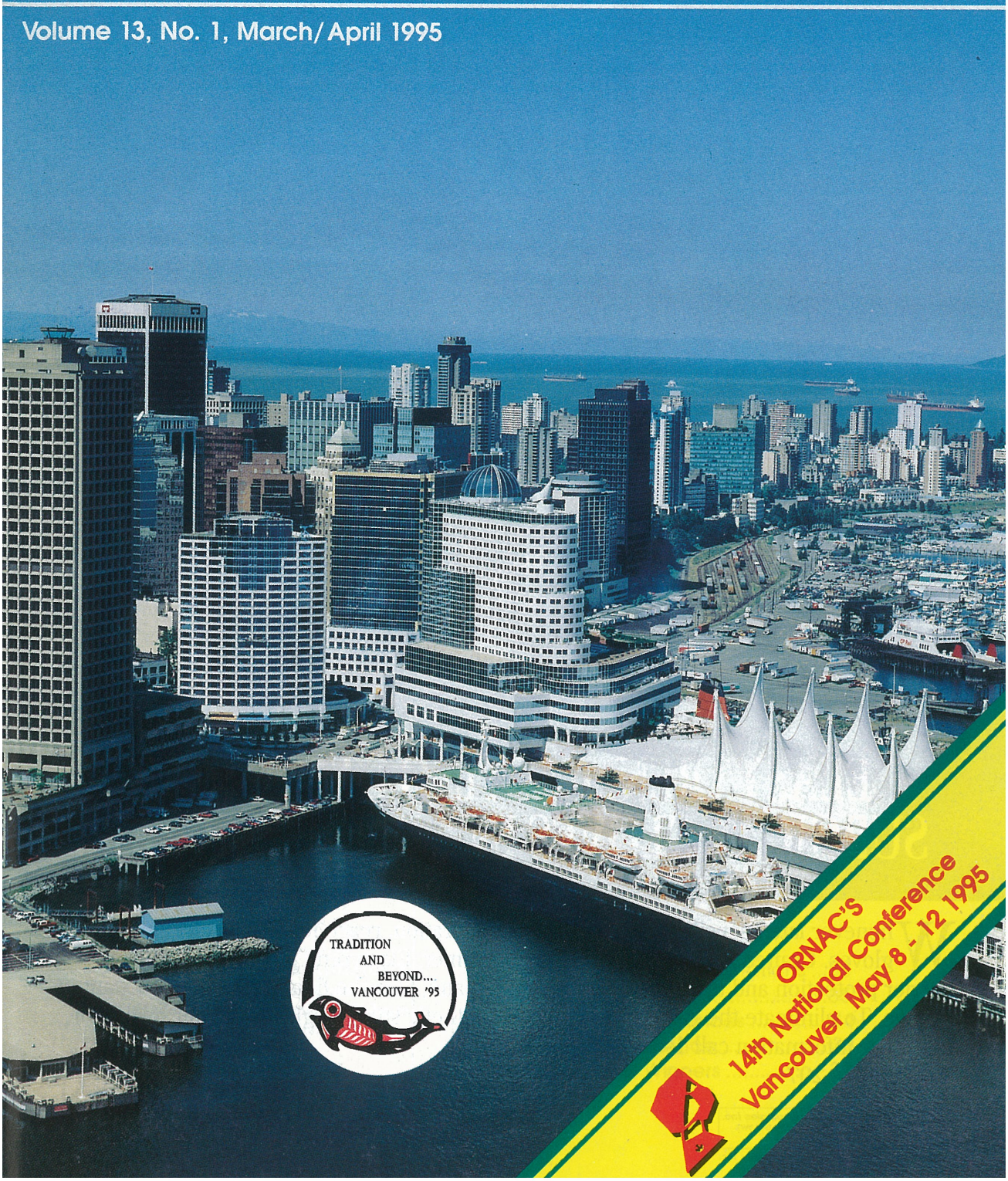
Canadian Operating Room Nursing Journal

Volume 13, No. 1, March/April 1995



Canadian Operating Room Nursing Journal

Published for the Operating Room Nurses of Canada by Health Media Incorporated.

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Subscription Rates:	**1 Year**	**2 years**
Canada	$ 17.00	$27.00
United States	$ 22.00	
Other Countries	$ 26.00	
Single Copy orders	$ 5.00	

Add GST @ 7% to all orders. R102310323
Canadian Operating Room Nursing Journal is indexed in *Index Medicus,* the Cumulative Index to Nursing and Allied Health Literature.
I.S.S.N. No.-0712-6778
Canadian Publications Mail Product Sales Agreement No. 0584304

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The 3Rs - Reflect, Review, Restructure

By Jackie Waisman

Greetings on behalf of the ORNAC Executive and Board. In this issue of the Journal I have the pleasure of sharing with you, the membership of ORNAC, some recent changes to the organizational structure of your association.

Last year the Board of Directors and the Executive of ORNAC realized the need to **REFLECT** on the organization as a whole. It had been over 10 years since ORNAC first formed nationally - a realistic time frame for an organization such as ours to have the need or desire to reflect and re- examine its aims and objectives. Many of the same questions and thoughts surfaced once more: What are we hoping to accomplish as an organization? Who do we represent? Why do we exist? Do we have the time, energy and resources for all there is to deal with today?

Over the latter part of 1994, the Executive followed through on the direction given to them by the national Board to review our current structure, consider all input from the Board for potential changes and put forth recommendations for revisions - hence a **REVIEW** of ORNAC. This was accomplished over the summer and early fall. Recommendations were forwarded to the Board. In October 1994, the Board made slight revisions to the recommendation and a **RESTRUCTURING** of ORNAC went into effect !

The highlighted changes are reflected in the downsizing of the Executive from six to five officers. The Vice President position was deleted and the functions associated with this office redistributed. The Board decided to remain with two Board members from each province. This was considered necessary to facilitate open discussion, determine consensus and provide steady progression to agenda items discussed. A motion was passed to fully fund these two Board members to each of the Board meetings - a need identified for quite some time now.

The Committees of ORNAC were reviewed and the only adjustments made were to identify the Certification Committee as an ad hoc under the Standards/ Education committee and to identify Advanced Nursing Practice as an ad hoc committee under Standards/ Education as well. The committees will continue to be chaired by either an Executive or Board member. This affected only a couple of committees where this had not been the current practice. This is expected to enhance communication and provide for a complete picture at each and every meeting of the Board. Membership on committees will still be sought from nurses across Canada to ensure regional needs are addressed and various practice issues are reflected.

Although the restructuring to some may seem to be minute, the openness of discussions, the sharing of a common vision and the team effort put forth by this Executive and Board is second to none !

Your national representatives are now refocused and ready to face the challenges of the health care changes; more Rs - **REDUCE, REGIONALIZE** and hopefully **RECOVER** ! ORNAC cares about our future ! We need your support.

REMEMBER - you are good stuff !

Jackie Waisman is President of ORNAC. She is Nurse Manager, Operating Room and Recovery Room of the Red Deer Regional Hospital Centre, Red Deer, Alberta.

The Operating Room Nurses Association of Canada

14th National Conference

TRADITION AND BEYOND... VANCOUVER '95

May 8 - 12, 1995

Vancouver Trade&Convention Centre
Headquarter Hotel - Pan Pacific Hotel

An Education Program offering outstanding speakers

plus Great Exhibits/ Lots of Entertainment/ Lots of Fun !

An exceptional educational program • Outstanding speakers • Great exhibits • Cruise ship to Alaska •Lots of Entertainment • Networking opportunities with OR nurses....and all in one of the world's most beautiful cities at the warmest and sunniest time of the year.

Program Preview

Sunday - May 7

Concurrent Workshops •1300 - 1500

1. Orthopedic Workshops
   Terry Murphy,
   Howmedica-Murphy & Associates
2. Healing Touch - An Experiential Introduction, Ethel MacLean, MSN, RN
3. OR Waste Reduction - Tools for Action
   Janet Dysart, RN, Susan Beye, RN
   Trish Glanfield, BA(Geog)

Certification Information Session •1500 - 1600

Monday - May 8

Opening Ceremonies • 0745 - 0850
ORNAC Information Meeting • 0850 - 0950

Valerie Shirreff Memorial Lecture • 0955-1015
Keynote Speaker: **Jane C. Rothrock**, DNSc, RN,CORN, Professor of Perioperative Nursing, currently president of the Association of Operating Room Nurses Inc., Denver, Co. "Achieving Prosperity - A Requisite for our Future".

Health Break • 1015-1030

Concurrent Sessions • 1030 - 1130
1.The Changing Role of the Nurse Manager
Margaret Fullerton, BSN, RN
2. Proceed With Care - New Reproductive Technology - **Patricia Baird, MD**
3. The Experience of a Lifetime-Transplant and Beyond. **Sue Howard, RN**

Lunch & Viewing of Exhibits • 1130 - 1400

Concurrent Sessions • 1445 - 1645
1.R.N. 1st Assistant - Perioperative Role of the Future
Dr. Jane Rothrock.
2.Dealing With Ethical Problems in the OR
Paddy Rodney, MSN, RN
3.Identifying the Chemically-Dependent Perioperative Patient
Marelyn Rugg, MN, RN-C

Tuesday, May 9

Concurrent Sessions • 0830-0930
1.Spinal and Spinal Cord Injuries-Contemporary Management, **Marcel Dvorak, MD**
2. Menopause - **Vera Frinton, M.D.**
3. Research as a Tool for Practice
France Bouthillette, MSN, RN

Health Break •0930-1000

Concurrent Sessions • 1000-1100
1. Smoke Gets in Your Lungs
Marlys Hoglan, RN, CNOR
2.Physiolgy of General Anesthesia
Bruce Prasloski, MD
3. Rituals and Research - A Closer Look at Sacred Cows in the OR.
Lorraine Varner, MSN, RN

Lunch & Viewing of Exhibits • 1100 - 1400

Concurrent Sessions • 1415 - 1615
1.Meeting the Challenge of Trauma Management in the Rural Setting
Piotr Blachut, MD &Patricia Lenci, BNSc
2. Latex Allergy
Gordon Sussman, MD (latex allergy testing available during conference)
3. Expanded Role of the Perioperative Nurse in Anaesthesia **Jacob Kress, RN,**
Sharon Trickett, RN, and Judi Tyndall, RN

Certification Information Session • 1630-1730

Wednesday- May 10

Concurrent Sessions • 0830-0930
1. Prostate Cancer - Early Detection
Who Needs It? How Is It Best Achieved?
Martin Gleave, MD
2. Sterilization - New Technologies, New Times
Lorna Murphy. BSN, RN
3. Redesigning Surgical Patient Care
Changing Boundaries and Exploring New Paths
Beverly Holman, BSN

Health Break • 0930 - 1000

Concurrent Sessions •1000-1100
1. Information at Your Fingertips
Developing OR Staff Reference Manuals
Valerie McQuaide, BN
2. Fire Safety
Jackie Goodman, BA, MA (Candidate)
3. Just Business - Nothing Personal
Managing the Shrinking Health Care Dollar
Seona Lamb, RGN, SCM

Lunch & Viewing of Exhibits • 1100 - 1400

Plenary Session • 1415-1615
Women Working With Women
Estelle Davison-Crewes, BA, MA, MS

Thursday, May 11

Concurrent Sessions • 0830-0930
1. Advances in Orbital Surgery
Jack Rootman, MD
2. Debriefing for Grief - **Georgia Nemetz, PhD**
3. Male Menopause - Understanding All the Men in Your Life (Part 1) **Meg Hickling, RN**

Health Break • 0930 - 1000

Concurrent Sessions • 1000 - 1100
1. Cold Hands to Warm Hearts - Warm-Blood Cardioplegia - **James Abel, MD**
2. Surviving Education
Marnie Simon, BGS, RN
Lucille Taylor, BA, BSN, RN & Amy Doi, BHS, RN
3. Male Menopause (Part 2) **Meg Hickling, RN**

Lunch Break and Viewing of Exhibits •1100-1400

Certification Information Session •1300-1400

Plenary Session • 1415-1615
Travelling Where There is No Path - Coping With Health Care Reform in Canada
Jane Fulton, BHEc, MSc, PhD

Friday, May 12

Closing Address • 0830-0930 " Our Legacy "
Joan Donald, BScN, BEd, MAEd,RN
Doctoral Candidate, University of Toronto
Closing Ceremony • 1000-1100

Social Events
All social events, except the "West Coast Affair" on Wednesday night, are free to all delegates. One ticket for the "West Coast Affair" is included in the 5-day registration package. If you are registering for fewer than 5 days, you may purchase a ticket ($75.00). Tickets may also be purchased for guests.
Sunday, May 7 • 1900-2200
Welcome Party "Pacifica - All Aboard and Set Sail

Registration by Mail
Mail registration form (mailed to all members) and fee to:

Susan Wynne
1371 Mathers Avenue
West Vancouver, BC . V7T 2G5
(604) 922-7675

Deadline for mailing registration is April 20, 1995. If your registration is postmarked no later than this date, you will be eligible to win a pre-registration.

Five-day package: **$375.00**
Mon. to Thurs. **$ 85.00** per day
Friday: **$50.00**

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Pan Pacific Vancouver, B.C.
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2. La technologie de reproduction
3. Les dilemmes d'éthique
4. La qualité de vie chez les patients transplantés
5. La chirurgie spinale
6. L' allerie au latex
7. L'infirmierè assistante à l'anesthésie
8. La gestion des urgences
9. La dépendance chimique
10. Démystifier la recherche
11. Le sang réchauffé dans les cardioplégies
12. Survivre à l'éducation
13. Physiologie en anesthésie
14. Le cancer de la prostate
15. Recyclage - De la fabrication au jetable
16. Compte rendu d'une situation douleureuse.....

et plus encore

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- Des exhibitions super intéressantes
- Croisière en Alaska après le congrès - prix spéciaux pour les délégués

Pas toutes les sessions seront traduit

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Canadian Micro Surgical Ltd.
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Cyanamid Canada Inc.(Davis & Geck)
Deknatel
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Dumex Medical Surgical Products
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Getinge Disinfection Inc.
Global Medical
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Johnson & Johnson Medical Products - Exhibit No.501, 503, 505, 602, 604, 606.
See the J&J advertisement in this issue and every issue .....Outside Back Cover

Incorporating Nursing Diagnosis and King's Theory in the O.R. Documentation

By J. Gill, L. Hopwood-Jones, J. Tyndall, S. Gregoroff, P. LeBlanc, C. Lovett, L. Rasco and A. Ross

Introduction

Perioperative nursing is based on critical decision making, goal setting, and evaluation of patient outcomes. The Department of Nursing at the Hamilton Civic Hospitals adopted a conceptual framework using Nursing Diagnosis to reflect patient-focused care. The operating room staff took this opportunity to change the documentation to adequately reflect the practice of perioperative nursing.

The Hamilton Civic Hospitals is composed of two separate units, the Hamilton General Division and the Henderson General Division. The Hamilton General Division is the regional centre for cardiac catheterization, open-heart surgery, major trauma and burns. Other services provided include Neurosurgery, Orthopedics, ENT, Plastics, Ophthalmology, Urology, Dental and General Surgery. The Henderson General Division provides the community with services in Obstetrics, Gynecology, General and Dental Surgery, Orthopedics, Urology, Plastics and ENT. Surgical treatment of patients from the adjacent regional cancer centre is performed at the Henderson.

Abstract

The Operating Rooms at the Hamilton Civic Hospitals share the same documentation format. The need to revise the documentation to incorporate the standards from the Operating Room Nurses Association of Canada was recognized. The Hamilton Civic Hospitals, Department of Nursing, adopted Imogene King's Conceptual Framework as the model for nursing practice. The flowsheet developed for the Operating Rooms incorporated both King's Theory and Nursing Diagnosis.

Conceptual Framework

The Hamilton Civic Hospitals adopted Imogene King's Conceptual Framework as the model for decision-based practice. King's nursing theory identifies the universal concepts of nursing, individual, health and environment which are incorporated in the nursing philosophy for the Hamilton Civic Hospitals.

King's theory is based on three dynamic, interacting systems (personal, interpersonal, and social) operating in an open systems network. King believes the behaviour of patients in their environment is understood in terms of personal (individual) which involves perception, growth and development, body image, space and time; interpersonal (groups) which involves concepts of interaction, communication, transaction, role, stress; as well as social (society) systems which involve authority, power, status and decision making. In the operating room (environment), the nurse and the patient (personal) come together (interpersonal) to achieve optimum health.

The focus of King's theory is mutual goal setting. In the pre-operative phase, the nurse and the patient identify goals to be achieved. The nurse initiates nursing diagnosis incorporating the goals, and develops the appropriate nursing interventions to achieve these goals.

Authors

Janet Gill, RN, is an OR staff nurse; Laurel Hopwood-Jones, RN, MScN, is a Senior Nurse Manager, OR; Judi Tyndall, RN is an OR Nurse Clinician at The Hamilton Civic Hospitals, Henderson General Division. Susan Gregoroff, RN is a Nurse Manager, OR; Patricia LeBlanc,RN is a Senior Nurse Manager, OR; Cathy Lovett, RN is a Nurse Manager, OR; Luba Raso, RN, MHS, is an OR Nurse Clinician; Anne Ross, RN, is a Nurse Manager, OR at The Hamilton Civic Hospitals, Hamilton General Division, Hamilton, Ontario.

Nursing Diagnosis

A nursing diagnosis statement consists of:

1. **a patient problem** (actual or potential)
2. **a cause of the problem** (related to)
3. **signs and symptoms** (as evidenced by - only in actual problems)

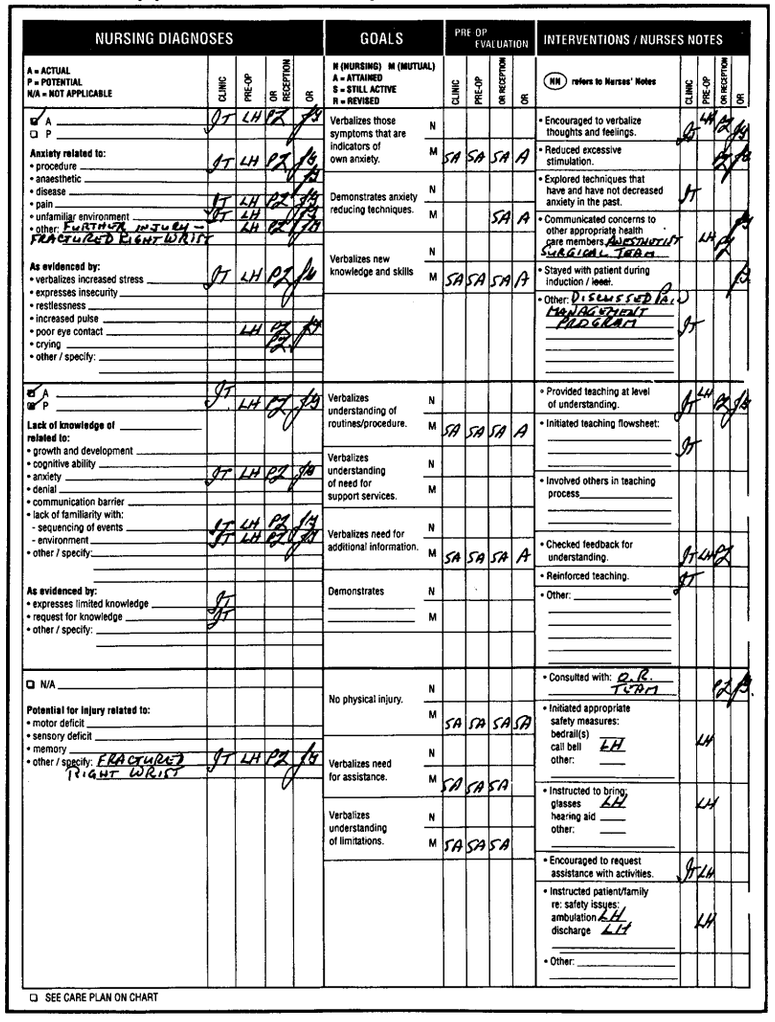
Nursing diagnosis is the statement of a potential or actual altered health status of a client, which is derived from nursing assessment and which requires intervention from the domain of nursing. Nursing diagnosis is the second step of the Nursing Process. Nursing diagnosis serves to promote goal-oriented, assessment-based practice. It also promotes consistency in decision-based practice across theoretical or conceptual models.

Development

The staff in the Operating Room recognized the need to incorporate Nursing Diagnosis and King's Conceptual Framework in the system of documentation of perioperative patient care. A committee was established with representation from the Operating Rooms of both divisions. The goal of the committee was to create a comprehensive nursing flowsheet that incorporated both nursing process and nursing diagnosis within King's conceptual framework. A literature search revealed little information regarding the use of nursing diagnosis during the perioperative phase.

In identifying the magnitude of this change process, inservice programs related to Nursing Diagnosis and King's Theory were organized. The staff was instrumental in identifying the nursing diagnoses related to the perioperative nursing care provided in the operating room. Following these formal inservice sessions, time was provided weekly for small group orientation to the actual documenting process using mock case scenarios. It was evident that the staff were familiar with required perioperative documentation, however, they now needed to review documentation within the context of Nursing Diagnosis and King's Theory. Guidelines for documentation were identified, incorporating the ORNAC standards, and were made available to every staff member. Within six month, the first trial flowsheet was implemented.

Appendix 1 - Perioperative Flowsheet #1



Implementation

Based on the length of cases, the daily workload, and the uniqueness of the individual OR units, implementation varied slightly between the two divisions. At the Henderson, implementation of the flowsheet was introduced gradually. The flowsheet was introduced over an eight week period beginning in the services with the longest cases. Long procedures were selected to give staff time to familiarize themselves with the flowsheet. By the end of the eight weeks, staff had no difficulty documenting for even the very short cases. The Hamilton General implementated the use of the flowsheet in all services over a two week period. This method was selected because of the longer average duration of the procedures in the Hamilton General Operating Rooms.

The implementation process was not without its difficulties for the disciplines affected by the change - nursing, anaesthesia and surgery. After much discussion, it became apparent that the choice of wording in some of the nursing diagnoses caused anxiety. As a result, a meeting was organized with representation from Administration, the Documentation Committee, Anaesthesia and Surgery to identify and resolve concerns. The hospital lawyer attended this meeting to provide guidance on issues of liability. The final wording on the flowsheet reflected the needs of nursing, and was sensitive to the medical-legal implication of documentation for all disciplines. This reinforced the need to communicate to all disciplines affected.

As anticipated, there was a period of adjustment that did contribute to delays in the room, apprehension, and insecurities with the documentation. However, through continual reinforcement of the nurses' right to document the nursing care, these issues were overcome.

Case Study

The following case study illustrates the flowsheet documentation process:

Jane Doe is a forty-five year old female scheduled for a laparoscopic cholecystectomy. Her right wrist is broken and in a cast. Jane does not have any other medical problems.

A week before surgery, Jane Doe visited the Preoperative Clinic. At that time, she expressed a fear of pain related to her surgery and the usual anxiety expressed by most patients regarding surgery and the unknown environment of a hospital. The Preoperative Clinic nurse initiated the Perioperative Flowsheet 1 (see Appendix 1 - Clinic Column) with the following goals to be achieved:

- prevent further injury to right wrist,
- assist Jane to understand the events of her surgical experience,
- provide Jane with support to work through her anxiety, and
- discuss pain management program.

The following nursing diagnoses were developed from the goals identified with the patient in the Preoperative Clinic:

- anxiety related to pain as evidenced by other - verbal statements,
- lack of knowledge related to sequence of events as evidenced by request for information, and
- potential for injury related to deficit as evidenced by fractured right wrist.

On the day of surgery Jane was admitted to the Preoperative Admission area. She was anxious about her surgery and concerned about further injury to her fractured wrist. The goals and nursing diagnoses identified in her original assessment were re-evaluated and updated as necessary (see Appendix 1 - Preop Column). After Jane was prepared in this area, she was transfered to Patient Receiving in the Operating Room. She arrived crying and accommpanied by a friend.

The Patient Reception and Operating Room nurses assessed the patient to determine if the nursing diagnoses and the goals were still active, needed revision, or had been attained. This documentation is on Perioperative Flowsheet 1 (see Appendix 1 - OR Reception Column & OR Column). Pertinent interventions were identified for each nursing diagnosis and required the nurse to initial those that were pertinent to the patient.

The patient walked into the Operating Room suite accompanied by the Operating Room nurse. On admission to the room, Jane stated that she was cold.

A surgical count was done according to hospital policy. A cautery pad was placed on Jane's left thigh.

The following goals were identified in the OR:

- maintain appropriate body temperature,
- count will be correct,
- cautery site will remain free of injury, and
- no further injury to fractured right wrist.

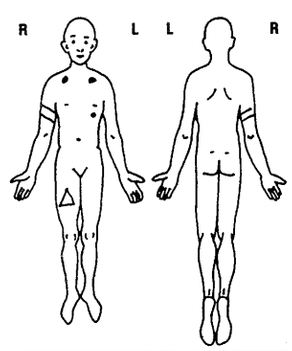
The nursing diagnosis for these goals are:

- altered body temperature related to perioperative events and environment, and
- potential for injury related to: positioning, length of surgery, cautery, and count items.

The intraoperative nurse continued with the nursing diagnosis potential for injury related to limita-

Appendix 2 - Perioperative Flowsheet #2

NURSING DIAGNOSIS	GOAL ATTAINMENT	EVALUATION			INTERVENTIONS · NURSES NOTES
A = ACTUAL P = POTENTIAL N/A = NOT APPLICABLE	N (NURSING) M (MUTUAL)	A = ATTAINED SA = STILL ACTIVE R = REVISED	STATUS	TIME / INITIAL	(NN) refers to Nurses' Notes NA = Not Applicable
3b. Potential for injury related to: (I) limitations in range of motion: ☑ fracture R/WRIST ☑ cast R/WRIST ☐ traction ☐ paralysis ☐ missing limb(s) ☐ other	M No physical injury as evidenced by: ☑ Pre-existing range of motion not compromized. ☐ Other	A		0900 JT	POSITIONING pre-op transfer to OR table: ☑ self ☐ assisted ☐ other post-op transfer from OR table: ☐ self ☐ assisted ☑ slider ☐ N/A ☐ other SURGICAL POSITION: ☐ prone ☑ supine ☐ lateral ☐ LT ☐ RT ☐ lithotomy ☐ frogleg ☐ other Intraoperative position changed to: SUPPORTS AND PADDING: ☐ stirrups ☐ bolsters ☐ beanbag ☐ sandbag ☐ frame ☐ table ☐ pillows ☐ rolls ☐ foams ☐ pads ☐ donut(s) ☐ other ulnar nerve protector ☑ RT ☑ LT SAFETY BELTS / RESTRAINTS: ☐ across thighs ☐ across abdomen ☐ across chest ☐ N/A Arms tucked: ☐ RT ☐ LT ☐ No Armboard: ☐ RT ☐ LT EYES PROTECTED: ☐ Yes ☐ No
(II) length of surgical intervention.	☑ Protected areas remained free of injury. ☐ Other	A		0900 JT	
(III) Use of equipment: ☑ Cautery	Cautery site: ☑ skin clear ☐ other	A		0900 JT	Type of Unit VALLEYLAB Serial # F ☑ Mono Cut 35 Coag 35 ☐ Bipolar Setting Grounding Pad Site Shaved ☐ Yes ☑ No
☐ Tourniquet	Skin Condition: ☐ as pre-application ☐ other				Type of Unit Serial # Applied By: ☐ RT ☐ LT Cuff size Pressure On / Off ; Pressure On / Off
☑ Count Items	☑ count correct	A		0900 JT	Count According to Policy ☑ Count Not Done ☐
☐ Laser	☐ Patient and environment remained free of health risk hazards and laser accidents.				Laser Protocol followed ☐
☐ X-Ray ☐ Image	☐ Maintained minimal exposure to patient.				X-ray Protocol Followed ☐
☐ Other					



= BP ✕ Other:
● E.C.G. Leads
▲ Cautery
■ Tourniquet

NURSING DIAGNOSIS	GOAL ATTAINMENT	EVALUATION			INTERVENTIONS NURSES' NOTES
A = ACTUAL P = POTENTIAL N/A = NOT APPLICABLE	N (NURSING) M (MUTUAL)	A = ATTAINED SA = STILL ACTIVE R = REVISED	STATUS	TIME / INITIAL	(NN) refers to Nurses' Notes N/A = Not Applicable
4. Potential (actual) altered body temperature related to perioperative events and environment. As evidenced by: ☐ pallor ☐ shivering ☑ verbal statement ☐ other	M Appropriate patient body temperature maintained.	SA		0900 JT	☑ warm blanket ☑ warm solution(s) NACL 0.9% IRRIGATION ☐ Bair Hugger ☐ cold solution(s) Blanket: ☐ hypo ☐ environment temp. altered ☐ hyper ☐ head covered
5. Potential for infection related to surgical intervention.	N Aseptic technique maintained.	A		0900 JT	Skin condition pre-op: ☑ clear ☐ other Skin prep: ☐ shave ☐ clip ☐ scrub Prep solution: ☐ Savlon ☑ Proviodine ☐ Hibitane ☐ other Pacing Wires: ☐ yes ☐ N/A CATHETER Size & type: Inserted by: Drainage: DRAINS Size / Type Location Collecting Device 1 2 3 ☐ sutured ☐ pinned ☐ free ☐ stab wound ☐ incision PACKING / DRESSINGS ½" STERISTRIPS

Correction

to ORNAC's
Recommended Standard #8
"Scrub, Gown, Glove"
Section 8.13 should read:
If a glove becomes contaminated or sustains a pin hole, the glove shall be changed as soon as the situation permits **by one member of the sterile team regloving the other member.** If not possible, **by open glove method.**

Rationale:
Once the original gloves are donned, the gown cuffs are considered contaminated.

Vija Hay
Chairperson, ORNAC
Standards/Education Committee

tions in range of motion due to the fractured right wrist. (This documentation is on Perioperative Flowsheet II, see Appendix 2).

The Operating Room nurse acting as the patient's advocate continued to ensure that these goals were met in the interoperative phase. Any goals that were still active were communicated to the PAAR nurse.

Summary

The flowsheet was trialed and assessed by staff. Valuable input for several revisions was received and incorporated into each new version.

The current form is the result of trials and revisions of the original format developed three years ago. The process of developing this type of documentation was an enriching experience for all involved. This Perioperative Flowsheet now reflects the nursing care provided in the Operating Room.

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OR Booking Policy:
Development and Implementation

By Margot Kontak-Forsyth, RN,BSc,BN,MEd & Anne E. Grant, RN, LL.B

Surgical bookings are integral to the optimal functioning of any operating room facility (OR).[1] Ideally, the goals and strategic planning of the organization should be reflected in surgical block scheduling. For example if an institution has identified that it intends to increase outpatient procedures or day surgery, it only follows that an appropriate amount of elective surgical time be allocated to any service or physicians who perform such procedures. Unfortunately this is not always recognized and often the process of booking OR lists is designated as merely a clerical function. In actual fact, bookings are the force that drives the OR. The authors will examine development and maintenance of a policy for this important area, and outline criteria which should be included in an optimal OR booking policy.

There are two general methods of allocating operating room time: block scheduling and open bookings.[2] Block scheduling utilizes a master schedule which defines the number and types of rooms available, the hours that rooms will be open and the service or surgeons who are allocated the operating time.[3]

1. Booking policies are utilized in many clinical areas such as endoscopy, cystoscopy, day surgery and out patient clinics. The criteria identified in this article would apply equally to other areas, but for ease of reading, the authors have chosen to refer solely to the operating room.
2. Breslawski, S. & Hamilton, D., Operating Room Scheduling, *AORN Journal.* (1991) 53(5),1229-1237.
3. Blake, J. T., *Strategic and Administrative Aspects of Advance Surgical Process Scheduling* (1994) Department of Industrial Engineering, University of Toronto (unpublished), at page 11.
4. Blake, supra at page 12.
5. Breslawski, supra.

While a master scheduling system has been observed to be potentially more efficient, this is dependent, on whether the scheduled block accurately reflects the actual patterns of usage and whether mechanisms are in place to release unreserved blocks in a timely manner.[4] For example, if a surgeon has been allocated a weekly block and over three months has demonstrated 70% utilization of this time, it would be appropriate to assess whether to decrease the length of the block. Under the open bookings system, also known as first come first served (FCFS), surgery is allocated to the first physician making the request. While FCFS systems are simple to implement and widely used, it has been observed that this system is associated with high levels of cancellations, low resource utilization, excessive overtime and friction between surgeons.[5]

Whatever type of surgical scheduling system is in use, an OR's bookings determine the surgical operational budget. In other words, the surgical schedule directly impacts staffing, hours of work, and utilization of supplies and equipment. As a key cost centre of any hospital, it is imperative that bookings be run smoothly and consistently. Further, the OR bookings significantly impact many other departments in the hospital including: Radiology, Haematology, Housekeeping, Pathology, and Biomedical Engineering to name but a few. Perhaps most significant is the impact of OR surgical block time on the utilization of that

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scarce resource, hospital beds. A poor booking policy, as with a poor system of surgical time block allocation, results in surgical staff circumventing the rules in order to get their cases done. This triggers other problems with staffing, inconsistent application of the rules and inefficient use of OR time, which may result in increased costs and a system clearly out of control.

Source of Problems

Possible problems with booking policies include:

- over utilization and under utilization of surgical block time;
- chronic overtime of nursing and support staff;
- last minute changes to the list resulting in inefficiencies for other departments such as Radiology, Haematology, Pathology, Housekeeping, CSR, PAR etc. Late changes to the list also increase nursing staff costs due to changes in set-up and assignment of staff;
- perception of favoritism re allocation of time;
- inappropriate scheduling of emergency cases;
- unavailability of equipment;
- cancellations; and,
- dissatisfied and unhappy clients.

The authors would also like to point out that the location of the booking office functions should be physically near the surgical suite. Booking functions are part of the day to day operations of the OR. In order to ensure efficiency, ready access by all OR personnel is necessary, for anaesthesia assignments, surgeons making changes, checking on lists, etc. Each institution will have to consider what works best in their own setting in the context of space restrictions and other limiting factors.

Problems with the OR list impact nursing staff, anaesthesia, surgeons' clinics and support staff as well as numerous departments outside the OR. Booking changes may contribute to increased change-over time and increased over-time worked by nursing staff.

Development of Booking Policies

Having identified problems, the procedure to amend and implement any policy should be collaborative. The process must consider hospital goals and objectives as well as the requirements of the staff physicians. The review should be conducted by the OR Management Team which consists of three individuals representative of Anaesthesia, Surgery and Nursing.[6] It has been the experience of the author that a smaller working group accountable to the larger OR committee structure is most efficient. The process should allow for the head of the Surgical and Anaesthesia departments as well as the heads of various surgical services to be consulted separately. This promotes collegiality as well as providing an opportunity to assess the impact of the policy on various staff. Other hospital commitments for physicians must also be factored in. These commitments include coverage in: labour and delivery; ICU; the emergency department; clinics; and pre-admission units. All adjustments to the policy should be reviewed once more by these stakeholders before the draft goes to a full OR Committee. Multidisciplinary consensus is essential to ensure on-going compliance.

Criteria to be Considered for an Optimal Booking Policy

The criteria which should be considered for an optimal booking policy have been subdivided into three sections: elective bookings; emergencies; and semi-emergencies.

Elective Bookings:

An optimal effective booking policy should address the following:

- A standard booking request form and process for all services and areas serviced by the booking office;
- Onus on the surgeon for providing timely, accurate and complete booking information including need for X-rays, type of anesthetic, equipment requirements, etc.;
- Complete and continuously updated list of procedures for each surgeon;
- Procedural time for each booked case based on objective data as provided by the data collection system in use (for example: an average of the times of the last ten (10) procedures done in the particular OR);
- Changes to the procedural times should require nursing management approval and consent;
- Pre-designated deadline for bookings. For example, elective bookings may be done months in advance but in a large urban teaching hospital the list should be finalized 48 hours prior to surgery, (for example, by 1200 on the second working day preceding surgery.) For out-patient surgery it may be prudent to close bookings one week in advance. Likewise, in a rural setting the cutoff time may be a week to a month prior to surgery. This provides anesthesia and nursing with adequate time to prepare and determine staffing requirements as well as time to notify and confirm the booking with the patient. Surgical time is removed and/or reallocated at this point if not booked;
- Exceptions to the designated deadline should be spelled out. Examples of such exceptions could include, neuro surgery, some vascular cases and retinal surgery, due to the urgent and emergent nature of the patient population. This assists in decreasing utilization of emergency time for these types of surgery;
- Bookings should close and the OR lists should be published at some consistent time such as at 1400 hours on the second working day preceding surgery;
- Distribution of the list should be consistent and predictable. Circulation is important as the Pre-Admission Unit relies on the list to re-affirm date and time of surgery with their clients;
- There should be a target of 100% utilization of various departments/division's surgical time. This can be enforced by designating one clerical individual per surgical specialty to ensure that any unused time is distributed to others in the department first and then to other departments. When allocated time is not used, this should be documented and sent to a designated individual who has a responsibility to ensure appropriate future action; (The authors recommend a member of the OR Management Team who is in turn accountable to the OR Committee.)
- It should be specified that longer cases go first unless there is a documented exception. This ensures that major cases are done when the team is "freshest", that major cases are not cancelled at the end of the day and prevents major cases from running late into the evening;
- Responsibility for re-arrangement of the list and notification of surgeons etc. should be spelled out;
- There should be specified procedures for dealing with cancelled and delayed cases, such as a delayed cases list;
- It should be specified that staff surgeons must remain in the OR with any case which is running late to minimize over-time and other additional costs;
- There should be procedures for dealing with remaining time if a surgeon's elective list finishes early;
- There should be a form and a process to address OR booking irrigulatities. This situations should be documented and submitted to the same designated individual responsible for enforcing utilization of surgical time, (Member of OR Management Team, accountable to OR Committee);
- There should be a specific protocol to deal with Emergencies.

Emergencies:

Emergency cases need specific treatment which should be clearly spelled out.

Procedures should be in place to determine priority of cases and to resolve potential conflicts. This is generally done through the use of a policy and procedure for emergencies and an Emergency Request list. An optimal policy should include:

- A clear definition of an Emergency Case;
- A list of cases defined as emergencies, according to the emergency case list submitted by each surgical service;
- Requirement that only surgeons or house staff may book such cases utilizing the appropriate form;
- Prescribed procedure for dealing with situations where a surgeon books a case which is not on the emergency list;
- The surgeon and the patient must both be available or the nurse does not take the booking;
- Provision for contacting the surgeon should OR time become available;
- Provision for documenting inappropriately booked Emergency Procedures. Such documentation should be submitted to the OR Management Team for action;
- Designation of the order in which emergency cases will be done;
- Provision for the resolution of any conflict as to the order of emergency cases;
- Clear direction as to what cases are to be done on what shift. For example, only emergency cases to be done on nights or weekends;
- Procedures as to who may call in nursing staff to do emergencies; and
- Define the number of emergency rooms to be run

6. The authors note that later references to the "OR Management Team" refer to the three person multidisciplinary structure described. This team is the working arm of and is accountable to the OR Committee.

and ensure anesthetic and nursing coverage.

• Clear procedure establishing how to bump elective cases.

• Provision that emergency cases should bump within their own service whenever possible.

Semi Emergencies:

The issue of "semi" emergencies generally applies to ORs with a high volume of orthopaedic surgery. Often cases such as fractures are "bumped" and the patients are left NPO waiting while other emergent cases take priority. A surgical service may need to assess its waiting list to determine whether allocation of fracture time for example, should be placed into Orthopaedic Surgical Blocks or the general elective block. Booking procedures need to be amended to include a limited time frame in which a fracture can be bumped. This could be 48 hours, before the case is automatically slotted into the assigned surgeon's elective list.

Implementation

The implementation of a booking policy builds on the same processes used for its development: collaboration; consensus; and multi-disciplinary cooperation. It is imperative that the policy be widely circulated, approved and enforced to foster credibility. Generally the policy will be determined by all major OR stakeholders and after consultation, presented to the main OR committee for approval. Institutional circulation should include the Surgical Nursing Directors, Post-Anesthetic Care Unit, and the Pre-Admitting Department. Such a policy should not only be accepted within the OR, but should be supported by all levels of the organization. As previously stated the goals and strategic plan of the institution should be reflected in this and all policies.

Automation

No comment on optimal OR booking would be complete without reference to automation. Automating a poor booking policy will not necessarily correct the problems. So assessment and revision of the booking policy ideally is a pre-requisite to automation. Even where booking offices are automated and equipped with progressive technology, the maximum utilization of these systems is not always realized. Computer systems have great potential to provide important data in a variety of forms and reports. Institutional contracts should be reviewed to determine what modules of the software may be available to upgrade an OR's existing system. Modules exist to deal with various functions and it is imperative that these options be explored, particularly in automated systems which are already installed.

Generally, staff needs for a manual booking system are the same as for a system which is automated. Remember, once additional data is available, more people will want reports. A mechanism should be put into place to filter who receives reports and when.

Those who are considering automation of the booking function should clearly identify their institutional and departmental needs in order to choose the best system for them. In addition to reviewing various companies' products, administrative staff should consider on-site visits to similar facilities to learn from common experience. As with any worthwhile endeavour there should be a plan for implementation. This could include a determination of how much is to be automated and at what point. For example, it may be planned to start with the main OR and expand later to include cystoscopy, endoscopy, etc. Part of the automation plan should be to standardize and streamline the process prior to automating. The technological enshrining of an inefficient and unwieldy system will only result in grief down the road.

Follow-up and Evaluation

As per the nursing process and any good business plan your booking policies and procedures should be evaluated regularly. The Master Schedule should be reviewed, updated and changed on a regular basis. A helpful system is to utilize a regular schedule for general use, and a reduced schedule to be implemented at Christmas, spring break and summer vacation. The utilization of surgical blocks should be assessed regularly (every three months) and administrators should respond to the patterns established by particular surgeons or services. The allocation of surgical beds should be consistent with the allocation of OR time. For example, if it is determined that Orthopaedics requires more time to meet the needs of an additional surgeon, and the total amount of surgical time remains unchanged, surgical beds should be reallocated appropriately.

The emergency case list and elective procedure lists should be continually updated as new procedures and new surgeons come on board. The main booking policy and procedure should be evaluated annually and on a "as needed" basis. The follow-up function can be delegated to the nurses in charge of your surgical specialties. This is an efficient way of handling ongoing evaluation as such nurses are generally among the first to be aware of new procedures and changes.

Summary

The importance of an optimal booking policy which has been reviewed and accepted by all staff cannot be over-emphasised. In these times of re-structuring it is imperative that organizations ensure that key cost centres are run efficiently. Achieving excellence in the utilization of surgical services in any size institution starts with a booking policy that is clear, realistic, accountable at all levels and applied consistently.

Special Considerations of the Elderly Patient Requiring Anesthesia

By Pat Corey-Plett, R.N., B.N.

Abstract

Aging is a complex phenomena involving both anatomical and physiological changes. As the aging, or geriatric population increases we are faced with many of these patients having surgery. The risk of surgery for many elderly patients is complicated by chronic disease processes. It has been reported that more than 100,000 patients over 65 years of age die postoperatively each year. When adequately prepared, elderly patients can tolerate many types of surgery as well as younger patients. The success of these patients' perioperative experience depends on the knowledge and expertise of the entire perioperative team.

Objectives

This presentation will define the term Geriatric, identify the changes that occur with aging, and discuss the risk factors of this population when having surgery. The effects of drugs and the anesthetic management of the geriatric patient will be discussed.

Introduction

Who is the geriatric patient? They are very special patients requiring dedicated personal attention.

Why? This phase of life is where the body functions are slowing and perhaps declining. Preventative health care and conscientious nursing care is needed when they are ill.

Increasing numbers of elderly patients are presenting for surgery. Much of it is major surgery requiring lengthy and complicated operative and postoperative courses. Medicine and nursing are being faced with increasing challenges in anesthetic management of geriatric patients.

Definition

First of all we must define the term: *geriatric patient.* Definitions have changed over the years. In the early 1900s, 50 years of age and older was a contraindication for surgery. In 1937 reports indicated that 70 years or older was considered as elderly. For convenience, and our society's present standards, most physicians and authors define a geriatric patient as being 65 years of age or older.

In 1900 only 4% of the population was 65 or older. Today, 11% is older than 65 years of age. Due to lengthening lifespans it is estimated to grow to 13% by the year 2000. In the United States, 5,000 people reach the age of 65 everyday. Since 11-13% of our patients are geriatric it is important to understand how to care for their specific needs. It is further estimated that 50% of the geriatric population will have at least one operative procedure before they die.

Anatomical and Physiological Changes

Nevertheless more important than chronological age is the patient's physiological age. The aging process varies from person to person and from one organ system to another. People appear to reach their peak physiologic function in their late 20's or early 30's. From then on it's, in general, downhill decreasing approximately one percent per year.

With aging many body parts and systems show signs of wear and tear.

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This article was originally a presentation for the 1994 MORNA / MAPAN Joint Conference in Winnipeg.

Aging Tissues

An elderly body is 10% drier than a younger one. There is 5% less water constituting the total body weight. In younger adults, one/third of the water is extracellular and increases in relation to intracellular water as the body ages. There is also a decrease in salivation leading to a much drier mouth and tongue during laryngoscopy. The tissue is drier and wrinkles with aging due to less water and muscle mass in the body composition. Lean body mass (muscle) has been reduced approximately 10% and there is a simultaneous increase in total body fat by 10%, contributing to dehydration of the aging process. Due to their high lipid solubility, anesthetic agents will be stored in adipose tissue. This can lead to a delay in emergence of drugs to the circulation. Total body weight remains fairly constant through the aging process but metabolically active cells decline contributing to as much as 24% decrease in the Basal Metabolic Rate (BMR). A depletion of muscle mass and a more sedentary lifestyle account for the decreased BMR.

Thermoregulation

Due to the decreased BMR, heat production for the whole body varies inversely with age. Thermoreceptors in young skin are capable of discriminating 1°C. Skin thermoreceptors in the elderly cannot distinguish 2°C or greater temperature gradients. As well, concomitant disease processes can reduce input even further (e.g. Diabetes or strokes). Like the very young, the elderly possess a very narrow window of temperature around their thermal set point, even to the point of cardiovascular collapse. Autonomic control of cutaneous, or superficial, vasculature declines and vessels eventually fail to vasoconstrict. This creates more bloodflow to the surface and increases heatloss thereby lowering the core temperature quite quickly.

General anesthetics interfere with heatloss in the elderly by lowering their thermostatic setpoint ,which normally ranges 37 ± 0.4°C, as much as 2°C. Regional anesthetics (i.e. spinals and epidurals) cause vasodilation below the block creating more heatloss through cutaneous bloodflow. Above the block, the body normally compensates by vasoconstricting. This can create hypothermia into the recovery period. Hypothermia is defined as a core temperature < 36°C.

Aging delays the onset and the intensity of shivering thermogenesis. Shivering normally can increase heat production 200-600%. Shivering, however, is a late defense mechanism in which workload is increased and therefore, oxygen demand is increased. The modern operating suite acquires heat from the older patient by evaporation (skin prep, cool irrigant), conduction (in contact with cool surfaces), radiation (exposure) and convection (cool air currents). Radiation and convection are due to the increased efficiency of the air exchange systems, the temperature of the environment (no less than 21°C), and exposure. Conductive and evaporative losses are directly related to the procedure. Each litre of room temperature crystalloid intravenous solution robs the patient of 16 kilocalories. Each litre of 4°C blood product transfuses away double that amount in conductive heatloss. Larger than necessary areas of skin prepped, extensive soaking and visceral exposure increase the resting evaporative heatloss 30 times.

Consequently, older patients must be monitored for temperature change very carefully. Core temperature should be monitored intraoperatively by an esophageal temperature probe, foley catheter and or a pulmonary arterial catheter. Rectal probes are the next fair alternative. Admission and discharge temperature of the geriatric patient is usually lower than normal in the recovery room. Hypothermia leads to hypoxia and increased cardiac workload. It is very difficult to regain normothermia, therefore it is very important to maintain temperature intraoperatively. The workload created by postoperative shivering can be catastrophic to the aged.

The Brain

Atrophy of the brain's neurons begins following age 30 years. By the age of 80, the brain will shrink up to 85% of its original weight with one neuron dying every other second. The older brain (i.e. >65 years) loses its capacity to resist loss of consciousness, therefore the amount of drugs and inhalational agents must be adjusted accordingly. There is a reduced requirement for anesthetics due to a decline in CNS activity as well as a decline in fluid volume thereby increasing the amount of crossover from the blood-brain barrier. Confusion and disorientation along with hearing and sight loss can greatly affect the perioperative care of these patients. Familiarity with the nurses and physicians involved is helpful to alleviate some confusion. Transient disorientation can oc-

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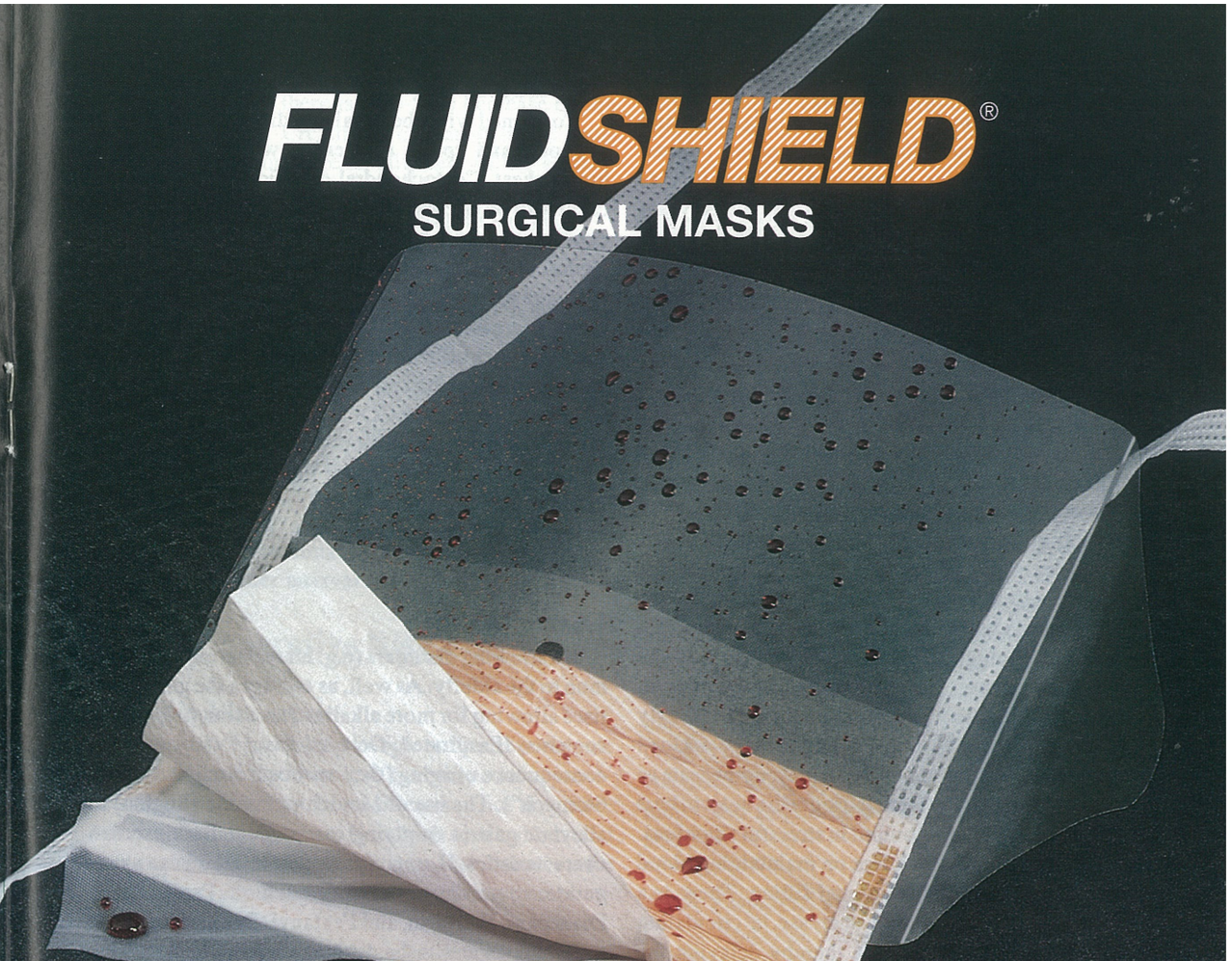

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cur for several days following a general anesthetic. Acute brain syndrome, with impaired judgement and varying levels of consciousness, extending beyond one week postoperative occurs in 6-25% of the elderly. Older patients undergoing cardiac surgery are susceptible to postcardiotomy psychosis. There is also a 2% risk of perioperative Cerebral Vascular Accidents (CVA) or strokes. From the elderly population presenting, 5% have had one or more CVAs.

Cardiovascular

The cardiovascular changes associated with aging are perhaps of more importance to the anesthetist than any other physiologic change. Coronary artery disease must rank high in suspicion of your assessment due to our society and sedentary lifestyles. An enlarged heart is also common due to coronary artery disease not just the normal aging process. The gradual dilation of the ascending aorta with relaxation of the arch represents another morphological change. Hypertrophy of the left ventricle occurs. Heartrate does not change with age but may be affected by medications the elderly may be on. When there is an increased workload demand on the heart, the elderly cannot compensate as well due to aging receptors that trigger the heart to beat faster increasing cardiac output in stressful situations. The elderly are very dependent on maintaining blood pressure and heartrate for optimal filling. There is a delay in circulation due to a decrease in circulating volume per body surface area thereby delaying the effects of intravenous medications. Arterial stiffening and wall thickening occurs in the elderly. These changes lead to an increase in blood pressure. In normal aging most regard an excess of 160/95 mm of Hg as hypertensive. A mean pressure is decided upon and maintained intraoperatively.

Airway

The elderly patient's airway may be at risk for anesthesia. Often arthritic changes of the cervical spine can prevent hyperextension for optimum visualization.

Most elderly patients are edentulous. Loose, single peg-like or decaying teeth can pose a hazard for intubation with the threat of knocking a tooth out and lodging it within the airway.

During laryngoscopy it is not uncommon to find foreign material retained in the posterior pharynx. Airway reactivity or reflexes are less effective. This is important to understand since the risk of aspiration is greater due to a lack of protection of the airway.

Respiratory

Combined with chest wall rigidity there is thoracic kyphosis and spinal shortening which generates a barrel chest. Costochondral calcification stiffens the chest wall by decreasing movement between ribs with expansion. Lung capacity decreases with age. The alveoli are fewer and larger thereby decreasing surface area for gas exchange. The level of oxygen in the blood decreases 10-15% while the CO_2 remains the same. Oxygen utilization under stress decreases due to decreased perfusion and diffusion. There is, however, a high prevalence for COPD in the aged; as well as a higher incidence of postoperative atelectasis. Upon exhalation the amount of air that is trapped and not exhaled, expands with age. This volume is further exaggerated by the supine position, smoking, anaesthesia and surgery.

Gastrointestinal

Swallowing disorders (e.g. hiatus hernia) are common to the elderly. As well, as one ages the gastric pH rises allowing for more alkaline less damaging gastric contents; if aspirated. Delayed gastric emptying is a consequence of aging (they may be treated like a "full Stomach"). The use of Metochlopramide (Reglan) to alleviate gastric emptying can produce Parkinsonian characteristics. H_2 antagonists (Cimetidine) can exagerate some drugs' effects such as Propranolol, Diazepam, Warfarin, and Fentanyl. Ranitidine avoids these effects and is the drug of choice.

Hepatorenal

Hepatic bloodflow declines as much as 45 % with aging which is important when we realize that the majority of drugs are metabolized by the liver (e.g. Fentanyl, inhalational agents). There is therefore a delay in the clearance of these drugs. There is a decrease in production of albumin which is an important protein in extracellular fluid volume. An increased level of active drugs unbound to plasma proteins (e.g. barbiturates, local anesthetics and certain muscle relaxants) can result.This depletion causes edema and a decrease in cardiac output. The liver enzyme, plasma pseudocholinesterase, is decreased as well. This enzyme breaks down and eliminates local anesthetics and muscle relaxants such as Succinylcholine. Dosages should be adjusted with this in mind.

Changes in renal function influence other body physiology. Degenerative changes in renal circulation begin early. Renal perfusion decreases 1.5 % per year, which means that there is a 40-50% decrease by the age of 65 years. Creatinine clearance is the most sensitive indicator of renal filtration in the elderly. Dehydration poses a hazard, therefore urine output should be 1 ml/kg/hr in the perioperative period.

Obstruction is another problem in elderly men due to prostatic hypertrophy.

These changes reduce drug elimination and prolong levels in the blood and tissue.

Musculoskeletal

There is decreased muscle mass, strength and joint movement. Tremors often occur. Bones become brittle and easy to fracture. The team must handle the elderly patient very gently. Between the ages of 2-70 years there is approximately a two inch height reduction due to thinner intervertebral discs.

Perioperative Risk Factors

Chronic Illnesses

Nearly 90% of all older people suffer from chronic illnesses which are more than four times more prevalent in this age group. More often than not they have several chronic illnesses for which medications and treatments must be juggled. When acute illnesses arise in this population, there is a higher rate of complications and mortality.

The leading causes of death in the 65 years of age and over population are heart disease, cancer and stroke. From a study of 1,000 patients a list was developed of common preanesthetic complications for the geriatric age group. The first seven pertain to heart disease. Hypertension is first and is defined as a blood pressure greater than 160/90 mm of Hg. Hypertension is a risk for end organ failures. Patients may be more hemodynamically unstable in the perioperative period especially with intubation, fluid shifts and the emergency period where there is increased catecholamines from stress, pain and hypoxia. Elective procedures should be postponed until a hypertensive patient is well controlled and when the diastolic pressure is less than 100 mm of Hg. Hypertension, arteriosclerosis, cardiomegaly, congestive heart failure, cardiovascular accident, ischemia, myocardial infarction and angina can all lead to disastrous events if there is not a well thought out plan of management. Dehydration can lead to hypovolemia. Extra strain on the heart can cause cardiovascular collapse and infarction to name a few. The geriatric population is more prone to cardiac dysrhythmias and may have evidence of old myocardial infarctions.

Complication rates relate closely to the associated diseases with which the patient presents. Cardiac failure (15.8%) leads the perioperative mortality list, followed by renal failure (10.8%) and vomiting (10.1%) due to decreased airway reflexes and decreased gastric emptying in the geriatric population.

Confusion and lack of cooperation is a concern and can be attributed to many possible causes such as: electrolyte imbalances, cerebral hemorrhages (due to hypertension), increased blood levels of drugs from slowed release and clearance, and other conditions which may be exaggerated due to anesthesia (e.g. Alzheimer's). Changes in respiratory reserve can be related to extensive smoking or lung disease history with a morbidity and mortality rate as high as 40%. Many patients present with varying degrees of osteoarthritis. Mobility and extension of the neck can be affected as well as decreased vertebral spaces leading to difficulties with regional anesthetic techniques. Many may be on nonsteroidal antiinflammatory drugs (NSAID) which can affect platelet function and coagulation. Injury is common as well due to brittle bones and fragile tissue. Positioning requires close scrutiny.

ASA Physical status

The American Society of Anesthesiologists (ASA) physical status classification is not affected by patients' age but rather by the number and severity of pre-existent medical conditions. The ASA classification predicts with reasonable accuracy, the risks of elderly patients having anesthesia. One study showed patients with ASA class II resulted in a 10% mortality rate. Those in ASA class III increased their risk 10-15% and class IV to 20%. Complication rates per 1,000 anesthetics related to ASA physical status was studied, for elective versus emergency procedures. Not only does the higher the ASA score lend to higher risk but those of an emergency basis exaggerated the perioperative risk of complications and death.

Emergency Procedures

There is an increase in perioperative complications and death by 3-10 times in this age group when surgery is performed on an emergency basis. There is usually a delay in seeking health care until there is advanced pathology. There is little time controlling pre-existing disease or gathering a thorough preoperative history and significant lab data.

Surgical Diagnosis and Procedure

The condition which may have lead up to the surgical procedure may play a very important role in the anesthetic management. Diabetes Mellitus, for example may have predisposed a patient to amputation. Blood sugars need to be controlled and observed, as well as fluid volume and hypertension. The type of incision and location (e.g. radical neck or thoracotomy) can be very detrimental to quality management.

Pharmacokinetics/Dynamics

Approximately 25% of all drugs prescribed are consumed by the elderly. Eighty-five percent (85%) of all elderly individuals receive drugs. The rate of compliance, however, is only 50%. It is important to be familiar with the drugs your patients are on and how they might interact with other drugs. The most commonly used drugs are cardiovascular, antihypertensives, antiarthritics, analgesics and sedatives. The likelihood of adverse drug interactions is increased due to the types of medications the elderly may be on and the type of anesthetic management. The risk of drug interactions increases with age.

It is important to understand how drugs react in the body.

Pharmacokinetics is what the body does to the drug; how it is absorbed (uptake), distributed, metabolized and eliminated. *Pharmacodynamics* is what the drug does to the body; the half-life (T1/2 β) of the specific drugs and the relationship to protein and the percentage of body lipid to bind.

Lipid soluble agents, such as Barbiturates (Thiopental), Benzodiazepines (Diazepam or Midazolam) and Opioids (Sufentanil, Fentanyl) have an increased (T1/2 β) in the elderly since there is a decrease in protein available for binding and more fat cells than muscle to store and slowly release the drug.

A decrease in extracellular volume and body water increases the plasma concentration of drugs. Thiopental should be decreased 20-40% in the elderly. Benzodiazepines and Opioids should be titrated due to their profound effect.

Premedications are not always safe ideas due to their effect on respiratory function and the patient's level of orientation.

Many drugs the anesthetist gives are eliminated by the kidneys which are less functional in this age group (e.g. muscle relaxants such as Vecuronium).

The basic principles in prescribing and providing preanesthetic medications for the geriatric patient includes:

a) Evaluation of the need for drug therapy.
b) Obtaining a complete history of habits and drug usage. NSAIDs must be discontinued preoperatively, antihypertensives and other cardiac drugs should be continued up until time of surgery, etc. Orders may include preoperative aerosol treatments or intraoperative steroid coverage.
c) Understanding the pharmacokinetics / dynamics of the drugs.
d) Preoperative teaching for patient compliance.
e) Assessment of appropriate lab data such as Creatinine, electrolytes, and glucose. Follow-up with the family physician for past history and other investigations.

Anesthetic Management

No short-cut anesthetic regimen can be used for the geriatric patient because their physiologic condition and associated risks leave a very narrow margin of safety.

Monitoring

Basic monitoring includes pulse oximetry (i.e. O_2 saturation), end tidal CO_2 temperature, blood pressure and ECG. Monitoring should be individually assessed beyond the basic Canadian Anaesthesia Society (CAS) Standards. A five lead ECG should be used for all patients 65 years or older. For major surgical procedures, or those which will be lengthy, an intraarterial line may be inserted to monitor blood pressure more accurately, and obtain blood samples (e.g. blood gases). A CVP or Swan Ganz catheter may be inserted to monitor further hemodynamics and core temperature.

Fluid intake should be accurately assessed for that particular patient and replaced as necessary to prevent overload, hypovolemia or electrolyte imbalances. Urine output and bloodloss should also be assessed.

Intervention

Hypothermia can be prevented by warm blankets, headwraps, warmed gel pads, bloodwarmers, humidivents, and warmed irrigant.

Prevention of hypothermia, hypotension and hypoxia will reduce the incidence of confusion post operatively with a faster recovery from anesthetic agents.

Monitoring for blood sugar levels may be required.

Careful assessment of hypertension is crucial and a mean pressure as a goal intraoperatively.

Titration of drugs for desired effect and observation of alveoli saturation of inhalational agents is necessary.

Intervention

Preoperative aerosol, steroidal treatments and aspiration prophylaxis may be ordered. An awake intubation may be planned and/or the use of cricoid pressure.

Anesthetic Technique

Once a thorough assessment is complete the anesthetic technique is selected.

Regional anaesthesia is commonly the technique of choice in this population for several reasons. Dose requirements for regionals; as with generals; is reduced due to decreased CNS activity, less myelin sheath covering the neurons, a decrease in vertebral column height and therefore more rapid spread of the drug. Intravenous agents as well as inhalational anesthetics need to be adjusted due the aging process. The patient may have concomitant diseases that would increase their risk for general anaesthesia. There is less cardiorespiratory compromise with regional blockade as well as a faster recovery from the medications postoperatively allowing for a more oriented and cooperative patient. There is less bloodloss as well as less risk of emboli formation. Spinal anesthetics have been studied and show a decrease in mortality rates from deep vein thromboses (DVT) in hip surgery. Spinal and epidural techniques are ideal for hip surgery and transurethral prostatectomies, to name a few. The blockade can, however, cause profound hypotension and cardiovascular collapse. The anesthetist must be prepared for this possibility. Often these patients require intra-arterial blood pressure monitoring and a bolus of crystalloid (e.g. Ringers Lactate) intravenous solution preoperatively to prevent a hypotensive episode. Usually a vasopressor (e.g. Phenylephrine) is prepared and attached to the I.V. line for immediate availability for pressure control. Epidural anaesthesia has an advantage over spinals in that there is a more gradual blood pressure drop as absorption is slower than the spinal route. Temperature is important to maintain with regional blockade. A warm blanket to cover the arms is helpful.

In the disoriented or uncooperative patient, or when the surgical approach warrants, a general anaesthesia is usually the choice. Due to a decrease in cardiac output one can expect a delayed onset of action. Risks that have been mentioned previously; such as decreased liver and renal function, airway protection from aspiration, the need for higher oxygen content inspired, close hemodynamic monitoring, hypovolemia, hypothermia, etc... need to be prevented. Careful positioning and padding is essential for prevention of injury and tissue breakdown, as well as ongoing treatment and awareness of concomitant diseases the patient may have.

Postoperatively, delayed recovery from anaesthesia can occur. Hypoxia is common, therefore oxygen supplementation is necessary postoperatively. Continual reorientation will help alleviate confusion and uncooperativeness. Access to their hearing aids may be helpful. Assessment of their fluid balance and electrolyte levels will assist in evaluating their status. Shivering can increase oxygen demand and cardiac workload, therefore, Hypothermia should be avoided. Among the most frequent complications are those that are pulmonary in nature. Suctioning before removal of the endotracheal tube and oropharyngeal suctioning are basic methods of ensuring good air exchange. Tenacious sputum and atelectasis of the lung may still cause postoperative complications. Deep breathing and coughing is important, as well as frequent position changes. ECG monitoring should be done postoperatively, especially when there is a possibility of myocardial ischemia. Narcotics should be given with caution due to respiratory depression. Pulse oximetry can be utilized to monitor oxygen saturation levels. Early ambulation and mobilization should be encouraged to prevent DVTs in lower extremities and pelvic vessels and to decrease the incidence of pulmonary infection.

Conclusion

In conclusion, as the aging population increases our geriatric surgical population increases. Aging is an all encompassing multifactorial process that results in a decreased capacity to adapt. There is a gradual decline in bodily function which is affected by other disease processes that may be present. Optimal anesthetic management in the geriatric patient requires careful preoperative identification and correction of specific conditions, a thorough anesthetic plan tailored to the specific needs of the patient. The anesthetic plan should include prevention and management of postoperative complications. This plan is a collaborative effort of the entire perioperative team.

An understanding of the changes that take place in the elderly will allow for safe and individualized care. In turn we will contribute to increasing the lifespan of our society. We will help our patients to maintain their full physiologic function and as high quality lifestyle as near to the end as possible.**(Continued on page 33)**

Continuous Quality Improvement: A Staff Nurse Perspective

By Lynda Wilson, R.N.

As the cost of health care is rising and government funding is falling to an all-time low, hospitals are being forced to evaluate their overall environments. Hospitals are becoming more business-like and are assuming corporate attitudes. It is for these reasons that most health care institutions have made commitments to move towards a Continuous Quality Improvement philosophy. It is hoped that continuous evaluation of the processes will result in improvement in the quality of care to the customers. It is expected that this will eventually lead to lower costs through greater integration and less duplication of activities. This would then be in keeping with the key determinants of health and the principles of the new approaches to the provision of care as established by the Ontario Premier's Council on Health Strategy for establishing reforms in the health care system.

The overall goals include:

- to promote general good health, thus reducing the need for care services in institutions.
- to provide as much care as possible in households and communities.
- to restructure institutional care.

According to the Council this will be accomplished in part by:

- continuous quality improvement using quality assurance mechanisms.
- teamwork in everything.
- customer or patient satisfaction.
- a total quality approach.
- employee empowerment.
- automation.
- innovation by everyon.
- management by vision and values.
- strategic choices.
- developing core competencies (basic, minimal accepted skills).
- focus on the interdependencies in the organization (multidiscipline).

The St. Catharines General Hospital is no exception, in that commitments to quality have been made. During the past year, the administration of the hospital has committed a great deal of time and effort to establish a Continuous Quality Improvement Program (CQI) throughout the hospital. Unfortunately, the atmosphere which resulted from the many layoffs of staff and the job insecurity which has loomed over the staff of the hospital has hindered the pursuit of quality. This atmosphere no doubt is common to all hospitals in Canada. St. Catharines is also a community that has suffered the recession keenly.

It is my belief that the concept of CQI has within its program the means whereby these attitudes and fears can be overcome. In the process, the staff is challenged to make their own decisions about their jobs and to be accountable for those decisions. This will result with our hospital becoming a viable business, a happy place to work, and an institution genuinely pursuing quality care for its customers (the patients, their families, physicians, suppliers, staff and government).

In the Operating Room we have Team Leaders (Resource Nurses) in each specialty area. In addition,

Author

Lynda Wilson R.N. is a Staff Nurse, St. Catharines General Hospital, St. Catharines, Ontario. She serves as Resource Nurse for Continuous Quality Improvement in the Operating Room. She is Past President of the Operating Room Nurses Association of Hamilton and District and currently Treasurer of the Operating Room Nurses Association of Ontario.

each of the general staff members has had extra specific duties included in their regular responsibilities (sutures, anaesthetic supplies, instrumentation etc.). Each specialty has over the years been encouraged to develop Goals and Objectives for each year. At the end of each year activities and outcomes have been documented. Although it was not called CQI at the time, our OR and PAR staffs have been encouraged by our unit manager to identify our problems and concerns with the objective of rectifying them. Thus, the process is not totally new to us. Now, however, the process assumes much larger dimensions.

Essentials of CQI Process

- It is a continuous process which never is to be considered completed.
- There is total involvement (everyone is encouraged to be involved, everyone is encouraged to be committed).
- It is customer driven. They have the right to have input for their own welfare.
- The process can only be accomplished through enhanced communication and teamwork (interdepartmental projects).
- Recommended modifications/solutions can occur at any time, but will require approval by quality council.
- Organizational charts are to become inverted with decisions and responsibilities placed at the employee level.

CQI Will Involve:

- All staff at all levels (Chiefs & Indians).
- Physicians.
- Board of Governors.
- Patients and their families.

Results:

- Increased quality of care.
- Satisfied customers.
- Increased productivity.
- Increased worker satisfaction and morale.
- Improved ability to respond to the changing environment.

Empowerment

In the past management procedures have been shrouded in secrecy (concern with power?). CQI promotes shared management procedures which allow staff to be accountable and responsible for their individual roles. Decisions will be made in the area by those doing the job. The attitude of the unit manager nevertheless determines the level of success of the system of shared empowerment. The unit manager must have confidence in his/her staff and demonstrate a willingness to allow the initiative for decision-making to pass to those doing the job. In addition, the unit manager must also have confidence and support from administration. When general staffs express ideas, management must listen and respond actively, and not give lip service agreement. This has, in the past, been all too commonly the sort of response which staffs became unhappily familiar with. The climate will allow for mistakes, and the process must do so in order to reduce fear among staff who are simply not used to voicing their opinions and making decisions about their respective jobs.

Under the CQI program, each department is challenged to create a statement of commitment. The staff of the Operating Room and P.A.R. agree to support and concur with:

- The Mission, Philosophy, Vision and Goals of the hospital.
- The Standards of ORNAC and OPANA.
- The Continuous Quality Improvement philoso phy as developed by the hospital.

Statement of Commitment

St. Catharines General Hospital Operating Room, and Post Anaesthetic Recovery Room - January 1994.

1. We shall build awareness of the need and opportunity for improvement for ourselves.
2. We shall set our own goals.
3. We shall organize to teach the goals (establish a quality council, identify problems, select projects, appoint teams, designate facilitators) to each other.
4. We shall provide training for our staff.
5. We shall give reports on our progress.
6. We shall give recognition and appreciation to those who participate.
7. We shall communicate our results.
8. We shall encourage everyone on our staff to be involved in order to accomplish quality improvement.
9. We shall recognize that our customers include patients, their families, physicians, other departments and ourselves. We recognize that our customers must have input in order to have satisfaction.
10. We, as perioperative nurses, shall make the care we deliver more evident. Our documentation will reflect the identification of customer goals, outcomes and nursing intervention. This theory-based nursing diagnosis will then give quantifiable evidence of the quality in the care we deliver.

How We Got Started

1. A CQI resource nurse in the O.R. was established. As I had been the Quality Assurance resources person previously, I continued in this developing role.

2. Education: Along with another staff member I was given the opportunity by the unit manager to attend a three session workshop.

We also attended a three day session "TQI - An Introductory Course", given by the Hospital Education Services Department.

3. Together with another staff nurse from our department I was assigned to a hospital-wide TQI project, Sharps/Foreign Objects in the Laundry. The OR was the pilot area that was studied initially.

Lessons Learned

- We became aware of other departments and their concerns.
- CQI education was a plus.
- Overall sense of teamwork is important (Laundry and O.R.).
- Friendships have developed, resulting in more accurate communication.
- Recognition of a common goal - Continuous Quality Improvement.
- The process was fun - an excellent group.

Outcome of the CQI Project

A hospital wide educational program or awareness program was developed. The program included a video, logo signs, a picture display, a collection of the inappropriate articles found. A travelling "show" was created to make hospital employees appreciate their individual responsibilities to the laundry staff. This method was very successful.

Considerations Before Implementation

If the group was to be successful in implementing a quality program in the OR, every staff member would have to become involved. We also needed to clean house a little before we could get to the "nitty gritty." Many of our policies and protocols needed reviewing and revising. Manuals needed updating. We were missing some of the more recent protocols that had become standard in the practice of perioperative care.

Starting the process required that the following considerations be dealt with: What are the current standards of practice? Are we meeting these? Can we do it better? This can apply to everything and everyone in the unit!

The members of the staffs of the OR and PAR were assigned to a small group. (Some groups have as few as two members). Each group had a statement of Opportunity for Improvement to consider and work on.

PROJECT EXAMPLE - 1

Statement - *"The current PAR record is outdated and revision is necessary"*.

EXPECTED OUTPUT OF TEAM:

- Examine PAR records vis a vis current OPANA Standards of Practice.
- Examine and compare other PAR records.
- Create a St. Catharines General Hospital record compatible with the current standards of practice.

ANTICIPATED MEASURES OF SUCCESS:

- Improved documentation and record keeping.
- Improved patient care.
- Improved communication amongst PAR staff, anaesthetists and staff on surgical units.

PROJECT EXAMPLE - 2

Statement - *"The pre-operative check list and the OR record are outdated and need revision.*

Nursing Diagnosis and Nursing Process are vital to the future of nursing and perioperative nursing and must form a part of our documentation".

EXPECTED OUTPUT OF TEAM:

- Examine the Pre-operative check list and OR record vis a vis the ORNAC Standards of Practice and the records of several other hospitals.
- Create a hospital pre-operative check list and OR record in keeping with our own requirements and compatible with our computer system within the recommended standards of practice.

ANTICIPATED MEASURES OF SUCCESS:

- Improved documentation and record keeping.
- Improved patient care and satisfaction.

• More efficient data collection.
• Improved communication between OR and PAR staffs.
• Prove by documentation that OR nursing is vital to the future of perioperative nursing practice.

Similar Statements of Opportunity for improvement included a review and revision of the following:

PAR Record,
Skin Prep. Manual,
Disaster Manual,
Organ Retrieval Protocol,
OR Policy and Procedure Manual,
Malignant Hyperthermia Protocol,
Abnormal CholinesteraseProtocol,
Patient Reception Manuals,
Standardization of Instrument and Bundle Picking practises, and the
Eestablishment of a Latex Allergy Protocol.

Personal Observations

I am not certain that the methods that have been implemented in our OR are in accordance with the established processes regarding CQI. Nevertheless, amazing things are beginning to happen. Initially the response from staff members was varied: "There is no time!"; "There are not enough people!"; "Why fix it if it is not broken". These are valid concerns. We are, in fact, currently required to do a lot more with less. Nevertheless, we are getting things done and we are often surprised to discover that we have strong feelings of pride in the projects which we have completed. Overall, an environment which was dull and unchanging is becoming quite progressive and professional.

Mistakes So Far

Mistakes must be regarded as opportunities for learning, and this attitude allows for creativity.

• *Cart before the Horse:* The staff as a whole must be educated on the CQI philosophy prior to its implementation. Thus, we will all be on the same level of understanding at the same time. If this is not the case, the development of the process will be delayed and/or misdirected .

• One project which we chose proved to be too large to handle until we have a better overall insight into the CQI process. The group involved was too large, and it was too difficult to organize meetings within working hours. This project is currently on hold for our unit.

• It is naive to believe that all projects can be accomplished during working hours.

• The hospital administration must acknowledge that most of the projects have required at least some time spent outside of working hours. The reality is that we are indeed oftentimes short on staffing.

Recommended CQI Development Methods

- A portion of staff inservice (staff meeting) is devoted to CQI Education.

- CQI Bulletin Board - information of ongoing projects in the hospital displayed for all to read.

- Recognition Bulletin Board: projects and ideas are displayed.

- Make sure that each project team has the opportunity to report on their accomplishments.

- Encourage staff who have completed projects to come up with new statements of opportunity for improvement and implement them.

- Small successes will encourage everyone to become involved - no one really wants to be left out or left behind.

- Don't forget to use other established knowledge and be prepared to share what you have learned .

- Use the regional Operating Room Nurses Association, the Provincial (ORNAO), The Canadian Association (ORNAC), OPANA and RNAO as resources that are easy to access.

- It is not necessary to "re-invent the wheel".

- Read, Listen and Communicate.

- We must learn to work smarter, not harder within the scope and limitations of health care today.

The Future of CQI

What I would like to see is the following:

• Establishment of a quality council within our own unit,

• Officer positions in the council should be **rotating**, so as to prevent the establishment of "power" plants within the unit.

• An Education Committee should be set up to review current literature available to present at staff meetings (i.e. *Canadian Operating Room Nursing Journal, and the AORN Journal).*

• A Liaison Committee should be set up to visit and communicate with other units in hospital (two-way communication).

• Peer Evaluation is a difficult concept which requires TLC (tender loving consideration) which could spell disaster if not handled correctly.

• Active physician participation, along with a physician representation on our Quality Council.

Conclusion

Is the Canadian Health Care System doomed? The government has forced hospitals to cut costs in part by implementing continuous quality improvement programs. I believe that this continuous improvement process can work if the government remains consistent in its reform policies and health care institutions can actually allow the employees to do the jobs for which they are trained.

I challenge you, employees of health care institutions, to get on board. Know what CQI is. Become involved, assertive and empowered. Do not sit in your staff lounges and complain about everything. We have finally been given some clout and it is up to us to run with it.

Remember that CQI is employee-focused and it is an on-going process. You, too, may be a patient someday.

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Special Considerations of the Elderly Patient Requiring Anesthesia -

Continued from page 28

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Clarification to the article:

"Fluid Replacement Therapy and Perioperative Management" by Pat Corey-Plett published in this journal, Vol. 12, No. 4, Nov./Dec., 1994, pages 18-21.

Thank you to my conscientious and studious colleagues at St. Boniface General Hospital who questioned my discussion on blood products and compatibility. *Submitted by: Pat Corey-Plett .*

Blood Type:	Surface Antigens:	Serum Antibodies:	Donors:
O (universal donor)	no ABO surface antigens	Anti A & Anti B	O
A	A	Anti B	O & A
B	B	Anti A	O & B
AB (universal recipient)	A & B	no ABO antibodies	O,A,B,AB

Type O blood is used as emergency blood when the patient's group is not known. There is very little of the serum antibodies, therefore a reaction is very remote. Group O has no A or B surface antigens on the RBC, therefore it will not be rejected by other groups. Rh(D) positive or negative: 85% of the population isRh positive. Studies show that in an emergent resuscitation, uncrossmatched group O packed cells is safe.

ORNAC Teleconferences

The Operating Room Nurses Association of Canada has planned a series of Teleconferences on a number of Operating Room Nursing Topics. The time for all Teleconferences has been set at 1:10 Eastern Time. Thus, participants must adjust to their time zones. Interested participants/groups are asked to contact Telemedicine Canada at **(416) 599-1234** to book programs.

Date	Topic	Speaker	Moderator
Apr 12 Wednesday	**Perioperative Nursing and Anesthesia: A Manitoba Experience**	Jacob Kress Pat Corey-Plett	Sahmee Roux
May 3 Wednesday	**Ethics of Organ Retrieval**	Ann Secord	Jean Reid
May 24 Wednesday	**Susbstance Abuse in Nurses Its Identification and Treatment**	Dr. Graeme Cunningham	Margaret Cassidy
June 14 Wednesday	**Perioperative Performance Appraisals - VGH Experience**	Mirilla Furlan Sunny Russell	Dahlia Robinson

Speaker Profiles

Jacob Kress, RN, Perioperative Nurse Clinician, and **Pat Corey-Plett**, RN, BN, Perioperative Nurse Clinician, St. Boniface General Hospital, Winnipeg.
Ann Secord, RN, Transplant Coordinator, Inspector of Anatomy, Saint John Regional Hospital, Saint John, N.B.
Dr. Graeme Cunningham, MD, FRCPC, Director, Homewood Alcohol and Drug Service, Guelph, Ontario, and Assistance Clinical Professor of Medicine, McMaster University, Hamilton, Ontario.
Mirilla Furlan, BScN, Unit Supervisor, 11A OR, and **Sunny Russell**, RN, Head Nurse Cardiovascular OR, Victoria General Hospital, Halifax, N.S.

Teleconference Moderators

Sahmee Roux, RN, Staff Nurse, Lachine General Hospital, Lachine, Que.
Jean Reid, RN, Staff Nurse, York County Hospital, Newmarket, Ont.
Margaret Cassidy, RN,BN, Staff Nurse, OR/RR, Region 7 Hospital Corporation, Miramichi Facility, Miramachi, N.B.
Dahlia Robinson, RN, President, Operating Room Nurses Association of Alberta, Clinical Coordinator, OR Ophthalmology/Otolaryngology, University

Contact: TELEMEDICINE CANADA at **(416) 599-1234** to book programs.

CALENDAR

ORNAC '95
14th National Conference, **May 8-12th,1995**
Vancouver, BC

World Conference of OR Nurses - IX
September 10-15, 1995, Sponsored by the AAORN, **Hamburg, Germany**

ORNAC '97
15th National ORNAC Conference - Ontario

Operating Room Nurses of New Brunswick
21st Spring Institute
April 28th, & 29th, 1995
Howard Johnson Hotel, Edmundston
(506) 739-7321
Theme: Quality, Competence & Challenge
Exhibitors Contact:
Noelline LeBel, OR Resource Nurse,
275 Boulevard Hebert, CP 520
Edmundston, N.B. E3V 3L2
Tel: (506) 739-2200 ext. 2500
FAX: (506) 739-2230
Reg. Nurses Contact: Helen P. LeBel, R.N.
(same address as above)

ORNAC
1995 Nominations for Office

The following is a presentation of the candidates that have agreed to let their names stand for consideration of the positions indicated on the executive and board of the Operating Room Nurses Association of Canada (ORNAC). The following biographical information and photography submitted by each candidate has been gathered and assembled by the chairperson of the Nominations Committee Gloria Stephens. Elections will be held at the ORNAC National Board Meeting May, 1995 in Vancouver.

Donna Farid
Nominated for President-Elect

Donna Farid is an Operating Room Nurse, Cardiovascular surgery, Victoria General Hospital, Halifax, Nova Scotia.

Preceptorship workshop- Orientation and training of OR staff '90s; Front-line leadership workshop - Management, Leadership and Interpersonal skills '93. Developed fund-raising projects to support nursing attendance at OR conferences.

Professional Activities:

Newfoundland/Labrador OR Nurses Association **(NLORNA):** • President '81 - '83; Chairperson Standards Committee; Chairperson Social Committee Annual Conference '84.

ORNANS: • Chairperson Social Committee for Atlantic Conference '89; Vice President Nova Scotia '88 - '91; President '91 to '94; Past President '94 to present.

Attended Atlantic OR Conference from '83 in PEI to New Brunswick in '94.

ORNAC: • National Board member representing Newfoundland/Labrador '82-'84; Board Member representing Nova Scotia since '91 to present. Chairperson - ORNAC Environmental Committee '94 to present. National Conference committee member '93 to present. Attended all National OR Conferences from '82, Winnipeg to '93, Quebec City. Plans to write OR Certification exam June, 1995. Advisory for the National OR Conference - Halifax 1999.

"Through my experience and continuing education, I have developed strong interpersonal relationship skills. I believe in assuring quality nursing care through good orientation and training, proper supervision, positive reinforcement and feedback. I would describe myself as an organized individual whose dealings with other people are fair and firm. I am creative and enjoy a challenge. I care about ORNAC and all it stands for, the promotion of operating room nursing. I believe in the philosophy of ORNAC as it supports the thousands of "grass-roots" OR staff nurses throughout this country. As a "grass-roots" staff nurse myself, I share the same needs and concerns, and have an understanding of the issues facing us today. Therefore, I feel I can best serve ORNAC by working with the Board toward achieving the following objectives:

• Promote and enhance the current image of the Registered Nurse in the perioperative setting to the public, government officials and health care administrators.

• Exhibit strong leadership in speaking out on behalf of OR Nurses whose roles are being eroded in the name of cost savings. The gains that ORNAC has made must not be eroded.

• Promote the continuous maintenance of excellent patient care as stated in ORNAC Standards despite obstacles such as budgetary and staffing cuts.

• Promote active participation of OR nurses in in-service, meetings, conferences and especially OR Certification. Support the *Canadian Operating Room Nursing Journal.*

• "Lead by example - important for ORNAC representatives to be role models, promoting professionalism in our specialty and to be obliged to seek certification in Perioperative nursing.

• Promote and continue to support the Advanced Nursing Practice roles that ORNAC has been working toward for some time.

Dahlia Robinson
Nominated for President-Elect

Clinical Coordinator Ophthalmology, Otolaryngology, Dentistry, General Surgery (adults and pediatrics), June'94 to present, at University of Alberta Hospital, Edmonton, Alberta.

Professional Activities:

ORNAA - Secretary Provincial Conference '87; President North Central Group '90-'94; Social Convener Provincial Conference '91; President-Elect '92-'94; President '94 to present.

ORNAC - Board Member '93 to present.

OBJECTIVES

• **Educate** - Education should not only apply to ourselves, but to our colleagues and the public. Informed decisions about our future cannot be made if organizations are not aware of what OR Nurses do. This information must be substantial and related to direct patient care or our concerns may be construed as "territorial bashing". We must be prepared to increase our educational base to accommodate the prospects of our expanded roles.

• **Motivate** - ORNAC can highlight the opportunities within the workplace for the membership, communication on a national level will enable us to offer suggestions, open doors and give positive feedback. We all need to learn from each other. This information can demonstrate to the general membership that the opportunities that appear to be happening to other health care disciplines can indeed be happening to us.

• **Mobilize** - We now have our OR Nursing Standards. We should be defining our scope of practice and promoting ourselves as the staffing choice within our present and expanded roles. We created the opportunities, we should capitalize on them. As we continue to promote ourselves in a positive and confident manner, we can continue to prosper and our patients will benefit.

Marlene Hill
Nominated for Treasurer

Marlene Hill is a Staff Nurse in the Operating Room, Queen Elizabeth Hospital, Charlottetown, Prince Edward Island.

Professional Activities:

ORNPEI President and currently Past President Chairperson - Atlantic Conference '92

ORNAC Board member representing PEI since '89. Committee member of Waste Management/ Environment and Finance. Chairperson of Finance Committee since'93 and currently ORNAC Treasurer since '93. Co-Chair of the Standards/Education Committee.

Objectives

• Continue the solvency of ORNAC;

• Continue to lobby for OR Nursing Experience to be reinstated into the generic nursing curriculum;

• Encourage higher membership into ORNAC through greater exposure of ORNAC's activities;

• Improve communications between ORNAC Executive/Board and all the Provincial memberships.

Corina Balcom
Nominated for Secretary

Staff Nurse - Mirimache Facility Regional Hospital, Newcastle, New Brunswick, (Team Leader, Surgical Care Team and Case Cart Committee).

Professional Activities:

NBORN Member New Brunswick Operating Room Nurses Group since '85. Served as Chairperson of the By-laws Committee; Spring Institute Chairperson '93. Currently President.

ORNAC Board member since '92 and served as a committee member Standards/Education. Responsi-

ble for arranging Telemedicine Canada sessions since September, '94.

Objectives: •Promote and update the ORNAC Communications network; •Assist in the research and promotion of the advanced nursing practice roles; • Promote clinical practice activities; and • Lobby for OR Nursing in Nursing Education programs.

Judi Tyndall
Nominated for Secretary

Nurse Clinician, Operating Room, Civic Hospital, Henderson Division, Hamilton, Ontario. She developed curriculum for post basic RN, OR College Course, Mohawk College and served as its Co-Program Manager and Instructor.

Professional Activities

ORNAO • President-Elect ORNAO '92-'94; President ORNAO '94-96. Provincial Conference Planning Committee for Ontario. Chairperson - Publicity ORNAO '90-'92.
Co-Chair and Protocol Chair Conference '94. Chairperson Conference '96. Chairperson of Expanded Role for ORNAO.

ORNAHD •Held positions of Program Committee Chair; President -Elect, President, and Past-President of Operating Room Nurses Hamilton and District.

ORNAC • Board Member '92 - '96. Member of the Advanced Practice Committee and represented ORNAC at CAS meetings. Exam item-writer for CNA Perioperative Certification, Committee member ORNAC Research Committee.

Other • Co-author of articles on "Latex Allergy"; "Patients Walking to the OR"; "Cardiac Arrest" .Was recipient of the ORNAC Editorial Award for articles published in the CORNJ.
Presented numerous lectures on 'Latex Allergy' and 'Nursing Diagnosis in the OR'.

Objectives • Promote Advanced Practice for Perioperative nursing; • Promote CNA perioperative Certification; • Keep ORNAC members abreast of the changes in health services both nationally and provincially; and • Fulfill my role as secretary, being the important communication link to the Executive/Board and membership.

Speakers and History of the World OR Conference

By Gloria Stephens

Since 1983, ORNAC has submitted a list of possible speakers to AORN from across Canada. Out first president was instrumental in getting Canada actively involved in the 'family' of organizing World OR Conferences.

A list of fourteen (14) possible speakers representing Canada was obtained through each Provincial President and was submitted to AORN. The selection is made by the Work Planning Committee of AORN and the speakers will be matched to the topics which were determined by an international committee the previous year.

AORN is the sponsor of the World OR Conference and is responsible for gathering representatives from countries throughout the world whose mandate is to prepare educational program and protocol for the conference. A three to four day meeting is held the year prior to the actual conference.

Canada has taken an active role in all the World Conferences but the first one by sending speakers, providing moderators, and as a member of the Planning Committee. Moderators are usually from the hosting country or from the Planning Committee. Speakers are very dedicated as they usually donate their time and receive very little or if any financial assistance as AORN does not provide funding but will wave registration fee. Canadian speakers have received financial assistance to as much as ORNAC's funds would allow. We are so fortunate to have had such competent speakers representing Canada throughout the years. ORNAC is grateful and extends a thanks to all.

AORN started the World OR Conferences due to a request from the Philippines for assistance when Barba J. Edwards was President of AORN in 1976. When Barba returned to the U.S. she proposed to AORN Board the possibility of conducting an American, European and Australian meeting of OR nurses. She had already travelled on numerous occasions to the British Isles, Europe, Africa , the Middle East, Australia and New Zealand as AORN president, so had contacts in all these countries. A strong common bond of professional kinship was being formed. There were always questions, swapping of ideas, good sound information exchanges and interesting stories.

The AORN Board and headquarters staff accepted the concept as a challenge to the future of OR Nurses and an enhancement of perioperative care for all patients throughout the world. Hence, the first International Conference was held in Manila, Philippines in 1978 with a total of 1,055 nurses and 62 exhibitors. The meeting proved to be so successful that a second meeting was planned for Lausanne, Switzerland in 1980. That being another success, conferences have followed every two years since: Honolulu, Hawaii 1983, Singapore 1987, Vienna, Austria, 1989. ORNAC and the Canadian nurses were very proud and honored to have Vancouver, B.C. host the World in September,1991. This conference had the largest number of exhibitors (459) and registrants (1957) to date. 1993 Adelaide, Australia hosted the conference with 1,757 nurses and 389 exhibitors.

Hopefully, there will be a large representation of Canadians at Hamburg, Germany for the XI World Conference, September 11-15, 1995.

"Only through teamwork with each other can we look with confidence to a future in which our children and grandchildren will have a chance to access good health care adequately provided. Only with strong conviction, concern and caring can we continue into the future. I believe that with prudence and patience, with a sense of dedication, and with God's help, we will provide enriched meaning to operating room nursing around the world, as well as our own human destiny." (**Barba J. Edwards** in a speech at the World OR Conference, Singapore, 1987.)

We have the vision to see what is needed, the courage to do what is needed. Do we have the teamwork that is needed ? A question put to all OR nurses.

World Conference of Operating Room Nurses - IX

Hamburg, Germany September 10-15, 1995

Theme: "Touching Lives and Building Futures"

Registration:

For program details, Hamburg tourism information, accommodation and registration forms write to:

Association of Operating Room Nurses, Inc.
World Conference of Operating Room Nurses
Attn: Customer Service
2170 S. Parker Road, Suite 300
DENVER, Colorado, USA
80231-5711
Phone (303) 751-0337 Fax (303) 750-3212

International Fellowship Night

Canadians traditionally attend Fellowship Night in the same attire. Chosen for this conference is a red windbreaker with the ORNAC logo and a look-alike Tilly Hat. Order the sweatshirt and the hat from Gloria Stephens as soon as possible, or to your Provincial President so that orders can be placed and delivery made at ORNAC's Vancouver National Conference.

To Order the look-alike **Tilly Hat** and **Windbreaker** (Sizes S, M, L. & XL & XXL) **Pay $35** including taxes to:

Gloria Stephens,
2864 West 3rd Avenue,
Vancouver, B.C. V6K 1M7

ORNAC's Motto Competition

The idea for a Motto competition was presented to the ORNAC Executive/Board in the Fall of '93 and again at the Spring meeting of '94 by Gloria Stephens, Past President. The idea was accepted.

A competition form was developed and sent to all Provincial Executives with a return deadline of December 30,1994. A notice and explanation accompanied the form. The Provincial Executives were to publish the request in their newsletters. The submission could be by Province or an individual.

Nine (9) submissions were received by the deadline. A committee of three was formed to judge the submissions Jan. 16, 1995. *(I was not part of the selection process).*

The motto selected was:

"PROMOTE EXCELLENCE"

submitted by Vija Hay of Ontario who happens to be the President-Elect of ORNAC. A thank you letter and the prize of a B.C. Indian carved spoon in pewter was sent to Vija as winner of the motto competition. The prize was donated by Gloria Stephens.

A 'Thank you" letter was sent to the other participants.

The next step to be taken by the Executive/Board is to set policy as to how the motto will be incorporated into the activities and publications of ORNAC.

Gloria Stephens
Past-President
ORNAC

1995 Bursary Awards for Nurses

The Canadian Nurses Foundation is pleased to announce the recipients of the following Awards:

Ansell Medical Baccalaureate Award - This is awarded to an OR nurse pursuing a Baccalaureate. The 1994 recipient was **Mary Lee-Hebert** from Lower Sackville, Nova Scotia. Mary Lee is attending Dalhousie University full time and is also enrolled in a distance perioperative nursing program at the Victoria General in Halifax. She continues to work in the OR on a casual basis. During the year Mary Lee initiated a research study related to patient positioning in Simms Stirrups and is currently in the process of gathering data on the number/type of gynecological clients who experience discomfort post-op after being positioned with these stirrups.

Jill E. Schneuker Fellowship in Nursing Science - This award is sponsored by Baxter Corporation in memory of Jill Schneuker, a former employee. The 1994 recipient of this award is **Sandra Hirst** who is currently pursuing doctoral studies at the University of Alberta. She plans to return to the Faculty of Nursing, University of Calgary as an Associate Professor, upon completion of her studies.

The Baxter Fellowship in Dialysis Nursing Sciences for 1994 was awarded to **Janet Yaremchuk** who is completing a Master's in Nursing at the University of Calgary.

In 1994 CNF provided 46 Study awards to nurses across Canada totalling $164,764. This year a number of new awards are available thanks to Johnson & Johnson Medical Products and Becton Dickinson Canada Inc.

For applications for these awards contact:

The Canadian Nurses Foundation
50 The Driveway, Ottawa, Ontario. K2P 1E2

Note: Applications deadline is April 15, 1995.

OR Bursary

The ORNAC/Johnson & Johnson Medical Products Bursary is offered to financially assist members of the Operating Room Nurses Association in Canada (ORNAC) in furthering their education in areas that will enhance perioperative nursing practice.

Applications are invited by ORNAC for 1995. Deadline for submission in **March, 1995.** Bursary application forms are available from Provincial Presidents and printed in some provincial newsletters. Submit your application to:

Shelly Zareski
Chairman Awards Committee
5572 North Ridge Road, #1206
Halifax, Nova Scotia

World's first 3D ultrasound-guided cryoprostatectomy performed in London

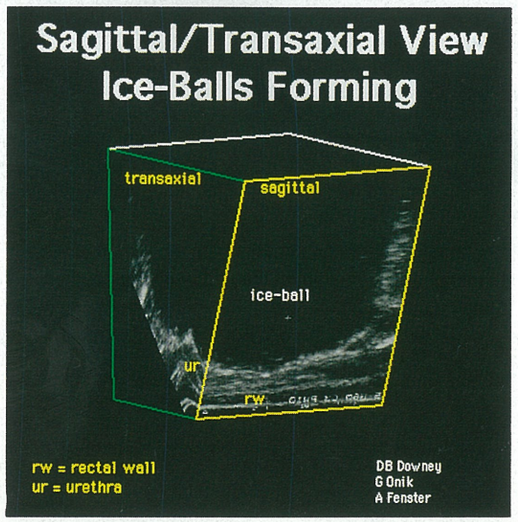
London, Ont. The world's first 3D ultrasound-guided cryoprostatectomy procedure was performed at University Hospital, December 14, 1994. The entire prostate was frozen and subsequent evaluation showed it was done without significant damage to either the urethra, the bladder or the bowel.

The 3D ultrasound technology was developed by University Hospital and researchers and scientists from the Robarts Research Institute.

In a telephone interview March 1st,1995 with Ken Hall, Nursing Coordinator of University Hospital's Operating Room, the Journal learned about this new technology and its exciting potential as tomorrow's surgical intervention for the treatment of liver tumors, breast tumors, and in ophthalmology.

The hosptial's news release claims prostate cancer is the most prevalent cancer in men and the second most frequent cause of death due to cancer in North American men. "Once diagnosed, four possible courses of action may be taken:

1. Surgery - where the entire prostate is removed;
2. Radiation Therapy - where the patient attends the cancer clinic, receiving intermittent x-ray treatment;
3. Drug Treatment - some drugs, notably hormones or hormone analogues, can affect the course of prostate cancer; and
4. Watchful Waiting - some tumors grow very slowly and are unlikely to be terminal. These may be left alone. Further, if the patient is elderly and infirm from other causes, it may not be appropriate to embark on aggressive treatment." *The slide (courtesy of University Hospital) indicates the 3D view of the formation of iceball in the tumor.*



Cryosurgery, (the freezing of tissue using liquid nitrogen), is one of the new treatments for prostate cancer. The problem with the procedure is the difficulty associated with freezing just the cancerous prostate. When other structures immediately adjacent to the prostate are inadvertently frozen, debilitating complications occur to the patient. 3D ultrasound is a more efficient technique for visualizing what is being frozen.

Dr. Donal Downey and Dr. Aaron Fenster's 3D transrectal ultrasound team joined forces with Dr. Joe Chin's urology team to develop a 3D imaging device. Dr. Gary Onik, Chairman of the Department of Minimally Invasive Therapy at Princeton Hospital in Orlando, Florida, and one of the foremost knowledgeable users of cryosurgery in the U.S., consulted on the procedure and its protocol. Dr. Fenster is a biomedical physicist with the Robarts Research Institute and Dr. Downey is the radiologist at University Hospital.

Following extensive laboratory testing, it was decided to perform a 3D ultrasound-guided operation on the prostate using the Institute's new system. With Candela Laser Corporation, Aloka Canada and Aloka, USA providing the necessary equipment for the surgery, a procedure was performed conjointly by Drs. Chin, Onik and Downey.

According to Ken Hall the damage to the adjacent tissues and structures and the problem of blood loss associated with prostate surgery are eliminated with this new 3D cryo procedure. The procedure involves the placing of cryoprobes in liquid nitrogen then freezing the tumor and totally disintegrating the cancer.

The development of 3D ultrasound technology is a significant improvement on traditional methods of treatment. It may prove to be a suitable treatment for patients who are not treatable by alternative methods.

In addition to the benefits this new procedure provides for patients, in terms of a significant shorter hospital stay and faster recovery, it has the potential to save the North American health care system approximately $300 million a year. In Canada, it represents an estimated $25million.

Plans are underway for a second 3D ultrasound guided surgery within weeks at University Hospital and the Journal hopes to have a description of the procedure in a later issue. ■

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