



Singapore conference 2008

The International Society of Nurses in Cancer Care will hold its biennial conference in 2008 in Singapore from August 17–21. This international event provides an exceptional educational and networking opportunity as well as highlighting the essential role that nurses play in cancer prevention, treatment and patient care worldwide.

The theme of the 15th International Conference on Cancer Nursing (ICCN) is to be *Creating Partnerships, Championing Progress, and Celebrating Practice*. The conference

will bring together delegates representing the broad spectrum of the international oncology nursing community, and will offer them the unique opportunity to exchange new research and best practices.

First time in Asia

The 15th ICCN marks the first time in the event's 27-year history that it will be hosted in Asia. The society is forming a partnership with SingHealth to host the 15th ICCN. SingHealth is a group of public health care institutions which treats over three million patients each year.

Singapore is an ideal venue for the conference. It has a fascinating history and is a thriving, cosmopolitan city with infinite options for visitors. The conference itself will be held at the world-class Suntec Singapore International Convention and Exhibition Center.



Merlion Park in Singapore – the Merlion, half fish, half lion is a national icon

Easy online abstract submission

Participate in the 15th International Conference on Cancer Nursing (ICCN) by submitting an abstract for an oral or poster presentation. Submitting an abstract for presentation at the 15th ICCN is now a simple process.

Visit the conference website at www.isncc.org/meeting and click on "Abstracts". On this page there are links to download the *Call for Abstracts* and submit an abstract via the new ICCN online abstract submission system. By creating a profile and password, you can return to the site to edit your abstract until the abstract deadline on December 3, 2007.

ISNCC and SingHealth particularly welcome abstracts related to identified conference themes and will consider all abstracts of significance to nurses in cancer care worldwide. See overleaf for the full *Call for Abstracts*.

Conference website

With the launch of the new ISNCC website, the most up-to-date information about the 15th ICCN is now at your fingertips. Information about the conference programme, accommodation, things to do while you are in Singapore and social events will all be available on the conference website at www.isncc.org/meeting.

Don't forget to subscribe to receive regular email updates about the 15th ICCN as it develops.

Visit www.isncc.org or email info@isncc.org to sign up for the ISNCC Newsflash today.

Visiting Singapore

Delegates attending the conference should consider extending their stay to explore Singapore's many attractions, shopping and dining options, as well as its beautiful parks and beaches. To help start planning your visit to Singapore, the conference website offers information about some of the exciting things that you can do and see before or after the conference.

The site includes links to some key resources for arranging your travel and planning your stay. Visit the conference website at www.isncc.org/meeting/singapore for information about Singapore and to start planning your trip.

Look forward to seeing you in Singapore at the 15th ICCN — the leading oncology networking and educational event.

**Don't miss the conference abstract deadline
December 3, 2007**

Preventing cancer deaths

The ISNCC, as the international voice of cancer nurses, has strategic relationships with international organisations in nursing and healthcare. One of these key relationships is with the WHO, where we have links with the nursing and cancer sections.

The WHO is an important player in the global effort against cancer and has long promoted the development of national cancer control plans as a means of setting priorities for cancer control that meet the needs of local communities and economies. The focus of cancer control plans is now supported by an important new 2007 WHO publication *Fight Against Cancer – Strategies that prevent, cure and care*. The document can be downloaded as a pdf from the WHO's website (www.who.int).

I strongly recommend this important document to you as a stimulus for thinking about the role of nurses in cancer control efforts globally. There are several important messages from this document that are worth emphasising here.

The first is that 40% of all cancer deaths can be prevented. Strategies critical to success in prevention are the reduction of tobacco and alcohol consumption, improving diet and increasing physical exercise. Prevention strategies also include the promotion of hepatitis B vaccination and more recently, cervical cancer vaccination.

All nurses are capable of making a contribution to these efforts in several ways: role modelling prevention behaviours; promoting cancer prevention to patients and their families; or getting involved in community

cancer prevention programmes. Curative and care strategies outlined in the document focus on early detection programmes and provision of pain and palliative care services.

Low cost but effective cervical screening programmes using visual inspection with acetic acid are an example of programmes where nurses take a major role in many developing countries (see page 6).

I remember presentations about this approach at the International Conference on Cancer Nursing many years ago, long before the programme was promoted by WHO. Such programmes are often the innovations of nurses and the ISNCC welcomes its role in promoting and showcasing such efforts.

If you are or know of a nurse making a particular contribution to cancer control efforts please bring this to the attention of the ISNCC so that we can help promote this work in the international community.

In addition to this newsletter the ISNCC now produces a regular email newsflash that goes to an increasing database of nurses around the world. We would be very happy to promote any local cancer control initiatives in either the newsletter or the newsflash. Please contact our secretariat on info@isncc.org to let us know about your contribution to global cancer control.

And if you would like to receive the newsflash please visit www.isncc.org or email info@isncc.org to sign up.

Sanchia Aranda
ISNCC president

New ISNCC website and email newsflash

ISNCC is pleased to announce the launch of its re-designed website, www.isncc.org. The ISNCC website, in addition to its new easy-to-navigate layout, features an updated resources section, a section devoted to the biennial International Conference on Cancer Nursing (ICCN), and information on the activities of ISNCC committees. A discussion forum, designed to allow ISNCC members to network and communicate with each other, will be launched shortly.

ISNCC has also launched the ISNCC Newsflash, an email newsletter that reports the latest news on society happenings, publications, and the 15th International Conference on Cancer Nursing (ICCN).

The ISNCC Newsflash is sent out via email every two weeks — past issues are available on the ISNCC website.

Visit www.isncc.org or email info@isncc.org to sign up for the ISNCC Newsflash today!

More cooperative research needed

Europe needs to develop more cooperative trans-national research projects, according to a report from the European Cancer Research Managers Forum. Policy makers should focus more on the differences between spending among the 27 states of the EU rather than trying to match the spending of the United States.

The forum estimates that €3.2 billion (\$4.4bn) was spent on cancer research in Europe in 2004 which is a 38% increase in funding from two years previously. However one third of EU countries had not increased their funding.

The UK spent the most on cancer research at €783m followed by Germany €324m. The report concluded that a cooperative approach with more joint programmes would be cost-effective.

Protocol on illicit tobacco control

The 146 parties to the World Health Organisation Framework Convention on Tobacco Control have decided unanimously to start negotiating a protocol on

illicit trade of tobacco products. The illicit tobacco trade occurs world wide, negatively affecting national security and economics, as well as public and personal health.

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Understanding and addressing oncologic emergencies

This workshop presentation gives an insight into oncologic emergencies and how they can be managed. Further learning materials can be downloaded at isncc.org

Oncologic emergencies are potentially life-threatening conditions or complications related to the disease or its treatment. By definition, an emergency requires immediate intervention; however, urgency of treatment may vary somewhat from condition to condition and from patient to patient.

A patient presenting with a slowly evolving pleural effusion, limiting activity tolerance is certainly much less urgent than a patient presenting with back pain and sensory-motor deficits related to a malignant spinal cord compression or a patient with hemodynamic instability, fever and neutropenia. Nevertheless, oncologic emergencies require swift assessment and intervention. Treatment may be curative or palliative. The incidence of oncologic emergencies during the course of illness is rising due to improved diagnostics, treatments and improved survival.

Oncologic emergencies can be broadly grouped into structural or metabolic emergencies. Structural oncologic emergencies involve direct invasion of the tumor whereas metabolic emergencies result in metabolic imbalances related to the cancer or its treatment. Examples of each are shown in Table 1. Any patient with a diagnosis of cancer is at risk of developing an oncologic emergency.

However, patients with metastatic disease, patients undergoing dose intensive chemotherapy, patients with a large tumor burden or patients with rapidly proliferating disease are at particularly high risk. Oncologic emergencies occur across the continuum of care and may present as a first sign of disease, with disease relapse or progression or as a result of treatment.

Nurses working with specific disease site groups will see that certain emergencies occur with increased frequency in their specific patient populations. For

example patients with hematologic malignancies frequently experience tumor lysis syndrome, disseminated intravascular coagulation, febrile neutropenia and septic shock. Lung cancer patients can experience superior vena cava obstructions, syndrome of inappropriate antidiuretic hormone and malignant pleural effusions with increased frequency.

It is difficult to generalise with respect to patient risk when considering oncologic emergencies, so it is important for nurses to understand their patient populations and risk profiles. Understanding oncologic emergencies can seem complex with respect to understanding the pathophysiology behind a condition, the manifestations of the condition as well as the treatment approach. It is extremely important in this context not to lose sight of the supportive care needs of the individual with cancer and their family during this time. Physical needs change rapidly and coincide with changing psychosocial and informational needs related to coping with a life threatening situation, new diagnosis or worsening prognosis.

Induction chemotherapy for acute leukemia

A good way to operationalise content is to link it directly to the patients we see in our clinical care. The case study of a typical patient that I care for in my clinical practice is described in Table 2. Acute myeloid leukemia is a clonal hematopoietic stem cell disorder that results in overproliferation and failure of stem cells to differentiate. This leads to accumulation of leukemia forms in the bone marrow, peripheral blood and other tissues. Clinical manifestations include neutropenia, anemia and thrombocytopenia resulting from bone marrow failure. Patients with hematologic malignancies are at high risk for

developing oncologic emergencies due to their large tumor burden with rapidly proliferating cells that can be exquisitely sensitive to cytotoxic therapies.

Tumor lysis syndrome

Tumor lysis syndrome (TLS) is a potentially fatal metabolic condition that occurs when intracellular contents are released from the tumor cells and emptied into the circulation, usually as a result of chemotherapy. The usual onset is in the first few days of initiation of therapy but blood work surveillance should continue for up to the first week of therapy in high risk patients. Hyperkalemia, hyperuricemia, hyperphosphatemia and hypocalcemia can occur individually or in combination even despite prophylaxis. These electrolyte imbalances can result in cardiac, neuromuscular, gastrointestinal and renal abnormalities.

Like many metabolic oncologic emergencies, the early clinical presentation can be vague and easily attributable to other things. Physical findings become more overt if renal failure ensues. The best way to treat tumor lysis syndrome is to prevent it. The mainstay of prevention includes urine alkalinisation, hydration and use of allopurinol to protect renal function. While there are some newer drugs that can be used to reduce uric acid productions such as uricase, treatment usually includes hydration with diuresis or dialysis for patients with severe renal insufficiency, fluid volume overload or severe electrolyte imbalances.

Disseminated Intravascular Coagulation

Disseminated intravascular coagulation (DIC) is the cardinal coagulopathy associated with cancer that results when excessive clotting leads to life-threatening bleeding. Additionally, DIC can occur in cancer patients in the context of infection and sepsis. Similarly to what has been previously described with TLS, cells containing tissue factor or procoagulants are released into the circulation with cell lysis. Circulating procoagulants activate the coagulation system, resulting in inappropriate clotting which leads to consumption of clotting factors. In the case of the patient in the case study (see Table 2) DIC occurred in an acute onset with mucosal bleeding that was well managed

Table 1: Oncologic emergencies

Structural	Metabolic
<ul style="list-style-type: none"> • Spinal cord compression • Malignant effusions • Superior vena cava obstruction • Bowel obstruction • Increased intracranial pressure 	<ul style="list-style-type: none"> • Tumor lysis syndrome • Disseminated intravascular coagulation • Hypercalcemia • Septic shock • Anaphylaxis

with transfusion support including platelets and cryoprecipitate infusions to keep the fibrinogen level above 1. Bloodwork should be monitored at least twice daily until stable with appropriate transfusion

support as needed for patients experiencing acute DIC. DIC can also present as a chronic condition particularly in patients with adenocarcinomas and is usually associated with venous thromboses.

Table 2: Case study – Mrs G

Mrs G is a 42-year-old previously well female who presented with a two-month history of acneform rash on her face and trunk unresponsive to antibiotics. Additionally, she described a four-week history of generalised fatigue and persistent sternal chest pain. A complete blood count and differential done by her doctor revealed an elevated white count with circulating blast cells. She was referred to the emergency department. A bone marrow aspirate was consistent with Acute Myeloid Leukemia – M4. She underwent IDAC (idarubicin and cytarabine) induction chemotherapy.

Blood results at presentation:

	Mrs. G	Normal
WBC	65.3	3 – 10.5
Blasts	56.81	0
Neutrophils	0.65	2 – 7.5
Hb	96	115 – 155
Platelets	66	125 – 400

Day 3 of chemotherapy

	Mrs. G	Normal
Urate	264	140 – 350
PO ₄	> 1.65	0.78 – 1.53
Ca	< 1.83	2.23 – 2.58
K	3.8	3.6 – 5.1
LD	> 550	98 – 192
Platelets	< 24	125 – 400
INR	1.5	0.9 – 1.1
Fibrinogen	< 0.7	1.9 – 4.5

Day 13 of induction chemotherapy

Mrs G develops a high fever (40°C), clear respiratory secretions, mucositis and chills with rigors. Physical exam was unremarkable except for a heart rate of 120 and a blood pressure of 100/75. No localising symptoms of infection were identified. Her central line was intact. Blood results revealed a white blood count of 0.1 X 10⁹/L, hemoglobin 94 g/L, and platelets 10 x 10⁹/L. Sodium was 129 mmol/L and potassium was 2.9 mmol/L. Indices of liver function and renal function were normal.

Course in hospital

Blood cultures grew viridans group streptococcus in 3/3 bottles. Mrs. G was treated empirically with IV piperacillin/tazobactam 3.375 mg q6h, vancomycin 1g q12h, and normal saline at 100 cc/h. She responded well to this therapy and her condition improved gradually over the course of three or four days. The chest x-ray was normal. An influenza swab was negative. She experienced some diarrhea (negative for Clostridium difficile toxin) that resolved prior to discharge. Subsequent blood cultures were negative for growth. An echocardiogram was negative for valvular vegetations. Mrs G experienced some renal wasting of potassium and phosphate and slight fluid overload. An asthma exacerbation was well managed with oxygen and salbutamol inhalations.

Fever, sepsis and shock

There are many causes of fever in oncology patients, infection being one of them. Other causes include tumor associated factors or allergic/hypersensitivity reactions to drugs or blood component therapies. Infections are an important cause of morbidity and mortality in patients with both solid tumors and hematologic malignancies. As described in the case study, identification challenges are significant in this population as the usual signs and symptoms associated with infection may be altered, suppressed or absent due to myelosuppression. For this reason, nurses must use their best diagnostic skills when reviewing systems and physically assessing these patients.

Ongoing monitoring is extremely important, as we all know too well that patients with febrile neutropenia can deteriorate very rapidly. Much work has been done over the years to better understand this disease entity and better stratify cancer patients according to established risk criteria. Treatment algorithms have been very helpful in tailoring drugs at the onset of fever, for persistent fever or change in patients physical or hemodynamic status. The key to successfully using these algorithms and adjusting patient care lies in meticulous ongoing nursing assessment of these patients.

Training the trainer

Over several years, I have developed and shared, in a full day didactic workshop format, information for nurses on oncologic emergencies. As the material grew and became more familiar to me, I realised that my best approach to share this information was to make it available to others and increase dissemination by “training the trainers”. I presented this workshop at the ISNCC Conference in September 2006 in Toronto. My presentation is available on the ISNCC website for easy download. A bibliography of suggested readings is also included. Go to www.isncc.org and go the newsletter section under the resources heading.

The material can be used in a variety of ways such as on an individual basis for self study, small group work or full day workshop format and can be adapted and tailored according to specific need. I welcome your feedback and look forward to hearing if this information is useful. I would particularly appreciate receiving any enhancements or updates.

Gail Macartney, Advanced Practice Nurse, Leukemia Program, The Ottawa Hospital, Ontario, Canada

You can download the power point presentation which relates to the workshop *Training the trainer: sharing a framework for teaching oncologic emergencies* held at the 14th International Conference on Cancer Nursing in Toronto last year. Go to the ISNCC website at www.isncc.org. A full reading list can also be accessed.

VIRTUAL CANCER CARE

Sexuality and cancer

There are very few subjects that are taboo in health care environments, especially where nurses are engaged with the essential bedside care of patients. Sexuality, however, is one of those subjects.

Where cancer is concerned it is doubly difficult; the effects of cancer treatment can affect libido and may cause impotence. The resumption of intimate relationships after active treatment can be an anxious time for our patients, so it is appropriate that this column takes a look at what help and advice is available on the internet.

Cancerbackup

<http://www.cancerbackup.org.uk/>

[ResourceSupport/RelationshipsCommunication/Sexuality](http://www.cancerbackup.org.uk/ResourceSupport/RelationshipsCommunication/Sexuality)

This award-winning UK website has been reviewed before and it continues to be one of the best on the internet for cancer patients and professionals alike. Its pages on sexuality are perhaps the most comprehensive you will find anywhere and address a wide range of issues from the physical and psychosocial to the emotional effects of sexual dysfunction.

National Cancer Institute

<http://www.cancer.gov/cancertopics/pdq/supportivecare/sexuality/HealthProfessional/page1>

If you are looking for a purely factual, scientific approach to sexual dysfunction and cancer then this US site is a good one to visit. For the professional it is well researched with a good range of supporting references. The patient information is much more user-friendly and to its credit is not afraid to use direct language.

Cancer supportive care programs

<http://www.cancersupportivecare.com/sexuality.html>

This US site is aimed primarily at cancer patients and takes a much more sensitive and holistic view of things. The information is simply presented on a plain background and is effectively one page for you to scroll down and read. There are no complex graphics or menus to negotiate and the subjects covered include body image, energy levels, erection, orgasm, and intercourse itself, with some good advice for those with difficulties in these areas.

TIC — Teen Info on Cancer

<http://www.click4tic.org.uk/dealwithit/sexandfertility/sexualityandcancer>

This fabulous UK website is designed by the people behind Cancerbackup to talk to teenagers in their language. It has good easily-digestible advice.

Worth a look

American Cancer Society

http://www.cancer.org/docroot/MBC/content/MBC_2_3x_Sexuality.asp?sitearea=MBC

The pages on this US site contain much the same information as on the previous sites reviewed, the main difference being separate sections for each gender.

Cancer Research UK

<http://www.cancerhelp.org.uk/help/default.asp?page=215>

This UK site has a wealth of information that is simply laid out, easily accessible and written in plain English.

Robert Becker, Macmillan Senior Lecturer in Palliative Care, Staffordshire University Faculty of Health and Sciences and Severn Hospice, UK

RESEARCH ROUNDUP

Occupational cancer risk spreading

In the future we can expect increasing incidence of occupational cancer in the developing world according to the WHO. Currently more than 200,000 people die each year from a workplace-related cancer, most of these in developed countries.

But work processes using carcinogens are shifting to developing countries which generally have lower occupational health standards. Second-hand smoke, benzene and asbestos are the most common carcinogens that people encounter at work. Lung cancer, mesothelioma, bladder cancer, and leukaemia are the most common resulting cancers.

One in ten lung cancer deaths are related to work-based risks. Employees who are heavily exposed to second-hand tobacco smoke at work are twice as likely to develop lung cancer as those working in a smoke-free environment. Workers in the chemical and diamond industries face the risk of leukaemia from exposure to benzene.

The WHO calls for a halt to the use of asbestos, introducing benzene-free organic solvents and banning smoking in the workplace.

www.who.int

Blood transfusions do not transmit cancer

Receiving blood from a donor who goes on to develop cancer is no more risky than receiving blood from donors who do not, according to a large database study.

Scandinavian researchers studied 354,094 people who had received blood products between 1968 and 2002. Of these the 3% who had received products from donors who later developed cancer were found to be no more likely to develop cancer themselves than other recipients over a seven year follow-up period.

The authors suggest that the risks of cancer remain slim even 20 years after transfusion of products from an affected donor.

Lancet 2007;369:1724-30

Cost-effective cervical screening

A quick, easy, and affordable screening test has been found to reduce the risk of cervical cancer by a quarter among women in rural India. A randomised trial looked at the effectiveness of a single visual inspection of the cervix with acetic acid followed by treatment for patients who had a positive result. This combination was found to reduce deaths from cervical cancer by 35%

during a follow-up period of seven years.

All the women in the study were screened once. The test most benefited those aged between 30 and 39 as the visual inspection test is harder to perform on older women.

The authors argue that the test is a good option for countries with low-level resources as it does not require the same facilities, staff, or infrastructure needed to for cytology screening. The test could be a temporary solution until vaccines against human papillomaviruses become cheaper and more widely available.

Lancet 2007;370:398-406

Lasting after-effects of childhood cancer

Children who survive cancer have worse health than their peers and need long-term surveillance according to a study which found high levels of chronic disease and multiple health problems among this group.

A study of 1362 survivors of childhood cancer found 40% had a severe, disabling, life-threatening, or fatal condition. One in four had five or more health problems at an average of 24 years.

Radiotherapy as a sole treatment was found to be associated with worse long-term health than surgery or chemotherapy.

JAMA 2007;297:2705-15

Balancing the ISNCC books

Candy Cooley, the current secretary/treasurer of the ISNCC explains her role

My name is Candy Cooley and I took over the dual role of secretary/treasurer for the ISNCC after the Sydney conference in 2004 for a period of four years. I am based in the UK. My current job is as the Palliative Care Development Manager for Worcestershire Primary Care Trust in England. I am also the out-going editor of the International Journal of Palliative Nursing.

When I started I was a little uncertain as to what the role might entail as there is a secretariat for the society as well as an accountant. However, over time I have come to realise that the role of secretary/treasurer is very important to ensure the financial viability of the society. My role for the ISNCC also means that I have responsibility to the ISNCC board as one of the three honorary officers for the society. I also have a key role in linking to the auditors and the Charity Commission.

In the role of honorary officer I have represented the ISNCC in a number of different ways including chairing the Scientific Programme Committee for the 2006 Toronto Conference.

I was also asked to represent ISNCC in the judging of the Roche, Images of Hope Photographic competition. This was a

fascinating opportunity. Over 150 images from all over the world were considered with a great diversity of subject areas, all images of hope when living with cancer or caring for loved ones. It was a humbling experience to have been involved in judging pictures which clearly brought a message of hope, often in circumstances which were close to despair.

The financial assets of the society enable the committees to develop resources, undertake research and implement education for the wider society of cancer nurses. However, as the ISNCC is a not-for-profit charity, there needs to be a balance between funding for specific projects and the funding to ensure the on-going work of the board and the committees.

Before I took on the role at ISNCC I had some understanding of the importance of financial balance and ensuring a clear cash flow. This understanding came from managing a fairly large and diverse budget as part of the management role in my job for Worcestershire Primary Care Trust. Tackling financial management for the ISNCC was quite difficult at first as there were a number of cheque books and different people responsible for paying bills



or generating invoices. Establishing more streamlined processes with clear communication and information flow has made life much simpler.

I will hand on this role at the Singapore Conference 2008. It has been a very interesting three years so far and we have a fairly healthy financial situation following the success of the Toronto conference. If you get the chance to be involved in your local, national or international society I would recommend that you do so as there is so much that you will enjoy. But only go for the treasurer's job if you like adding up, answering lots of questions and hard work!

*Candy Cooley,
ISNCC secretary/treasurer*

EDUCATION COLUMN

Cancer education for professionals working in general settings

In the UK one in four people have cancer and one in three will die from it. As our population is increasingly aged so the incidence of cancer will rise. There will continue therefore to be many situations where people with cancer and their families are cared for in non-specialist cancer settings either in the community or in hospital.

Their care may be provided by nurses who have expertise in acute surgical nursing, cardiothoracics, care of the older person or community nursing but who have not had the opportunity to undergo formal cancer education.

Cancer Care in General Settings is an educational programme which has been developed to increase the knowledge and confidence of nurses and allied health professionals working with people with cancer in non-specialist settings.

The programme was developed by Clair Sadler and Chris McNamara from the Royal Marsden School of Nursing and Rehabilitation, London, UK. The guiding philosophy behind the programme is collaborative working between the specialist cancer centre and the clinical experts in the

relevant hospital.

Areas covered included:

- what is cancer?
- the major treatments for cancer;
- symptom management in cancer;
- pain management;
- understanding the patient and family experience of cancer.

Since its initiation the three-day programme has been accessed by more than 600 staff in 15 hospitals in and around London. Following the roll out of the programme, a research study has evaluated it. The research study used focus groups with course participants and individual interviews with key stakeholders, eg lecturing staff and lead cancer nurses.

The project took place against a backdrop of considerable change and financial constraints within the UK National Health Service (NHS). The evaluation sought to identify the effectiveness of the programme, and consider some of the practice issues that were raised by those who attended.

Key issues that emerged during the research were as follows:

- Motivation — the professional and personal motivation for undertaking the programme.
- The need for protected time to question and acknowledge the personal demands of caring for people with cancer.
- The importance of networking and collaboration within the hospitals. As a result of the programme, course participants are now able to identify key staff for support and advice.
- Patients as teachers. Each programme included at least one patient from the hospital who came and shared their experiences of having and being treated for cancer. This was a highly valued part of the programme.

Overall, participants rated the courses highly and felt that they were more confident to care for people in the future and to be able to ask for advice.

Shelley Dolan, Chief Nurse, Royal Marsden NHS Foundation Trust, London, UK

For further details about the *Cancer Care in General Settings* programme this please contact: Clair.Sadler@rmh.nhs.uk

Addressing recruitment and retention of cancer nurses in Canada

In 2003, the World Health Report indicated that the most critical issue facing health care systems is the shortage of qualified health personnel (WHO 2003). For many countries, the most problematic human resource challenge is the shortage of nurses (Buchan & Calman 2004). The Canadian Nurses Association (CNA, 2002) predicts that by the year 2016, Canada will be short 113,000 nurses and that this shortage will be exacerbated by a potential 53.4% increase in the demand for nursing services. In addition, Canadian cancer care statistics (CCS/NCIC, 2006) show a steady increase in the cancer patient workload.

The research reported here describes a national project that was initiated in response to Canadian reports (CNA, 2002; CSCC, 2002; CNAC, 2002) that called for action to develop plans for the recruitment and retention of qualified health care professionals. The focus on cancer nursing addresses the need to direct attention to human resource planning within nursing subspecialties. This is done in order to ensure that the unique care needs of patients living with complex illnesses such as cancer are met. The project goals were:

- to produce information about how workplace and professional practice factors influence the working lives of Canadian cancer nurses;
- to determine strategies that would strengthen and sustain a quality cancer nursing workforce.

The project was conducted in two phases over three years. Traditional research methods and a participatory action approach were used.

Phase I Nurse work environments

The focus of Phase I was the examination of cancer nurse work environments across Canada. A prospective survey design provided information about the presence of workplace and professional factors within work environments, the retention of cancer nurses, and the development of a conceptual model that predicts nurses' job satisfaction. In 2004, more than 75% of the 615 cancer nurses surveyed indicated: they had positive relationships with physicians; had freedom to make patient care and work decisions; and were supported by their managers in their nursing decisions. However, 45% of the nurses reported not having opportunities to participate in policy decisions nor having administrators who were visible, accessible or responsive to employee concerns. In the 2006 follow-up survey similar trends were found in how nurses perceived organisational

characteristics. The one difference noted was that the percentage of nurses who indicated that there were not enough RNs to provide quality patient care increased by 10% from 2004 to 2006.

This project was the first longitudinal cohort study of cancer nurses in Canada to capture data about nurse retention. In the 2004 survey, 6.4% (39/615) of the nurses reported an intent to leave their job, whereas in 2006, this number increased to 26% (102/397). Of the 397 participants resurveyed in 2006, 4.3% (17/397) reported they were still a nurse but no longer in oncology and 2% (8/397) reported that they had left nursing altogether. Of the eight people who left nursing, five retired and the others cited their departure was precipitated by "unacceptable working conditions".

Based on a literature review of the nursing workforce research, the career experiences of the research team, findings from the team's previous work (Bakker et al 2006), and nurse focus groups, a conceptual model of workplace factors that influence job satisfaction was developed and tested using the survey data. Results of model testing showed several factors that directly influenced nurses' job satisfaction. These factors were: positive physician/nurse relationships; philosophy of nursing; ability to influence patient care; enough RNs to provide quality care; freedom to make important patient care decisions; and supervisor support in managing conflict.

Phase II Recruitment and retention

In Phase II, a participatory action research approach was taken to engage cancer nurses and decision makers in discussions about workplace issues and recruitment and retention strategies. Three different types of focus groups were conducted. Twelve cancer nurse focus groups provided information from the perspective of "front-line providers". Four focus groups were conducted with decision makers (individuals who had responsibility and authority for influencing nurse work environments). Three additional focus groups were conducted that included both oncology nurses and decision makers together.

The underlying premise for all focus groups was that the development of effective workplace strategies to address recruitment and retention can only be attained by seeking input from both nurses (those affected by change) and decision makers (those facilitating change).

Several recommendations emerged. The most compelling was the need to develop

a national health human resource plan for cancer nursing. Other recommendations addressed the need for organisations to recognise and value cancer nursing as a specialty. Both nurses and decision makers identified the need for mentorship to retain nurses, and that orientation was not enough. Investment in leadership was deemed essential for creating environments where nurses want to work.

Conclusion

Several key implications emerged from this research project. The findings highlight the need for a Canadian health human resource plan directed at oncology nursing. Input from nurses and decision-makers identified realistic workplace and educational strategies that can contribute to retaining and maximising the skills and productivity of oncology nurses currently in the system and improving work environments to attract new nurses into cancer care.

Without plans for organised cancer workforce strategies at regional, national and international levels the current global nursing shortage will continue to threaten the ability to provide safe and effective health care.

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