Official Journal of the Canadian Association of Critical Care Nurses

Index:

Critical Thinking........................................4
Critical Care Nursing Abstracts......................14

Canadian Association of Critical Care Nurses
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The Official Journal of the Canadian Association of Critical Care Nurses

Volume Ten, Number Three, Fall 1999

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Organ transplantation: The role of critical care nursing

The shortage of organs and tissues for transplantation has been, for many years, an issue of concern in Canada. With a population of over 30 million, the national donation rate is around 13.8 donors per million population (1998), as compared to the United States, where the rate is 21 per million. The “benchmark”, however, has been set by Spain, a country with over 39.6 million inhabitants. Through the establishment of a national body to coordinate all levels of activity in the donation process, Spain’s organ donation rate increased from 14 donors per million population in 1989 to 31.5 donors per million in 1998, the highest in the world (Kidney Foundation of Canada, 1999).

Can we improve these statistics in our Canadian population? What role should critical care nurses play in organ donation? CACCN was an invited participant in a recent House of Commons subcommittee convened to explore these pressing issues.

The federal policy-making process

In 1995 a federal/provincial working group established by the Conference of Deputy Ministers developed strategies to improve organ/tissue donation and distribution in Canada. In September 1997, the federal/provincial/territorial deputy ministers and ministers accepted a 13-element strategy (Table One) and committed funding to developmental activities leading to its implementation. Following a request put forward by Keith Martin, MP for Esquimalt - Juan de Fuca, on October 9, 1997, the House of Commons unanimously supported the need to explore organ donation. On November 24, 1998, the House of Commons undertook the study of the state of organ and tissue donation in

Table One:
Strategies Regarding Standards/Guidelines

| Strategy 1 - Organ/Tissue Safety | Improve Canadians’ assurance of the quality and safety of organs and tissues used in transplantation. |
| Strategy 2 - Hospital Procurement Processes and Transplantation Programs | Increase donation rates by improving hospital performance in the identification and procurement of organs and tissues for transplantation and in achieving optimal transplantation outcomes. |
| Strategy 3 - National Sharing Algorithms | Improve equitable access to scarce organs and tissues by ensuring a fair allocation system is in place and utilized. |
| Strategy 4 - Procurement Organizations | Improve donation rates by improving the performance of provincial/regional procurement agencies. |
| Strategy 5 - Organ/Tissue Transplantation Systems | Improve efficiencies and quality of care by providing provincial ministries of health with guidelines with the optimal structure and size of the provincial transplantation system. |

Strategies Regarding the Organization and Management of the Donation and Distribution System

| Strategy 6 - Donor Identification | Improve donor rates by ensuring ready identification of potential organs. |
| Strategy 7 - Organization of Provincial/Regional Procurement, Distribution and Transplant Systems | Improve donation rates and system efficiencies by ensuring that optimal structures and processes are in place. |
| Strategy 8 - Information Management | Improve efficiency, quality and the equitable allocation through enhanced client tracking and program monitoring capacities. |
| Strategy 9 - Cost Recovery for Donor Identification, Maintenance and Retrieval | Improve donation rates by removing disincentives for physician and hospital involvement in the procurement process. |
| Strategy 10 - Equitable Access | Determine the extent to which equitable access is currently achieved for Canadians. |
| Strategy 11 - Formal Sharing Agreements | Improve equitable access by formalizing interprovincial and international sharing of organs/tissues across provincial borders. |

Education Strategies

| Strategy 12 - Public Education | Improve donation rates by increasing the public’s awareness/knowledge about the importance of organ and tissue donation and processes associated with donation. |
| Strategy 13 - Professional Education and Certification | Improve donation rates and quality outcomes by increasing professional awareness, knowledge and practice regarding the organ/tissue procurement and distribution process. |
Canada, and after two months of deliberations that included over 100 interviews with stakeholders, including CACCN (OJCACCN 10(2), Summer 1999), recommendations were made regarding the appropriate role of the federal government in the development of national safety, outcome and process standards for organ and tissue donations, as well as promotion of public and professional awareness and knowledge regarding organ and tissue donation, procurement and transplantation (Organ and tissue donation and transplantation: A Canadian Approach. Report of the Standing Committee on Health, 1999). The Minister of Health, the Honorable Allan Rock is expected to respond to the report by November 1999.

On June 29-30, 1999, the National Coordinating Committee for Organ and Tissue Donation and Transplantation (Table Two) gathered in Aylmer, Quebec to respond to a directive from the Advisory Committee on Health Services (ACHS). Composed of five government members (one each from Health Canada, Atlantic Canada, Quebec, Ontario, and Western Canada) and key stakeholders (e.g. CACCN, Canadian Critical Care Society, Canadian Neuroscience Nurses Association, and Canadian Neurosurgical Society), the National Coordinating Committee (NCC) was asked to provide information to support the discussions at the September 1999 meeting of the Ministers of Health. The information and recommendations being put forward by the NCC to ACHS includes the following goals:

- To provide the necessary background information for use by the governments of Canada to develop health policy around donation and transplantation.
- To assist the Ministers of Health in deciding on the structure of donation and transplant services in Canada.

The following objectives have been defined as steps to achieve these goals:

- To define core (steps) and support (e.g. information systems support, education and program evaluation) processes that are essential to successful donation and transplant systems, at the three levels of service providers: local, provincial/territorial and national.
- To determine the level of accountability for core and support processes.
- To evaluate each strategy element and assess the potential impact for implementation.
- To identify coordination activities critical to supporting donation and transplantation activities.
- To identify the data and information system requirements to support donation and transplant activities.
- To identify organizational models that would ensure ongoing accountability for sustainable performance of donation and transplant health services.

Outcome goals

- To develop a framework for action at the local, provincial/territorial and national levels which will result in a sustained systematic approach to increasing the rates of organ and tissue donation and transplantation in Canada.
- To develop a statement of principles to guide officials in preparing an organizational and financial plan for collaborative action to support donation and transplant activities.
- To develop a detailed operational plan for approval by the Conference of Deputy Ministers in September 1999.
- To develop a goal expressed in donations per million population annually for organ donation in Canada in the year 2005.

Table Two: National Coordinating Committee for Organ and Tissue Donation and Transplantation

June 29-30 Chateau Cartier, Aylmer, Quebec

Membership:

Co-Chairs: Prudence Taylor, Alberta Health, Edmonton, AB
Dr. Philip Belitsky, Dalhousie University, Halifax, NS

Government Representatives:

Provincial:
Ann Secord, New Brunswick Department of Health and Community Services, Saint John, NB
Elizabeth Barker, Nova Scotia Department of Health, Halifax, NS
Maurice Beaulieu, Ministere de la Sante des Services Sociaux, Quebec, PQ
Ricki Grushow, Ministry of Health, Toronto, ON

Federal:
Andre LaPrairie, Health Canada

Non-government Representatives:

Liz Anne Gillham-Eisen, Canadian Association of Transplantation
Elma Heidemann, Canadian Council on Health Services Accreditation
Dr. David Hollomby, Canadian Organ Replacement Register
Dr. Norman Kneteman, Canadian Society of Transplantation
Mary Catherine McDonnell, The Kidney Foundation of Canada
Linda Hollett, The Canadian Emergency Nurses Association
Dr. Paul Boiteau, Canadian Critical Care Society
Gwynne MacDonald, Canadian Association of Critical Care Nurses
Dr. Brian Weitzman, Canadian Association of Emergency Physicians
Jim Mohr, Canadian Tissue Banking Interest Group
Betty Ross, Canadian Neuroscience Nurses Association
Dr. Rick Moulton, Canadian Neurosurgical Society
Positioning

It is CACCN’s position that the critical care nurse should recognize potential organ donors and participate in the process of organ donation. This process includes the exploration of the potential donor’s and family’s wishes and beliefs, provision of education as required regarding organ donation, and support for the family during the decision-making period. The nurse is in a position to promote the role of organ donation as a way to offer some meaning to a tragic and unexpected loss. While the critical care nurse can be crucial to successful organ retrieval, the premier focus of the critical care nurse remains the care of the donor and family. The critical care nurse must remain non-judgmental throughout the process. If, despite appropriate education and discussion, a family declines organ donation as an option, it is the position of CACCN that the family’s wishes be respected.

There are recurring themes to our position: the notion of “gifting” vs taking; the critical care team supporting the family and potential donor throughout the entire episode with information, explanations, comfort and expertise; the position that the “trained requester” be a member of the critical care team; and lack of support for routine or mandatory referral legislature (e.g. mandatory referral of deaths).

Building support

CACCN is in a unique position to influence and actually shape health care policy related to organ and tissue donation and transplantation. Forming alliances with our critical care physician colleagues, the Canadian Critical Care Society (CCCS), and building partnerships with neuroscience and emergency care nurses/physicians only adds strength to political action.

CACCN awaits the position paper that outlines the discussions and recommendations of the NCC. The document will be reviewed by the board of directors for approval and presented to the chapter presidents at Chapter Connections Day, September 11, 1999 for discussion and consensus. Information will be shared with the membership at CACCN’s annual general meeting Monday, September 13, 1999.

Gwynne MacDonald,
President, CACCN


Organ Donation and the Critical Care Nurse. Submission to the Canadian House of Commons’ Standing Committee on Health. March 16, 1999. CACCN.


Call for DYNAMICS 2001 Planning Committee Members

Dynamics 2001 will be held in Victoria, British Columbia and chaired by Gwynne MacDonald. Any CACCN member interested in working on this planning committee should submit a resume and summary of conference planning experience to the CACCN national office by September 30, 1999. Selection of the planning committee members will take place in October 1999.

For further information about this exciting opportunity, please contact the CACCN national office.
Question to the board

Question

I’ve been visiting the CACCN homepage for three years now - are there any new and exciting changes coming in the near future?

Answer

In July 1996, CACCN embarked on a new adventure - we introduced our own CACCN homepage on the internet, and provided national office with e-mail access to the board of directors and association membership. Over these past three years, CACCN has enjoyed tremendous success with these technologies - in fact, where would CACCN be without e-mail! As CACCN ventures into its fourth year of being on-line, we can be proud of our accomplishments thus far, and anticipate our future successes.

Since the homepage’s inception, the board of directors has eagerly followed the positive response to our homepage by the CACCN membership, the critical care nursing community and corporations. To date, there have been almost 10,000 hits on our site. Although some of these are repeat visitors (we are not yet able to track visitor demographics), this number is very impressive! In addition to website visits, numerous new CACCN memberships have been received using the on-line membership application form, and almost $1,000 in revenue has been generated from employment postings.

Early in 1998, when CACCN’s critical care nursing survey (Hewlett-Packard, 1998) results were analyzed, the board of directors was surprised to learn that only 36% of the 472 respondents were aware that CACCN had a homepage. While this statistic was initially disappointing, in retrospect, it demonstrated the tremendous potential to reach more critical care nurses!

In this spirit, the CACCN Board of Directors has continued to investigate leading edge options for our homepage, along with ways that on-line technologies can assist the work of the association. In the remaining paragraphs, we would like to outline some upcoming, exciting changes, as well as inform you, or perhaps remind you, of the wealth of information already available on our homepage.

continued on page 8...

CRITICAL CARE NURSES LOOKING TO THE FUTURE

With development underway on a new critical care building at the Health Sciences Centre, the critical care program is looking to the future. Presently, however, we are looking for critical care nurses. We offer:

• an extensive orientation program
• ongoing training and educational opportunities
• staffing schedules that may be flexible to individual needs
• excellent support structure
• opportunities to join committees
• a central location
• research opportunities
• room for advancement
• participation in nursing rounds

As the province’s recognized Trauma Centre and Aboriginal Health Care facility, the Health Sciences Centre has permanent full and part-time opportunities for critical care nurses in:

• Surgical/Intermediate Intensive Care Unit
• Medical Intensive/Coronary Care Unit
• Post Anesthesia Care Unit - Adult and Pediatric
• Pediatric Intensive Care Unit
• Adult and Pediatric Emergency
• Neonatal Intensive Care Unit

If you have critical care experience, are excited about career development within your profession, and would like to explore your potential at the Health Sciences Centre, please send a resume to:

Mail: Human Resources, HEALTH SCIENCES CENTRE, 60 Pearl Street, Winnipeg, Manitoba, R3E 1X2
Fax: (204) 787-1376; E-mail: SusanGoertzen@hsc.mb.ca; or call the Centre’s Nurse Recruiter at (204) 787-1842.
As it is now...
Currently, the CACCN homepage has 13 main components which are changed and updated with varying frequencies. Four of these components outline basic information such as: membership criteria; on-line application form; association objectives, mission and philosophy statements; and our national constitution and bylaws. Also posted is information about CACCN’s publications and awards.

On a more regular basis, several components are updated to reflect current CACCN activities and items of relevance to critical care nursing. These components include:

- **Dynamics of Critical Care conferences** - For each conference, both the call for abstracts and the conference brochure are published on-line. Promoting our conference on-line has prompted international requests for exhibitor packages for the tradeshow, as well as providing us with cost-effective and widespread access to international critical care nursing colleagues. It is expected that with upcoming changes, delegates may soon be able to register on-line! More of that later!
- **Chapters’ information pages** - We are pleased to provide opportunities for the 11 chapters of CACCN to promote their upcoming educational events, as well as providing contact information for each chapter. These chapter pages are updated as soon as information is received from the chapters. Watch here for future events in your locale!
- **Official Journal** - After the release of each issue of the official journal, the titles of the articles are posted.
- **Critical Care Research** - As a sample of the tools available, this section provides information to help both the novice and expert. Options currently available include: abstracts from Canadian critical care nursing research; free access to MEDLINE; links to research information and resources; and information on awards and grants. This section is still in development and it is expected that the newly organized CACCN research utilization committee will help to augment the structure and content of this component. Watch for exciting things to happen here!

- **Critical Care Chatter** - About 18 months ago, a very simple idea blossomed into what is now called “Critical Care Chatter”. This component of the homepage is the most “interactive” and variable - and we believe, has spurred the greatest “repeat” interest in our homepage. Here, critical care nursing colleagues, from both within and outside Canada, can informally dialogue in the format of questions and responses. There are over 20 different topics currently being “discussed”. Why not post a question or issue you’ve been contemplating? Do you have insight to share regarding a posted query? Your nursing colleagues are eager to learn and help.

What’s new?
With the momentum gained from three years of on-line successes, the board of directors is confident that the following new and exciting changes to the homepage will be beneficial to the association in both the near and distant future. Execulink (CACCN’s internet service provider) and CACCN’s own webmaster, Scott Reid of London, Ontario will be working diligently over the next few months to implement these new projects - it is expected that some of these new changes will be unveiled at Dynamics ’99 in Ottawa!

The first and obvious change is the new CACCN homepage address! As CACCN endeavours to make greater use of the homepage as a communication tool for our membership and public, and to establish itself as a stronger international presence, CACCN has recently invested in a proper, registered domain name for our homepage. This new address will be functional as of September 1, 1999 - watch for the announcement. Never again will CACCN have to change its homepage address!

Using a new software package, CACCN will be dramatically enhancing the website’s design. The creation of a new, sophisticated cover page should be enticing and more user-friendly for all visitors! Also involved will be a major restructuring of content to allow more upfront and direct access to key areas of interest such as critical care nursing certification, important critical care links (ie., Canadian Critical Care Society [CCCS]; the American Association of Critical Care Nurses [AACN]; and the Australian Confederation of Critical Care Nurses [ACCCN] and the very latest CACCN news). We’ll be looking for your feedback on these exciting changes in the months ahead!

With enhancements to our monthly internet service, CACCN will soon acquire two new capabilities: web stats - the capability to gather statistics and origin of our daily visitors; and e-commerce - the technology to allow CACCN to offer our members the option to use VISA on a secured line for membership renewals, conference registrations, publications purchases, etc.

The final, and perhaps most exciting change for CACCN members, will be the creation of a new “restricted to CACCN members only” component. Although the exact configuration of this component has not been determined, it is expected that it will include the following features:

- opportunities for on-line participation in issues of critical importance
- on-line CACCN membership directory - listing of critical care nurses with information about employer, position, areas of responsibility, expertise, credentials and work contact information.
- critical care nursing research reviews and critiques
- ability to download CACCN screen savers and promotional materials
- and much, much more.

Closing thoughts...
Following the direction provided in CACCN’s strategic plan (1999) and the association’s mission statement, the board of directors is instituting many changes that will help respond to the professional and educational needs of Canadian critical care nurses. The development, maintenance and ongoing enhancement of the CACCN homepage is one element of fulfilling this key responsibility. We hope you’ll look for us on-line, contribute your expertise, and forward your feedback to national office!

Heather E. Reid, ARCT, BA, MSc
Administrator,
CACCN, national office
Nominees for the CACCN Board of Directors
April 1, 2000 - March 31, 2002

As of May 30, 1999, the deadline for submitting nominations for the national board of directors, three nominations (one from each CACCN region) for the term April 1, 2000 to March 31, 2002, had been received in national office. In accordance with our constitution and bylaws, nominations for board positions will also be accepted from the floor at the CACCN annual general meeting, September 13, 1999 in Ottawa, Ontario. Candidates interested in being nominated are asked to contact national office for further information and the board nominations package. Candidates being nominated from the floor will have the opportunity to circulate their personal statements and biographical information during Dynamics '99, as well as a brief opportunity to address the CACCN members at the annual general meeting.

Pam Hughes, Halifax, Nova Scotia, CACCN Eastern Region

Hello from the east coast. I entered nursing late, following a diploma in agriculture (biology lab), but my enthusiasm was certainly fueled when I was introduced to the world of critical care.

I have been working in medical surgical ICU over the past 13 years and most recently added the third dimension of neuro ICU. I’ve been actively involved in CACCN at the chapter level since 1987, and successfully completed my certification in critical care in 1997. I am also a member of the CACCN working group creating a position statement concerning withdrawal of life support issues.

I believe that critical care nurses are a very dynamic, well-educated body of professionals that many of the other health team members look to for input, guidance and opinion in delivering compassionate, highly-skilled care on a daily basis.

It is my goal, if elected to the board, that I bring a new awareness of CACCN to the bedside - showing its support, educational opportunities and a feeling of “group” to many who are faced with the challenges of economic restraint and technological growth as we enter the year 2000.

Brenda Morgan, London, Ontario
CACCN Central Region

As I enter the second year of my term on the board of directors, I realize how quickly time passes. Two years is barely enough time to plan and implement changes... a second term would provide an opportunity to see a number of exciting projects through to completion. During the past year, my contributions as a member of the board have focused on the planning and preparations for Dynamics ’99 as conference chairperson, and as the board liaison to the Canadian Nurses Association critical care certification committee during a time of significant change to the examination.

During the last half of my term on the board, my focus will include the development of a position paper that addresses the current issues facing critical care nurses. Factors affecting future recruitment, retention, underemployment and workload will be central to this document. I am excited about this initiative, as I believe it is an important opportunity to profile to government and the public the significant contributions made by critical care nurses, and to provide a mechanism to facilitate improvements, in a way that demonstrates our professional commitment to patient care.

This is my second experience as a member of the board of directors. Between 1990 and 1994, I was fortunate to have the chance to participate on the board in a number of roles, including that of president. It is impressive to see how far we have come during the past 10 years, and it would be an honour to continue to represent critical care nurses as we move our association forward in the new millennium.

I am deeply committed to the important work accomplished by critical care nurses in Canada, and would consider it a privilege to continue to work towards the development of our profession.

Cindy MacVicar, Edmonton, Alberta
CACCN Western Region

I have been a nurse for over 20 years. My background has been extensive and varied, including general surgery, plastics EENT, a burn unit, neurosurgery and a small neuro intensive care, and for the past 14 years, adult intensive and coronary care.

My interest in CACCN is multifaceted - this is a group that focuses on critical care in all its aspects, from practice and standards, to a legislative aspect.

The CACCN promotes continued education for critical care nurses, advocating us toward growth, both personally and professionally. It also provides a network and forum for sharing concerns and bouquets for critical care nurses.

I have been president-elect and president during an extremely busy and active phase of the Greater Edmonton Chapter.

My potential contributions to the national board of directors are many, and I hope to bring my enthusiasm and energies to it for the continued success and growth of our organization. I also hope to bring a western region point of view to the board, and a national perspective back to the western region. Finally, I would like to bring my knowledge and skills to our national board of directors to continue my own growth as a person and professional.
Certification Update

The Canadian Nurses Association (CNA) national certification examination in critical care nursing consists of a sample of multiple choice questions (called items) that are designed to test knowledge and comprehension, application and critical thinking skills within this specialized area of nursing. The Standards for Critical Care Nursing Practice in Canada (CACCN, 1992), and the Specialty Designation Proposal for Critical Care Nursing (CACCN, 1993) developed by the Canadian Association of Critical Care Nurses (CACCN) provided the basis to create a critical care certification examination. The questions are developed from a blueprint (CANNA, in press), which is comprised of a group of critical care competencies that describe the expected standards for nursing practice within the area of specialty. Assessment Strategies Incorporated (ASInc), a subsidiary of the CNA certification program, is responsible for examination development, administration and evaluation. Experienced nurses from across Canada (both members and non-members of CACCN) have provided the content expertise for both competency and examination development.

In March 1999, 105 nurses successfully completed the fifth CNA critical care nursing certification examination, bringing the total number of nurses with the credentials CNCC(C) - Certified Nurse in Critical Care (Canada) - to 893. The year 2000 will bring a number of important changes to the examination, and will represent the first occasion when nurses certified in critical care will renew their certification (certification is a five-year term). The deadline for recertification or to apply to write the March 25, 2000, examination is November 5, 1999.

In the fall of 1998, the competencies for the critical care blueprint were reviewed and revised. Existing competencies were reassessed for continued relevance, and updated to reflect our rapidly changing environment. As part of the ongoing effort to ensure examination quality, and in response to feedback from examination surveys, some significant changes to the competencies were made. As the framework for the examination, these changes will be reflected in the examination as follows:

1. Adult-only content
   Feedback from critical care nurses has repeatedly supported the development of separate critical care certification examinations for adult and paediatric areas of practice. Consequently, the year 2000 examination will be based on the adult client only. A separate paediatric critical care certification process is planned for the future, with the specific methodology yet to be determined. CACCN and CNA have received feedback from a number of members indicating that they would write the certification examination when it became all adult.....the opportunity is now available!

2. Reduction in psychosocial items
   The psychosocial domain of critical care nursing is an important component of our practice. While CACCN, the competency development task groups, and the CNA critical care nursing examination committee strongly support the importance of these skills to holistic critical care nursing practice, it is well recognized that multiple choice items are a weak method of evaluating these competencies. Psychosocial questions are difficult to develop and to write. Consequently, most of these competencies have been reclassified as “assumptions”, indicating that they are expected components of practice for any critical care examination applicant. In order to demonstrate the ongoing commitment to ensuring this area of practice remains important, alternative methods to measure these skills will be explored by ASInc. The number of psychosocial competencies tested on the multiple choice examination has been reduced.

3. Reclassification of competencies
   The competencies have been reclassified into systems, rather than by the nursing process. These systems include cardiovascular, respiratory, neurological, renal, gastrointestinal, endocrine, immunology/hematology, musculoskeletal/integumentary, and psychosocial (includes communication and comfort) competencies. The recategorization of the competencies provides more direction to item writers (nurses who develop test questions), which should reduce the potential to have one area of practice over-represented on the examination.
Some frequently asked questions about certification

I am a paediatric nurse already certified in critical care. How will the removal of paediatric content affect my certification?

Paediatric nurses already certified will retain their certification in critical care. Continuing education hours in paediatric critical care will continue to qualify for recertification, ensuring that certified paediatric nurses who recertify every five years will maintain their earned credentials. Until a separate paediatric certification program is available, the credentials will continue to be CNCC(C) for both adult and paediatric nursing practice. Once the paediatric component has been determined, credentials will be re-evaluated.

Why write the exam?

The CNA certification program offers nurses an opportunity to demonstrate and receive recognition for their advanced knowledge and skill. Over the next few years, it is anticipated that there will be a number of job opportunities opened up for nurses. Certification in critical care provides a national credential that enhances a critical care nurse’s attractiveness to potential employees. While currently very few institutions offer financial recognition for specialty certification, many offer preferential hiring. A number of efforts by CACCN are being made to raise the profile of certification, including a letter writing campaign appealing for institutional support and recognition. With a total of 10 specialty certifications available, and 8,114 nurses certified in Canada, the voice of certified nurses is becoming stronger, increasing the importance of lobbying efforts to nurses’ unions and hospital associations.

Remember, colleagues who have written the certification examination repeatedly indicate that the professional development associated with preparation for the examination, and the personal satisfaction achieved, are the two greatest benefits of certification. As well, certification may offer an advantage to nurses interested in applying for job advancement in critical care... a lot of changes can occur in today’s health care environment during a year-and-one-half. Keep in mind the turn-around time between applying to write the examination and becoming certified in critical care is long. Once the November 5 deadline for the March 2000 examination passes, the next opportunity to write is the year 2001!

Would you like to join the growing number of critical care colleagues certified in critical care next year? Take the challenge and call CNA for an application guide today!

Brenda Morgan, RN, BScN, CNCC(C),
Director, Certification

References


CACCN’S RESEARCH GRANT

• GENERAL INFORMATION •

I. Grant Available:

CACCN’s research grant has been established to provide funds ($1000) to support the research activities of a CACCN member that is relevant to the practice of critical care nursing. A grant will be awarded yearly to the investigator of a research study that directly relates to the practice of critical care nursing.

II. Eligibility:

The principal investigator must:
• be a member of CACCN in good standing for a minimum of one (1) year
• be licensed to practice nursing in Canada
• conduct the research study in Canada
• publish the findings in the *Official Journal of the Canadian Association of Critical Care Nurses*

CACCN members enrolled in graduate nursing programs may also apply. Members of the CACCN Board of Directors and the awards committee are not eligible.

III. Application Requirements:

• a completed application form.
• a grant proposal not in excess of 5 pages exclusive of appendices. Appendices should be limited to essential information, eg. consent form, instruments.
• a letter of support from the sponsoring agency (hospital, clinical program) or thesis chairperson/advisor (university faculty of nursing).
• evidence of approval from an established institutional ethical review board for research involving human subjects and/or access to confidential records.
  Refer to CNA publication *Ethical Guidelines for Nursing Research Involving Human Subjects*.
• a brief curriculum vitae for the principal investigator and co-investigator(s) describing educational and critical care nursing background, CACCN participation, and research experiences. An outline of their specific research responsibilities is to be included.
• proof of CACCN active membership and Canadian citizenship.

IV. Budget and Financial Administration:

• funds are to be used to support research expenses.
• funds must be utilized within 12 months from the date of award notification.

V. Review Process:

• each proposal will be reviewed by a research review committee. Their recommendations are subject to approval by the board of directors of CACCN.
• proposals are reviewed for potential contribution to the practice of critical care nursing, feasibility, clarity and relevance.
• deadline for receipt of application in CACCN National Office is January 1. The recipient of the research grant will be notified by mail.

VI. Terms and Conditions of the Award:

• the research study is to be initiated within six months of receipt of the grant. Any changes to the study timelines require notification in writing to the board of directors of CACCN.
• all publications and presentations arising from the research study must acknowledge CACCN.
• a final report is to be submitted to the board of directors of CACCN within three months of the termination date of the grant.
• the research study is to be submitted to the OJCACCN for publication.
3M Canada Ad
Tempa Dot
use four-colour film from last issue
CACCN p. 13
Premier Dynamics Issue
Critical Care Nursing Abstracts

Four of the strategic goals of CACCN are: 1) to provide educational opportunities for critical care nurses; 2) to optimize the quality of critical care nursing practice; 3) to provide varied opportunities to profile critical care nursing research, and 4) to provide opportunities for nursing colleagues to network.

CACCN’s national conference, Dynamics of Critical Care, provides an excellent venue for accomplishing all of these goals, however only a portion of CACCN members are able to attend a Dynamics conference annually. Cognizant of this, and using the example of international critical care nursing journals, CACCN is pleased to be printing a selection of the abstracts from Dynamics ‘99 in this premier “Dynamics” issue of our official journal.

The following abstracts represent a selection of the concurrent session abstracts being presented during Dynamics of Critical Care ‘99 being held in Ottawa, Ontario, September 12-15, 1999. To assist the reader, the abstracts have been divided into three sections: clinical, professional and caring environment.

It is our hope that CACCN members interested in pursuing a profiled topic will contact our national office at (519) 649-5284 or caccn@execulink.com to receive information regarding how to contact the author about the work.

We hope you will carefully consider the critical care nursing topics currently being investigated and discussed in various centres across Canada and internationally!

Idiopathic pulmonary hypertension: A case study
L. Hunter, Ottawa, Ontario

Idiopathic pulmonary hypertension (IPPH) occurs when the pulmonary vasculature undergoes extensive remodelling. Young and middle-aged women are the most affected age group. Although there is no cure for this disease process at present, there are a number of treatment modalities available. The median survival is 2.6 years from diagnosis and is largely a function of the severity of the disease at hand.

This presentation will cover:
I. the characterizations of the disease process,
II. the signs and symptoms of IPPH, and
III. the available treatment options.

A case study scenario will be presented to illustrate the practical application of this information and to show nursing measures used in taking care of a patient with IPPH.

Acid-base balance: A necessary overview
L. Hunter, Ottawa, Ontario

All critical care nurses must have an understanding of acid-base balance as a fundamental concept. Blood gas measurements, including pH analysis, have more immediacy and potential impact on direct patient care than most other laboratory values. Working in a multi- and inter-disciplinary fashion, it is the bedside nurse in the critical care setting that has first glance at these results. Many times, potential ventilator changes are proposed based on these results.

This lecture will cover:
I. primary overview of acid-base balance,
II. four regulations of body fluid pH,
III. how to read and interpret a blood gas result,
IV. primary abnormalities,
V. compensatory mechanisms, and
VI. anion gap.

Clinical examples will be utilized to keep the overview pertinent to the clinical setting. This presentation will be of most interest to new/beginning critical care nurses and those seeking a review of acid-base balance.

The effects of therapeutic touch on continuous EEG waveforms in the comatose critically ill patient

Standard electroencephalography (EEG) records a brief sample of the patient’s cortical activity. Many neurology patients are at risk of developing seizures or other life threatening conditions such as status epilepticus or stroke. Continually monitoring the EEG (CEEG) of high risk patients in the critical care setting alerts the nurse and physician to potential deterioration in level of consciousness and is the best method for detecting seizure activity for therapeutic response at a reversible stage.

Therapeutic touch (TT) is presented in the literature as a non-invasive method of promoting relaxation and reducing or alleviating anxiety and pain. The technique involves the movement of hands in a downward motion from head to toe with the hands positioned four to six inches away from the body. However, there are no published studies that have examined the effects of TT on CEEG waveforms in the attainment of relaxation as demonstrated by changes in the appearance of the waveforms.

The purpose of this presentation is to share the findings of a research study designed to determine the effects of TT on CEEG waveforms in 20-30 critically ill patients experiencing cortical dysfunction. It is hypothesized that TT will change the pattern and rhythm of CEEG waveforms; and will elicit a
relaxation response as demonstrated by a return to baseline of heart rate and systolic blood pressure. The presentation will highlight the clinical applications of CEEG and describe the experiences of two critical care nurses practising TT and CEEG monitoring in a 30-bed critical care trauma centre.

Streptococcal toxic-shock syndrome
J. Glowa and J. Van Eck, Calgary, Alberta

Group A streptococcus (GAS) is an organism that has become more virulent in the recent past. Recently, severe invasive GAS infections associated with shock and organ failure have been reported with increasing frequency, predominantly from North America and Europe. These infections have been termed streptococcal toxic-shock syndrome. The majority of patients also have clinical signs of soft tissue infection, which progresses to necrotizing fasciitis and/or myositis.

Necrotizing fasciitis is a deep-seated infection of the subcutaneous tissue that progressively destroys fascia and fat but may spare the skin and muscle. It can be caused by GAS or other organisms. Myositis is an inflammation of muscle tissue, usually of the voluntary muscles.

Early recognition of signs and symptoms of invasive GAS is crucial. For patients with invasive deep tissue infection, prompt and aggressive surgical exploration and debridement is critical. Penicillin remains the drug of choice for treatment of GAS infections. Immediate complications of streptococcal toxic-shock syndrome can include renal and respiratory failure, hypotension and shock.

This presentation will discuss the signs and symptoms, diagnosis, treatment, nursing care and considerations of streptococcal toxic-shock syndrome and necrotizing fasciitis. A case study will be presented.

Infant massage in the NICU
A. Cattral and P. O'Flaherty, Ottawa, Ontario

The nursing staff at our tertiary level neonatal intensive care unit (NICU) have implemented guidelines for developmentally sensitive care in our nursery routine. Recently, the nurses have focused on the importance of neurodevelopmental care, the interpretation of infant cues, and the provision of a developmentally supportive environment. As we know, developmental care is multifaceted, including all the factors of care that interface directly or indirectly with our infants.

Approximately 50% of our population is comprised of infants < 38 weeks gestation. These infants have been referred for surgery, cardiac or genetic assessments, or have developed complications associated with prematurity. Many require long-term hospitalizations creating challenges in promoting and facilitating family-centered care.

Initially, these infants benefit from current initiatives of developmentally sensitive care. We have found that there remain infants who, despite these measures, still do not get adequate rest. Some require increased sedation. What could we do to enhance the level of wellness for these infants throughout prolonged hospitalization? Can we provide more individualized relaxation therapies for the technologically dependent infants? Recently, two neonatal nurses from our NICU attended an infant massage workshop. Our intention is to develop and implement an innovative instruction program of infant massage therapies for the caregivers of our neonates with special needs.

The expectations of the learning program for parents and nursing staff will be:
1) To identify the benefits of infant massage,
2) To provide the knowledge necessary to assess and interpret infant ‘cues’,
3) To describe a continuum of infant massage techniques,
4) To design individualized relaxation therapies, and
5) To demonstrate the skills necessary for infant massage therapy.

Infant massage has become a popular intervention within the framework of developmental care initiatives. Studies have shown a variety of outcomes, including improved performance on developmental tests, increased growth and earlier discharge. It is our intention that once practice guidelines for infant massage are implemented, tools to evaluate its efficacy and safety, as well as incorporate it into the discharge planning process, will be created.

Abdominal compartment syndrome
S. Leframboise and F. Smith, Ottawa, Ontario

Working in a surgical/trauma ICU, the opportunities for nursing a patient at risk for abdominal compartment syndrome can be numerous. This can be very challenging as early recognition of signs that a patient is developing an elevated intra-abdominal pressure is crucial, given the high mortality rate associated with abdominal compartment syndrome. Understanding the causes of abdominal compartment syndrome and the pathophysiology of the affected organs can lead to early surgical intervention and help decrease the patient’s mortality.

Critical care nurses play an invaluable part in recognizing patients who are at risk of developing abdominal compartment syndrome. The nursing implications and methods to measure intra-abdominal pressure will be presented. The significance of the measurements and the effects on the various internal organs will be defined. Pre-/post-operative management and treatment of a patient with abdominal compartment syndrome will be explained.

Caring for post-partum cardiac patients in the coronary intensive care unit
K. Alexander and J. Allen-Brunt, Toronto, Ontario

Advances in treatments and medications have allowed women with cardiac dysfunction to successfully proceed through pregnancy and delivery. During pregnancy, an increase in cardiac workload, including the increased heart rate and cardiac output, can challenge an already compromised heart. Conditions such as cardiomyopathy and severe valvular dysfunction can worsen during pregnancy and after the birth. The mother can experience difficulties as the heart must manage the shifting of fluid. The immediate post-partum period can be life-threatening for women with cardiac dysfunction and is often monitored closely using a pulmonary catheter, arterial line and a rhythm display.

It is essential for cardiac nurses to have an understanding of the labour process and the physical changes which occur post-partum. The application of cardiac knowledge assists to provide competent intensive care to these patients. This presentation will discuss the literature which guides nursing practice of cardiac patients in the coronary intensive care unit during the first 48-hours post-partum. Case scenarios will be discussed with respect to the successes and recommendations from our program.
The Road Safety and Motor Vehicle Regulation Directorate of Transport Canada conducts a program of in-depth investigations of collisions across Canada. The work is conducted in a multi-disciplinary format involving both engineering and medical professionals. The aim of the research is to understand the mechanisms of collision-related trauma, and to develop appropriate counter-measures. Much recent activity has been focused on occupant restraint systems such as seat belts, child restraints and air bags. This presentation will provide an overview of this research and its findings, and will be illustrated by means of case studies of real-world crashes.

The dangerous side of heparin: Allergy and HIT
M. Donahue and P. Price, Calgary, Alberta

Most critically ill patients receive heparin in one form or another: in flush solutions, intravenous solutions or subcutaneous injections. Heparin is the most commonly prescribed anticoagulant and has been used clinically since the 1930s. We immediately think of bleeding as the most serious complication, but heparin is also associated with other more obscure and complex problems.

The purpose of this presentation is to describe two relatively rare but potentially life-threatening consequences of heparin therapy: heparin allergy and heparin induced thrombocytopenia (HIT). The pathophysiology and significance of heparin allergy and HIT will be presented. A case study of a cardiac surgery patient allergic to heparin will illustrate the issues and dilemmas involved, and the possible alternative therapies for thrombophrophylaxis.

It is important for critical care nurses to be aware of these complications. Early recognition of coagulation abnormalities, prompt intervention, and alternative therapies could significantly impact patient outcomes. This presentation will be relevant to all critical care nurses who administer heparin.

Traumatic amputation and re-attachment of a lower limb: Kayla’s story
S. Martin, Kingston, Ontario

This is the unique story of 10-year-old Kayla who had her leg traumatically amputated in a pedestrian-motor vehicle collision. The fortunate circumstances around her pre-hospital care, including immediate bystander and EMS responses, the proper packing of the limb and the speed at which she arrived at hospital prompted the surgeons an excellent candidate for limb re-attachment.

There was limited literature supporting this distinctive procedure and the specific care she would require. There was a commitment to maintaining the re-attached limb, yet the procedure alone was a threat to Kayla’s life.

This presentation will start with an outline of the criteria, risks and considerations, and the surgical procedure performed. The primary focus of this presentation will then be the essential nursing care that was provided over the week that she was in the intensive care unit. This specialized care included perfusion assessment with hyperthermic therapy, balancing fluid resuscitation with a coagulopathy and volume losses, preventing acute renal failure related to rhabdomyolysis, ensuring ventilation, managing pain and nutrition, and supporting patient and family needs with confidentiality and compassion.

A videotape of Kayla’s physiotherapy session and her mother’s perspective one year later will illustrate the success of this procedure and the extensive nursing care they received.

Acute iron poisoning: A case presentation
B. Luffman, Kingston, Ontario

Iron is an essential dietary nutrient and a common medication for children and adults, but when it is ingested in sufficient quantities it is potentially lethal. Iron poisoning continues to be the leading cause of paediatric accidental ingestion fatalities and is a common choice for intentional overdose in adults.

Iron is widely available in various forms as an over-the-counter purchase. Ferrous sulphate, the most common prenatal supplement and children’s chewable vitamin, is found in many households. This availability along with a lack of awareness by many adults of the potential lethality of acute iron poisoning are important contributors to the continuing risk of iron ingestion and poisoning.

This presentation will review what is required of the critical care nurse to competently care for the patient admitted with acute iron poisoning. It will include: the important elements of assessment, discussing the diagnostic and laboratory tests that are useful and those which are not; a description of the five clinical stages of iron toxicity and the current recommendations for treatment including the role, if any, of activated charcoal, gastric lavage, whole bowel irrigation and chelation therapy.

The complexity of these critically ill patients and the caring role of the critical care nurse will be demonstrated by the case presentation of a young teenager who presented to our intensive care unit after an intentional iron ingestion.

The patient with acute iron poisoning could present to any critical care unit and the information presented will be useful to all critical care nurses.

Myocardial infarction in women: Precursors, presentation, process and recovery
A.K. Woodend, A. Stolarik and E. Kerr, Ottawa, Ontario

Heart disease has not traditionally been considered a “woman’s disease” and yet 55,000 Canadian women die of cardiovascular disease each year. The manifestation, treatment and ramifications of heart disease are ostensibly different for women for both physical/biological and cultural reasons. In almost half of men with heart disease, a myocardial infarction (MI) is the first indication of heart disease whereas this is the case in only one-third of women. Although the most common initial manifestation of heart disease is chest pain, it has a limited prognostic value in women. Furthermore, women with heart disease, or suspected heart disease, are treated less aggressively. Women arrive in the emergency room further into their MI than do men, are less likely to be admitted to a coronary care unit and are less likely to receive thrombolytic therapy. A number of studies have shown that after controlling for age, comorbidity, and disease severity, women undergo fewer angiograms, coronary bypass grafts and percutaneous transluminal coronary angioplasties. Women have a worse prognosis than men with the greatest mortality differences occurring in the first 30 days after the infarct. Women with heart disease appear to be at a higher risk than men of experiencing emotional distress and a lower quality of life. Despite this, they are less likely to be referred to, and to participate in, cardiac rehabilitation programs. They
are also more likely to drop out of them. Women also experience difficulty in relinquishing homemaking and family responsibilities and often resume these roles early after discharge despite physical and psychological symptoms. This presentation will highlight the implications for critical care nurses of “women’s” unique experience of heart disease. It will also include a discussion of strategies to optimize care in this special population.

**A chilling plunge:**
**How L.C. beat the odds**
*A. Landriault and S. Boissonnault, Ottawa, Ontario*

Severe hypothermia leaves few survivors. Through effective, competent and coordinated efforts, full resuscitation may be achieved even when there are initially no signs of life. Beware, ye critical care nurses, for the transfer from the emergency department to the intensive care unit alone can cause circulatory collapse of a hypothermic patient. A well-prepared critical care nurse is a vital link in the “chain of survival”, for these patients are at risk of developing even more life-threatening emergencies.

The audience will be guided through the first 24 hours of L.C.’s battle to survive her perilous dive into the frigid waters of the Rideau River. Through this case presentation, the speakers will define hypothermia, review the ACLS guidelines, and examine treatment modalities and complications associated with submersion hypothermia.

**Nitric oxide**
*B. Luffman, Kingston, Ontario*

Inhaled nitric oxide (INO) was identified as a selective pulmonary vasodilator in the late 1980s. This discovery led to the administration of INO for a variety of clinical applications. This presentation will answer the questions “What is nitric oxide?” and “What are the physiological effects of INO?”. A review of the current clinical applications will include neonatal, paediatric and adult populations. The adverse and potential toxic effects of INO will be discussed, followed by the practice issues regarding delivery techniques and monitoring of the patient receiving INO.

This presentation will conclude with a summary of the current questions and debates surrounding the clinical outcomes following the administration of INO.

**The problem of sleep deprivation in ICU**
*M.R. Sumitro, Ottawa, Ontario*

Critical care nursing is concerned with anticipating, recognizing and preventing real and potential problems of the acutely ill patient. One such problem is sleep deprivation, which is encountered by ICU patients everywhere. Several studies have described the length of sleep and extent of sleep deprivation in ICU patients. The literature suggests that sleep is disrupted in the critically ill by a number of specific internal and external factors. The circumstances surrounding the admission of the patient to ICU have a particularly negative effect on both the quantity and quality of sleep. With the advent of sophisticated invasive and non-invasive monitoring to measure important hemodynamic and respiratory parameters and the intensification of nursing care, the ICU patient is subjected to a variety of stressors which predispose him/her to sleep deprivation.

Sleep deprivation in ICU refers to decreases in the consistency, quality or amount of sleep the patient gets. The responses to sleep deprivation as documented in the literature are the behavioural and cognitive decrements that are characteristic of the ICU syndrome. The occurrence of sleep deprivation can have profound implications on the patient’s healing process. It is, therefore, crucial for ICU nurses to promote sleep and prevent sleep deprivation. Nurses should be aware of how the high-tech ICU environment today is contributing to sleep deprivation and take appropriate measures to counteract adverse situations. They should be familiar with the theories underlying the nature of sleep physiology and effects of sleep deprivation in order to plan a strategy of nursing interventions needed to enhance sleep in the critically ill.

Nursing interventions are directed towards preventing sleep deprivation by acting on the barriers to sleep using sleep promoting strategies.

**Implementation of analgesia/sedation scoring systems and protocols for critically ill adults**
*M. Loft, M. van Soeren, E. Pfeiffer and T. MacKinnon, London, Ontario*

Patients in the intensive care unit (ICU) must endure the natural course of their illness, which involves many necessary but uncomfortable treatment interventions. To facilitate critically ill individuals’ care and promote their comfort, effective analgesia and sedation are required. Research findings indicate most ICU practitioners do not routinely incorporate the use of assessment tools to monitor pain or sedation levels. The use of assessment tools can be an important factor when selecting the most appropriate drug for a patient’s symptoms and to achieve the goal of effective pain control and sedation. Multiple pharmacologic agents and variation in caregiver assessment often make drug selection a challenge. Recommendations from the Society of Critical Care Medicine indicate specific regimens for the provision of analgesia and sedation be utilized.

In the ICU at St. Joseph’s Health Centre implementation of a scoring system and protocol for the provision of analgesia and sedation has been introduced to improve patient care. The Motor Activity Assessment Scale (MAAS) and a Likert scale rating for pain were the assessment tools used for this project. Data collection regarding drug selection and dosing was performed pre- and post-implementation of the assessment scales. Unit based education with individual follow-up occurred prior to the introduction of the analgesia/sedation protocol. Evaluation of sedation practices pre- and post-implementation of the assessment tools and protocols to determine impact on patient care and possible benefits regarding cost-effectiveness will be reported.

**Aortic valve replacement in women:**
**Recovery patterns and issues**
*A. Stolarik, L. Clark and A.K. Woodend, Ottawa, Ontario*

Women who undergo aortic valve replacement with or without concomitant coronary artery bypass present a special challenge to nurses and other health care providers. Perhaps it would be appropriate to include the caption “ain’t no care map long enough” in any discussion of this patient group because the issues/concerns during recovery are unique. In addition, the length of hospital stay frequently exceeds that of other surgical patient groups.

The purpose of this presentation is to explore the problems women undergoing aortic valve surgery confront, contrast them with those of men, and to describe indicators nurses can use to identify women with aortic valve replacement who have special needs.
A retrospective chart review of 40 patients (20 women and 20 men matched for age and concomitant CABG) as well as telephone follow-up of 70 women and 140 men who had aortic valve replacement was completed and the findings will be described.

It is important to identify these patients as early as possible in order to mobilize appropriate resources both in hospital and after discharge. In addition, this presentation will assist nurses as they plan nursing care cognizant of the unique concerns of this patient group.

Left ventricular remodelling using endoventricular circular patch plasty (EVCPP)
S. Havey, S. Robitaille and B. Snow, Ottawa, Ontario

Left ventricular remodeling is the physiological change in the shape and size of the left ventricle that can occur following myocardial infarction. Development of left ventricular enlargement is determined by the size of the infarct and the degree of healing as well as left ventricular wall stress.

Left ventricular reduction surgery for the treatment of end-stage dilated cardiomyopathy introduced by Dr. Batista has gained acceptance. However Dr. Dor has written extensively of possible benefits of earlier “remodeling” surgical repair of left ventricle as an option in preventing the progression toward end-stage disease. This technique is applicable for both akinetic and dyskinetic ventricular scars. The mechanics of using a “circular” repair to improve hemodynamic status are proposed to have advantages over the classical “linear” repair.

The nursing literature has not reported on this surgical approach. This poster presentation will highlight the operative and post-operative nursing care of a patient undergoing ventricular remodeling by the technique described by Dr. Dor.

Alcohol withdrawal:
A community hospital experience
J. Sherlock, Peterborough, Ontario

Alcohol dependence is a major health care concern. Fifteen to 20% of all hospitalized patients are alcohol-dependent and acute abstinence can result in a life-threatening withdrawal syndrome. This can lengthen hospital stay, and increase morbidity and mortality.

We recognized this problem in our post-operative patients at the Peterborough Regional Health Centre. We are a 385-bed, two-site facility in the Kawartha Lakes region serving Peterborough, Victoria, Northumberland, Haliburton and a portion of Hastings counties.

Our primary goal was to develop guidelines for the treatment of potential alcohol withdrawal and a measurement scoring system to assess patients’ response to therapy. Our secondary goal was to educate all health care providers to the recommended guidelines.

This presentation will outline the process we followed, describe the guidelines and their use, examine our results and provide information on our future directions. Since the guidelines were implemented, the nursing staff feel more empowered in dealing with the physicians and more confident about the care of these difficult patients.

Development of clinical practice guidelines for the swallowing management in the tracheostomized patient

The goal of assessment in dysphagia management is to successfully predict those patients who are at risk of aspirating on the basis of a disordered swallow, as well as to determine those patients who are aspirating at the time of swallow. Decreasing the risk of, or preventing aspiration may then be possible through dietary modifications, training of compensatory strategies or other interventions.

Coordinated dysphagia management for the tracheostomized patient is important, as the presence of the tracheostomy tube itself is a risk factor for development of dysphagia. In a tertiary acute care setting, tracheostomized patients are regularly encountered in all hospital areas including intensive care, surgical care and medical care. Concern regarding consistency of practice in managing this population arose in the fall of 1996. A multidisciplinary team was struck with the objective of developing an evidence-based clinical guideline for orally feeding the tracheostomized patients. Membership includes representatives from nursing, nutrition, physiotherapy, respiratory, speech pathology and the physician group.

The literature review was grossly assigned to the following areas: 1) the effects of tracheostomy on swallowing function, 2) patient risk factors for dysphagia (additional to tracheostomy), 3) consideration when feeding the ventilated or previously ventilated patient, 4) the clinical bedside evaluation, and 5) instrumental evaluation. The literature was critically appraised and graded according to the guidelines given by the Ontario Health Care Evaluation Network.

From this review, a clinical practice guideline was developed. Prior to implementation of this guideline, the membership intends to measure the current knowledge and skill of the staff caring for these patients, and to measure the outcomes in the feeding of the tracheostomized patient. The information obtained will then supply a basis for comparison of data obtained following guideline implementation.

The goals of the clinical guidelines include improving the quality of life for our patients, decreasing the length of stay in the intensive care unit/hospital, decreasing the cost to the health care system by decreasing the number of readmissions to the intensive care unit secondary to aspiration, and increasing the level of knowledge and skill of the staff caring for these patients.

Translaryngeal tracheostomy:
On the cutting edge
J. Morrow and E. Marris Rogers, London, Ontario

Critically ill patients requiring prolonged intubation in an intensive care setting eventually require a tracheostomy, to both protect the patient’s vocal cords and facilitate weaning from the ventilator. The translaryngeal tracheostomy (TLT), developed by Professor A. Fantoni, evolved as a new technique that would eliminate the complications seen with the current surgical and other percutaneous tracheostomy techniques performed today. The TLT is innovative because retrograde dilatation of the trachea is possible using a new device which when inserted through the larynx is able to both dilate and convey the tracheostomy tube. Not only is there a decrease in complications for the patient, but also a decrease in cost for the health care facility as the procedure is done at the bedside in the ICU, eliminating the need for OR time and personnel. TLTs will likely be seen in Canada with increasing frequency for these reasons.

The University Campus of the London
Health Sciences Centre is currently the only centre in North America performing the TLT on a regular basis. The implementation of this change in practice is being evaluated through chart audits, to determine the impact on patient care (e.g., medications used, complications).

In this poster presentation, we will describe the indications and contraindications for use of the TLT, applying this information in case study format. The procedure itself will be described in detail through pictures and a short video presentation. The information we will present will outline patient history, type of medications required, complications of the TLT and specifics of follow-up care. Nursing implications with respect to preparation of the patient, monitoring during the procedure and care of the patient after the TLT will be discussed.

Pulmonary artery catheter removal by ICU registered nurses:
The time has come
C. Mawdsley, M.A. Davies and R. McCready, London, Ontario

In the fall of 1997, a program was created to train the intensive care unit (ICU) registered nurse (RN) for the removal of pulmonary artery catheters (PACs). The program was developed in response to some inefficiencies in the patient care process and the ICU RNs’ willingness to expand their skills in accordance to current provincial legislation.

After a review of the literature and current practices in other ICUs around North America, an evidenced-based protocol, training program and evaluation form were created. Due to barriers to ICU staff attending traditional in-services, the PAC removal training program encompassed a self-directed educational package, the use of an interactive website for hemodynamic waveform interpretation, and a performance checklist. During the year of 1998, over 120 nursing staff were successfully trained in removing PACs.

This change in practice was evaluated to determine the impact on patient care. Data collected included patient demographics and medical histories. Outcomes specifically measured were incidence of complications related to PAC removal (e.g., dysrhythmias, resistance to removal of PAC) by the ICU RN, compared to the incidence of complications with physician removal of PAC.

This poster presentation will describe the process used to ensure a successful change in practice, provide examples of the PAC removal program and PAC removal protocol, and summarize the evaluation data from the implementation of this practice change.

Initiating inotropes in a non-critical care unit
M. Adam and Y. J. Park, Ottawa, Ontario

Patients in congestive heart failure (CHF) whose condition has deteriorated beyond the point of symptomatic relief with the conventional therapy of diuretics, ace inhibitors and cardiac glycosides, can gain benefit from a trial of intravenous inotropes. IV milrinone has become the drug of choice for these patients because it can be safely initiated and administered outside of critical care with minimal monitoring. The advantages to the patient are obvious: an almost immediate relief from SOB, the ability to get a good night’s sleep, a reduction in fluid overload, and an increase in overall energy. The challenge for nursing in this situation is to understand the mechanism of action of the drug, to overcome the fear of delivering potent inotropes outside of critical care, and to realize that the patient is less likely to become critical with the drug than without it. This presentation will review the indications for the use of milrinone, and share the protocol for correct dose delivery in patients with chronic, debilitating heart failure.

Music therapy:
A nursing intervention to reduce patient anxiety prior to arterial sheath removal
M. R. Sumito, Ottawa, Ontario

Music has been used in a variety of ways for therapeutic purposes and has shown to benefit patients with its anxiolytic property. The objective of this pilot project is to evaluate the effect of music as a nursing intervention in alleviating patient anxiety prior to arterial sheath removal post percutaneous transluminal angioplasty. The conceptual framework to be used is derived from both stress and music theories. The project pre-test - post-test design will use a sample of 10 subjects from a critical care cardiovascular unit who will listen to their preselected taped music for 30 minutes. The Anxiety Visual Analogue Scale and State Anxiety Inventory are the instruments to be administered before and after the music intervention. Physiologic parameters of blood pressure and heart rate will be measured at baseline and at 10-minute intervals. A qualitative questionnaire will be used after the completion of the sheath removal procedure. Evaluation according to the structure, process, and outcomes will be made, and study results and conclusions will be discussed.

CACCN 10-3 Fall 1999
The tracheostomy team: A strategy for quality care
C. Mawsley, R. Gross, C. Harris, T. Moosa and A. Storie, London, Ontario

The tracheostomy team (TT), is a multidisciplinary team developed to maintain a comprehensive and consistent patient-centered plan of care for patients with tracheostomies. The TT consists of representatives from critical care nursing, respiratory therapy (RRT), and speech language pathology (SLP). The team was developed in response to inconsistencies and lack of continuity with our management of patients with tracheostomies, to minimize the occurrence of aspiration pneumonia for patients with tracheostomies, and to facilitate transfers of patients with tracheostomies from our intensive care unit (ICU) to other areas within our facility.

The TT provides consistency and continuity to tracheostomized patients as the TT follows all patients with tracheostomies throughout their hospital stay, from the point of initial tracheostomy to either decannulation or patient transfer outside of our facility. The TT assesses patients with tracheostomies for their eligibility for cuff deflation, swallowing assessments, Passy-Muir Valve (PMV) trials, and/or decannulation; and to identify and monitor concerns with secretion management, the tracheostomy site, or swallowing dysfunction.

The positive impacts of this team have been numerous: earlier consults for SLP and the initiation of cuff deflation and PMV trials, improved patient communication with the use of the PMV, implementation of evidence-based protocols for swallowing assessment and PMV trials, early monitoring and troubleshooting of patients with tracheostomies, and timely education for patients, families and nursing staff involved in the care of the patient with a tracheostomy.

On this poster, greater details will be provided: the process leading to the development of the TT, examples of the evidence-based protocols, descriptions of the roles and responsibilities of the TT, and examples of documentation strategies to enhance consistency and continuity. In addition, data will be provided that supports the necessity of the TT as integral for quality patient care for patients with tracheostomies.

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Development of an evidence-based multidisciplinary standard for prone positioning of the critically ill adult
P. Bradley, T. Tanguay, B. Anderson, J. Westby and J. Alberda, Edmonton, Alberta

Prone positioning is more frequently being used as a therapy for critically ill patients with hypoxemia refractory to conventional ventilation and positive end expiratory pressure. Prone positioning improves gas exchange in patients with acute lung injury by improving ventilation-perfusion relationships and by encouraging the opening of previously atelectatic dependent alveoli. The multidisciplinary health care team members were unfamiliar with prone positioning and nurses felt uncomfortable caring for and monitoring patients in the prone position. To ensure the provision of safe and effective nursing care to patients in the prone position, a multidisciplinary team of health care providers was convened to develop evidence-based guidelines for prone positioning and monitoring of the patient in this position. Using the CURN research utilization model, the committee met, reviewed the literature on prone positioning, conferred with experts on prone positioning, and developed guidelines for prone positioning including patient outcomes, potential complications of prone positioning and multidisciplinary interventions. The prone positioning guidelines have been trialed and revised. Following implementation of the guidelines, the patient care outcomes will be evaluated. The evaluative data will be used for revision of the guidelines and implementation process to ensure consistent compliance with the guidelines and a high standard of prone positioning in critically ill adults.

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Synergy model
M.A.Q. Curley, Boston, Massachusetts

Given the exponential changes occurring within health care, a clear sense of nursing’s unique contributions to patient outcomes is essential. This presentation describes a new way of thinking about nursing practice that is based on the needs and characteristics of patients and the demands of the health care environment predicted for the future. The fundamental premise of the synergy model is that patient characteristics drive nurse competencies. When patient characteristics and nurse competencies match and synergize, optimal patient outcomes result. This session will present the major tenets of the synergy model: patient characteristics of concern to nurses, nurse competencies important to the patient, and patient outcomes that result when patient characteristics and nurse competencies are mutually enhancing.

By creating safe passage for patients and families, nurses make a significant contribution to the quality of patient care services, containment of costs, and patient and family outcomes. The synergy model not only provides a conceptual framework for the certification of acute and critical care nurses in the United States, it may help patients, administrators and legislators better understand what nurses do.

Prepare to publish: Tips on preparing a manuscript for publication
P. Price, Calgary, Alberta

“I couldn’t possibly write an article.”
“I don’t have anything worthwhile to write about.”
“I am not qualified to write for publication.”

Do any of these statements sound familiar? This session is intended to dispel these beliefs. You can write an article. You care for the most complex patients in the
Hewlett-Packard Ad
CACCN p. 21
Artwork to come
health care system, so you do have something worthwhile to write about. Besides correct spelling and grammar, there are no special skills, certificates or diplomas required for publishing. You are qualified to write for publication.

The purpose of this presentation is to take the mystique out of the publication process. Each step of publishing an article will be explained, from idea formation to framing your first article. Practical examples and recommendations will be presented. The essential components of the APA format necessary for the Official Journal of the Canadian Association of Critical Care Nurses will be outlined and resources to assist you will be provided.

Computers in nursing: Strategies for teaching
J. Bouma, Calgary, Alberta
The implementation of computers is becoming commonplace in many hospitals. As health care moves into the information age, computer technology is moving closer to the bedside and requiring nurses to become involved in the daily use of the technology. Computer literacy is rapidly becoming a job expectation in all areas of nursing, from academia to the community and to the bedside.

Nursing is faced with the responsibility of accepting the challenge of computerization and developing strategies to facilitate implementation. While the thought of using a computer may be intimidating for many nurses, studies have shown that nurses are willing to learn computer technology. Critical care nurses have repeatedly demonstrated their ability to grasp the indepth technological advances made in their environment.

The transition from paper charting to computer documentation can be greatly assisted by clearly identifying teaching and learning strategies and recognizing support issues. This session will explore the realities of teaching bedside nurses to use computers, decreasing resistance to computer technology and incorporating the principles of adult learning specific to computer training.

Organ donation in a paediatric referral centre
E. Tsai, S. Shemie, D. Hebert, S. Furst, P. Cox and L. McCarthy, Toronto, Ontario
There continues to be a disparity between the demand for transplantation and the number of available organs. Given the scarcity of information available on organ donation in paediatric health centres, we have undertaken a study to identify factors influencing organ donation consent and procurement rates in the paediatric population.

One hundred and fifty-three medically suitable candidates for organ donation were identified in an eight-year retrospective review. Organ donation was requested in 84% of suitable cases. Consent was obtained in 63% of cases where requested, resulting in an average of 3.65 organs per donor for transplantation.

We have developed an organ donor consent team whose focus is on mandatory request, multicultural issues, decoupling and post-consent management. The inclusion of an organ donor coordinator has been identified as vital in helping to improve the consent rate.

This session will describe our study and the strategies developed to improve consent and organ procurement. Nurses will learn about the unique factors which influence paediatric organ donation. They will also learn how to identify a potential organ donor and will gain knowledge with respect to medical and nursing management of these patients.

Orientation: “More than everything you ever wanted to know about critical care in a couple of weeks”
J. Rashotte and M. Thomas, Ottawa, Ontario
It is almost universal that each critical care area struggles with the development and implementation of an orientation program for new staff that: 1) develops the level of knowledge and skill of the new orientees which results in the safe provision of care according to the unit’s standards, policies, procedures; 2) assists the new staff nurse in becoming socialized to the new environment and health care team; 3) is responsive to the individual learning needs and styles of the new orientees; and 4) is cost and resource efficient. We are all too familiar with the challenge of orienting a group of new staff which includes a new graduate, a nurse with two years general med/surg experience and the nurse with a background including seven years of critical care. Evaluations have demonstrated that we teach too much too fast to the novice and/or the experienced nurse is insulted or bored.

The purpose of this presentation is to share with the audience the development of our new critical care orientation program. The program reflects Benner’s theory of novice to expert integrated with adult learning, reflective practice and transformation learning theories. That is, our program is aimed to reflect our educational philosophy that facilitated learning on entry into the new workplace, as well as an established continuum of expected acquisition of knowledge, practice skills, attitudes and critical thinking abilities promotes the transition from novice to expert. This presentation will include the sharing of: 1) a self-learning assessment tool; 2) a competency-based checklist; 3) a curriculum guide; and 4) orientation program evaluation tools. The benefits to preceptors’ own learning and development in being involved in this process will also be discussed.

Evidence-based practice: Panacea or curse?
G. MacDonald, London, Ontario
Evidence-based practice promotes the collection, interpretation and integration of current “best” research evidence into clinical practice (McMaster University, 1997, Evidence-based Medicine Information Project). Critically appraised evidence is balanced with the clinical expertise of the care provider, and moderated by patient circumstances and preferences (McMaster University, 1997). Evidence-based practice should improve the quality of clinical decision-making and facilitate cost-effective health care. However, since its inception, the approach has generated controversy, uncertainty and debate among health care providers. The question begs to be asked: Is evidence-based practice a panacea or curse?

This presentation will provide an overview of the “roots” of evidence-based practice, define the approach, and outline the essential key steps. Actual clinical scenarios will be incorporated to illustrate the practice: the development of a DVT prophylaxis guidelines, implementation of weaning protocols and the controversy surrounding the use of PA catheters in the critical care setting. Implications of the approach for critical care nurses and exciting avenues for future endeavours will be explored.

Peer review: Ensuring competence through self-regulation
L. Hamilton, D. Ouellet and M. Lee, Toronto, Ontario
The economic and political climate, which continues to exert pressure on the health
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CACCN p. 23
The restructuring of health care organizations has increased the demand for quality, cost-efficient, alternative approaches to health care provision. In particular, the high cost and scarcity of critical care resources has resulted in the establishment of "high dependency" or "intermediate care" units to meet the needs of high acuity patients who would otherwise require critical care admission.

In January 1998, The Hospital for Sick Children identified an organizational need to develop an intermediate care unit capable of providing complex patient care and monitoring. This recommendation led to the development of the progressive care unit (PCU), a coordinated facility resourced with medical, nursing, professional and support staff with expertise in the management of high acuity patients and located within close proximity to the critical care unit (CCU).

The PCU is an eight-bed short-term observation, monitoring and clinical management unit with immediate access to medical intervention for patients who are considered clinically unstable and have the potential for rapid deterioration. Graded high acuity care is provided for:

- inpatient unit or emergency room patients who require a level of care beyond that available in these areas but less than that available in the CCU.
- CCU patients at low risk for needing life support therapy but who may require a level of care beyond that available on the inpatient units.

This poster presentation will discuss the implementation of the progressive care unit at The Hospital for Sick Children including:

1. Patient identification:
   - General admission guidelines
   - Specific admission guidelines
   - Targeted patient populations
   - Excluded patient populations
2. Admission/referral process
3. Resource allocation:
   - Human resource allocation
   - Environmental/equipment resources
   - Systems support
4. Methods of evaluation:
   - Usage of invasive procedures on PCU patients vs CCU patients

The high cost of critical care has led to the re-evaluation of which patients should be admitted to SICU. This decision must not be taken lightly. While
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scoring systems such as Interqual, and the Apache Scoring method are helpful in determining which patients should be admitted to SICU; they do not recognize those patients who require intensive nursing care in the form of aggressive chest physio or intensive airway management to prevent intubation.

The decision to bypass SICU is multifactorial and consideration must be taken with regard to the specific patient population, the resources required for an alternate level of care, and the learning needs of the staff on the general nursing units that will be receiving the patient. As a patient advocate, the critical care nurse has a responsibility to ensure that administrators practise due diligence when making these decisions.

This presentation will focus on the decision-making process as it pertains to bypassing the SICU for specific patient populations. A case study will be presented to highlight the change in surgeon and anesthesia practice and the costing formula used to transfer funds between programs. How the learning needs of the receiving unit were met, the mechanisms that were put in place by the SICU staff to act as clinical resources, and the communication strategy used to ensure the safety and efficacy of the patient transfer to an alternate level of care will be discussed.

**Dinosaur to dragonslayer:**

**ICU rounds in a community hospital**

*J. Sherlock and J. White, Peterborough, Ontario*

The Peterborough Regional Health Centre is a 385-bed, two-site facility serving the five counties of Peterborough, Victoria, Northumberland, Haliburton and a portion of Hastings.

Rationalization between the two sites resulted in the construction of a 15-bed medical/surgical ICU, and the amalgamation of the nursing staff.

With the increasing acuity and the number of ICU admissions, bed utilization, length of ICU stay and cost containment strategies became more important. How could we improve our efficiency without losing the caring, supportive environment we had created? The unit was undergoing administrative changes with the formal appointment of a medical director and the reorganization of clinical support systems. This led to a collaborative development of interdisciplinary rounds.

The purpose of this presentation is to describe this implementation process in a community hospital setting and how the introduction of rounds has facilitated communication and coordination of care. We will identify the members of the interdisciplinary team, outline the structure for rounds, and list the benefits of the practice change. Barriers to implementation and the future direction of the project will also be addressed. The traditional “dinosaur”, or fragmented approach to patient care, has evolved into a confident “dragonslayer” interdisciplinary team.

**Ethical dilemmas in the paediatric intensive care unit**

*F. Carnevale, Montreal, Quebec*

This session will examine the dominant views on ethical decision-making for critically ill children. This will involve a discussion of: (a) the doctrine of informed consent as a tool for promoting autonomous free-choice, (b) surrogate decision-making for patients that are ‘incompetent’ or minors, (c) the best interests standard as a means of evaluating interventional options for children, and (d) current views on the withholding or withdrawing of life-sustaining therapies. These will be analyzed in terms of their respective merits and limits. In particular, the role of the child in decision-making will be discussed. Finally, moral tensions that are particular to nursing will be discussed, with the aim of promoting strategies for addressing issues in nursing ethics.

**A framework for the nurse’s role in the end-of-life decisions in critical care**

*J. Beitel, Toronto, Ontario*

Critical care nurses are integrally involved in treatment and end-of-life decisions. Research reveals that ICU nurses experience moral suffering, moral distress and stress as a result of caring for patients and families in situations where difficult decisions are considered (Corey, 1995; Erlen & Sereika, 1997; LaMear-Tucker & Friedson, 1997; Rushton, 1992). Advancement of technology, consumer awareness, ambiguity of the nurse’s role in these situations and conflict of values with patients, families and other staff contribute to moral distress and other associated feelings (Callahan, 1993; Karlawish, 1996; Wocial, 1996). Literature on ethical and collaborative decision-making in critical care nursing highlights a need for support for the decision-making process. In a survey of the CACCN membership, the Critical Care Nursing Survey (CACCN, 1997) echoed this need. End-of-life treatment decisions and advanced directives were two of the top issues respondents wanted pursued. Evidence supports the use of a decision-making model by critical care nurses (Erlen & Sereika, 1997; Karlawish, 1996; Wocial, 1996). Use of a model was associated with autonomy and less stress (Erlen & Sereika, 1997).

This presentation will provide participants with a framework to guide practice in situations in which difficult decisions are being considered. The framework consists of nursing standards clarifying the accountability and role of the nurse, and is based on values and assumptions from a human science nursing perspective (Mitchell, 1998; SHSC nursing council, 1996). The presentation will begin by asking participants to reflect on what values, beliefs and assumptions guide their practice during decision-making. Underlying assumptions of the framework will be introduced and discussed. A patient situation will illustrate how the standards are integrated into practice and the decision-making process. Anecdotal evaluations...
of nurses using the standards to guide practice will demonstrate the effectiveness of the standards in practice.

End-of-life decisions in the critical care unit: Controversies and conflict

N. Tee, E. Vandenberg and A.K. Woodend, Ottawa, Ontario

Advances in technology have enabled critical care staff to extend life and improve the quality of life for countless individuals. Occasionally the aggressive application of this advanced technology causes concern for individual staff responsible for the care of the patient. Interventions such as CPR, mechanical ventilation, inotropic support, intra-aortic counterpulsation and hemodialysis may be considered to prolong death and suffering rather than to prolong life or promote the quality of life. Staff frequently express concern regarding the aggressiveness of care and the costs to the patient, family, public and staff. These concerns cause ethical uncertainty, distress and conflict for some practitioners.

The purpose of this presentation is to identify and discuss the attitudes and beliefs of critical care staff regarding the issues of do-not-resuscitate orders, withdrawal of treatment and advance directives. A survey of 106 critical care nurses, 36 medical staff and 13 allied health staff was conducted in the two critical care units of a tertiary cardiovascular referral centre. The purpose of the survey was to determine the attitudes, beliefs and knowledge of critical care staff regarding end-of-life decisions; to identify differences in attitudes, beliefs and knowledge between disciplines; to identify areas of potential conflict; and to determine strategies to reduce conflict and promote resolutions.

Results of the 45-item survey indicate that there is a substantial degree of consensus, a good deal of controversy and some conflict regarding the issues surrounding end-of-life decisions. Areas of controversy included: how well-informed patients are of care alternatives, the benefit versus burden of some treatments and the ethics of withholding and withdrawal of treatment.

Nurses who attend this session will gain useful insights into common attitudes and beliefs, and will be encouraged to participate in discussion to identify strategies for their own practice.

Critical care nurses’ satisfaction with withdrawal of life support on critically ill patients: A regional perspective


The withdrawal and withholding of life support has become a common mode of dying in both community and academic critical care units over the last decade. The decision to consider further aggressive therapy as futile, and to simply make the patient comfortable is not an easy one. The process of reaching this decision is stressful for both family and staff. A recent scenario-based survey of critical care physicians and nurses found great variability in reaching these decisions of ending aggressive therapy, despite similar scenarios. While there may be isolated institutional attempts to improve the process of withdrawing care, there is little published literature that clearly identifies current methods of withdrawing life support and critical care nurses’ (CCN) satisfaction with the process.

This gap in the literature was addressed with a regional study involving 11 community hospitals and three teaching hospitals, which are members of a regional critical care research network. One of the purposes of the study was to determine the processes of withdrawing life support from each critical care unit, as well as the CCNs’ satisfaction with the process. To determine how well the process of withdrawing life support is being conducted, an outcome must be selected that reflects quality of care. Since there was limited published literature of an existing instrument to use as an outcome measure, a tool to measure satisfaction was developed specifically for this study.

During this presentation, current literature regarding withdrawal of life support will be reviewed within the context of the design and methodology of this study. The findings of the study will be described including characteristics of CCNs who were satisfied and not satisfied with the process of withdrawing life support, the variations in the processes of withdrawing life support among the regional critical care units, as well as relationships among unit variables, demographics, and the CCNs’ reported satisfaction. In addition, recommendations for practice changes, guideline development and areas for further study will be presented with opportunities for discussion.

Provision of optimal health care to critically ill patients and their families

D. King and L. Siller, Halifax, Nova Scotia

The IWK Grace PICU standards committee recently revised its policy and procedure manual. The goal was to have an easily accessible resource in the unit providing a basis for the quality standard of care being delivered. The aim was to take the existing material, update it, and then put it in a more “user friendly” format in hopes of making it a resource we could all refer to with ease, not frustration.

To facilitate this aim, we changed the layout and the way we had been doing our “standards” statements. We used to have a “standard” statement for every procedure; feeling this to be overdone, we divided procedures into related areas and made an overall standard statement. For example, one standard (policy) statement for all specimen collecting instead of one for every type of collection (much less paper work and page turning for all of us, and the same end result of excellence in care of our patients). Every standard statement category has a different coloured paper section, making it even easier to use. The newly revised format is also proving to be a valuable learning resource for preceptors orientating new staff members.

This poster presentation will demonstrate the policies, divided under 12 different headings with the overall value statement being optimal care. Optimal health care in the PICU is defined as the provision of the best and most favourable health care for patients and their families. This must always take into consideration such factors as: acuity level of patient and safety issues (of patient, family, staff and environment) - competence, and growth and development, and psychosocial needs of patients and families - compassion. To attain this goal, it is essential that there be nursing expertise and autonomy - confidence and conscience, along with ongoing interdisciplinary collaboration - commitment.
Incorporating patient-centred care into the intensive care unit

J. Walker and J. Fulcher, London, Ontario

Reforms in health care are being propelled at tremendous speed throughout centres across Canada. The realities of economics, access to information, patient knowledge, an aging society and human concern of how patients are treated in the health care system have been the impetus to create change. A demand is being placed on health care to be more responsive to individuals, families and communities. The Picker/Commonwealth Program for Patient Centred Care (PCC) was established in 1987 to promote an approach to hospital and health services focusing on the patients' needs and concerns, as the patient defines them, and to explore models of care that make the experience of illness and hospitalization more humane.

This model or philosophy is what the London Health Sciences Centre has decided to adopt throughout the organization. The philosophy of PCC being provided at the London Health Sciences Centre and how that vision for PCC is being incorporated, specifically into the critical care program, will be the focus of this poster presentation.

A multidisciplinary steering committee was struck to guide the process of implementing the vision of PCC into the critical care program. The overall objectives of the committee were:
1. education of staff, with emphasis placed on the dimensions of PCC and how these can be applied in the very specialized and technical area of intensive care;
2. review existing systems and devise new systems or ways of doing things that will promote and enhance PCC; and
3. develop a critical care based satisfaction survey.

The poster presentation will discuss how these objectives have been or are being reached, and the initiatives that support the vision of PCC within the critical care program. The change process is expected to take many years. The outcomes of the change to PCC will be presented as they exist to date.

Cardiac surgical intensive care nurses’ perceptions of environment and its influence on patients

S. Robitaille and E. Kerr, Ottawa, Ontario

Cardiac surgical intensive care settings have long been considered bastions of high technology. But with high technology comes resulting environmental issues with which all critical care nurses and, more importantly, patients must contend. Researchers have documented the impact of environmental stressors on patients that include such concerns as ineffective coping, sleep pattern disturbances and ICU psychosis.

Furthermore, environmental stressors have been known to adversely influence patients’ psychological and physiological responses. For instance, psychological effects include feelings of helplessness, hopelessness, labile emotions, hallucinations and, in particular, sleep disturbances. Physiological responses include increased blood pressure, peripheral vasoconstriction, increased muscle tension and increased adrenaline release. In turn, these responses may lead to prolonged stays in intensive care units in the hospital and/or increased morbidity rates.

The literature highlights the need for increased awareness by critical care nurses of these issues in order to advance strategies to lessen the negative influence of environmental stressors on patients.

With this in mind, we decided to examine the everyday practices in a busy cardiac surgical intensive care unit in an attempt to identify whether unit standards needed to be developed as part of a continuous quality improvement project. Consequently, we designed a survey to measure nurses’ perceptions of their work environment and their knowledge of its impact on patients’ responses. This poster will present background information regarding environmental stress, our survey questions and findings, as well as educational content to be used to heighten our colleagues’ awareness of environmental issues.

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