, 2006. 2. Van Wyck DB, Cavallo G, Spinowitz BS, Adkinson B, Coggins S, Chonchol C, et al. Safety and efficacy of iron sucrose in patients sensitive to iron dextran: North American clinical trial. *Am J Kidney Dis.* 2000;36:846-57. 3. Charytan C, Levin N, Al-Saloum M, Hörbert T, Coggins S, Van Wyck DB. Efficacy and safety of iron sucrose for iron deficiency in patients with dialysis-associated anemia: North American Clinical Trial. *Am J Kidney Dis.* 2006;35:505-7.

Venofer® is manufactured under license from Vifor (International) Inc., Switzerland.

PAAB

See prescribing summary on adjacent page.

formula® 2000 plus

The fruit of exploration: Dialysis monitoring evolves

BHC MEDICAL
Renal Care

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Mississauga, ON L5N 8G2
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AT THE HEART OF MEDICAL TECHNOLOGY

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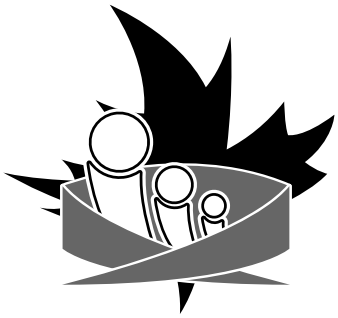
CANNT Membership



First Name _____

Last Name _____

Home Address _____

City _____

Province _____ Postal Code _____

Telephone (H) (_____) _____ - _____

(W) (_____) _____ - _____

Fax (_____) _____ - _____

E-mail _____

Employer _____

Employer Address _____

City _____

Province _____ Postal Code _____

Mailing Address Preferred ❑ Home ❑ Work

Do you consent to the use of your name and address on mailing lists that CANNT has considered pertinent and appropriate? ❑ Yes ❑ No

❑ New Member or ❑ Renewal

CANNT # (if renewal) _____

Person who recommended joining CANNT: _____

Membership Fee (GST #100759869)
Membership fee is tax deductible.

❑ One Year: $65.00 + 3.25 GST = $68.25
❑ Two Years: $120.00 + 6.00 GST = $126.00
❑ Student Rate: $32.50 + 1.63 GST = $34.13*
**Proof of full-time enrolment must accompany application.*

I enclose $ _____
made payable to Canadian Association of Nephrology Nurses and Technologists.

Method of payment:

❑ Cheque ❑ Money order ❑ Visa ❑ Mastercard

Cardholder Name: _____

Visa Number: _____

Expiry Date: _____

Signature: _____

❑ I have attained CNeph(C)/cdt designation
Year of designation _____

Professional registration # _____

Date last renewed: _____

❑ I am a member of CNA

Ontario applicants only
Do you belong to RNAO?
❑ Yes ❑ No

Professional Status

❑ Registered Nurse
❑ Registered Practical Nurse/Registered Nursing Assistant/ Licensed Practical Nurse
❑ Technician
❑ Technologist
❑ Other (Specify) _____

Number of Years in Nephrology _____

Area of Responsibility

❑ Direct Patient Care ❑ Teaching
❑ Administration ❑ Research
❑ Technical ❑ Other (Specify)

Work Environment

❑ Acute Care ❑ Independent Health Care
❑ Self-Care Unit ❑ Private Sector

What is Your Highest Level of Education?

Nursing	*Non-Nursing*
❑ Diploma	❑ Diploma
❑ Baccalaureate	❑ Baccalaureate
❑ Master's	❑ Master's
❑ Doctorate	❑ Doctorate

I am At Present Studying Toward:

Nursing	*Non-Nursing*
❑ Specialty Certificate	❑ Specialty Certificate
❑ Baccalaureate	❑ Baccalaureate
❑ Master's	❑ Master's
❑ Doctorate	❑ Doctorate

Primary Area of Practice

❑ Progressive renal insufficiency (pre-dialysis)
❑ Transplantation
❑ Hemodialysis
❑ Peritoneal
❑ Pediatrics
❑ Other (Specify) _____

Return to **CANNT**
Mailing Address:

Debbie Maure, CANNT,
Suite #322, 336 Yonge St., Barrie, Ontario, L4N 4C8
Telephone (705) 720-2819 Fax (705) 720-1451

Demande d'adhésion

Prénom _____

Nom de famille _____

Adresse à domicile _____

Ville _____

Province _____ Code postal _____

Téléphone (D) (_____) _____ - _____

(T) (_____) _____ - _____

Télécopieur (_____) _____ - _____

Courrier électronique _____

Employeur _____

Adresse de l'employeur _____

Ville _____

Province _____ Code postal _____

Adresse de correspondance ❑ domicile ❑ travail

Acceptez-vous que l'ACITN ajoute votre nom et votre adresse sur des listes d'envois qu'elle juge pertinentes et appropriées? ❑ Oui ❑ Non

❑ Nouveau membre ou ❑ Renouvellement

Numéro de l'ACITN # (si renouvellement) _____

Nom de la personne qui vous a recommandé de joindre l'ACITN: _____

Frais d'adhésion (TPS #100759869)
Les frais d'adhesion sont deductibles d'impots.

❑ Un an: 65,00 $ + 3,25 TPS = 68,25 $
❑ Deux ans: 120,00 $ + 6,00 TPS = 126,00 $
❑ Tarif étudiant: 32,50 $ + 1,63 TPS = 34,13 $*
**La demande doit inclure une preuve d'inscription à plein temps*

Je joins $ _____

payable à l'ACITN.
Mode de paiement:
❑ Chèque ❑ Mandat de poste ou chèque visé

❑ Visa ❑ Mastercard

Nom du titulaire de la carte: _____

Numéro de la carte: _____

Date d'expiration: _____

Signature: _____

❑ J'ai obtenu la désignation CNeph(C)/cdt
Année de désignation _____

Numéro d'enregistrement professionel _____

Date du dernier renouvellement : _____

❑ Je suis membre de l'ACI

Demandeurs de l'Ontario seulement
Faites vous partie de l'AOIA?
❑ Oui ❑ Non

Statut professionnel

❑ Infirmière(ier) autorisée(sé)
❑ Infirmière(ier) auxilaire autorisée(sé) / infirmière(ier) auxilaire
❑ Technicienne / technicien
❑ Technologue
❑ Autre (spécifier) _____

Années d'éxperience en néphrologie _____

Domaine de responsabilité

❑ Soins directs ❑ Enseignement
❑ Administration ❑ Recherche
❑ Technologie ❑ Autre (spécifier)

Milieu de travail

❑ Soins actifs ❑ Services de santé indépendants
❑ Unité d'autosoins ❑ Secteur privé

Plus haut niveau d'instruction?

Infirmière(ier)	*Autres*
❑ Diplôme	❑ Diplôme
❑ Baccalauréat	❑ Baccalauréat
❑ Maîtrise	❑ Maîtrise
❑ Doctorat	❑ Doctorat

Je poursuis présentement des études:

Domaine Infirmière(ier)	*Autre domaine*
❑ Certificat	❑ Certificat
❑ Baccalauréat	❑ Baccalauréat
❑ Maîtrise	❑ Maîtrise
❑ Doctorat	❑ Doctorat

Secteur de pratique spécialisé

❑ Insuffisance rénale progressive (pré-dialyse)
❑ Transplantation
❑ Hémodialyse
❑ Péritonéale
❑ Pédiatrie
❑ Autre (spécifier) _____

Poster à **ACITN**
Adresse postale :

Debbie Maure, ACITN,
336 Yonge St., pièce 322, Barrie (Ontario) L4N 4C8
Téléphone (705) 720-2819 Télécopieur (705) 720-1451