Canadian
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Volume 9, No. 1, March/April, 1991

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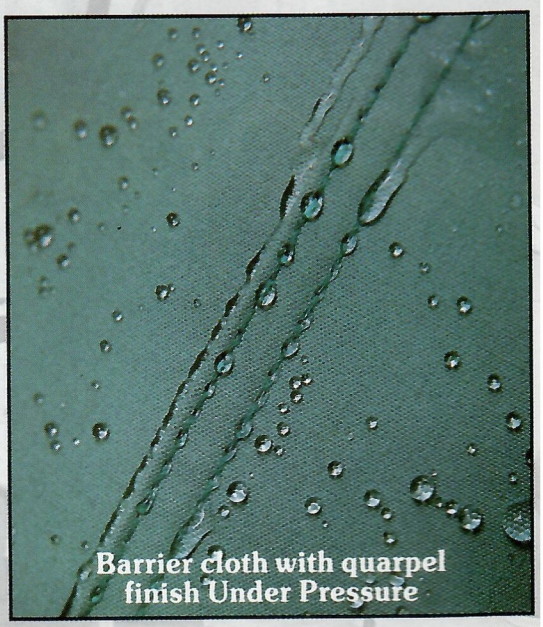
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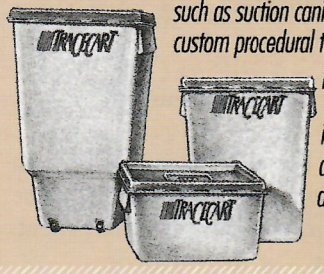

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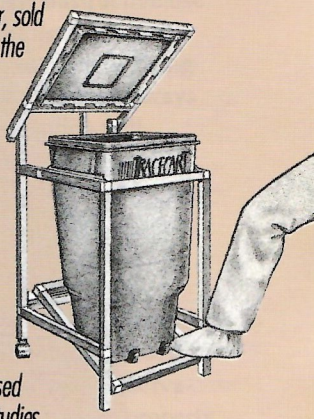

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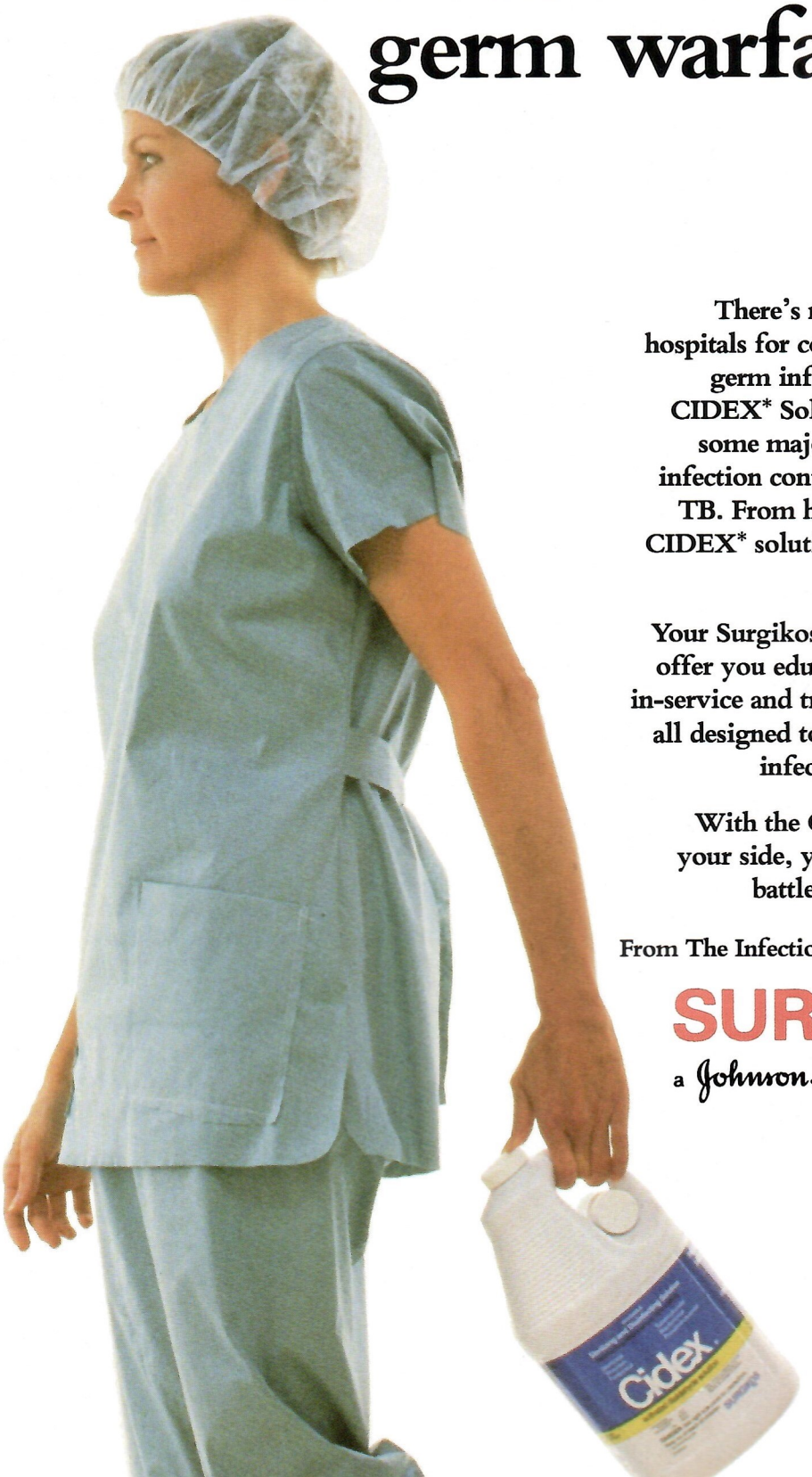

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Feedback - Success of an Organization

By Gloria Stephens

Essential to achieving better relationships among people and for the success of organizations, is feedback. In order to effectively relate to other people we need to know something about the way we are affecting and influencing them. Feedback provides a way in which we can evaluate this impact. If we are interested in changing an organization in some way, or to evaluate the activities of the organization, feedback can provide us with a fuller understanding of how we are doing or how we should change.

Giving feedback is a difficult skill and requires a good deal of experimentation and practice in order to do well. This requires that the giver of feedback be in fairly good contact with his/her own feelings and judgements, and that he/she have adequate language for communicating them. On the receiving side one needs the ability to receive feedback without necessarily feeling attacked or condemned. This requires some confidence or security on the part of the recipient so that feedback can be tolerated and utilized for corrective action.

To clarify some misconceptions about what is meant by feedback; feedback is the communication of an individual(s)'s feeling or reactions to the behavior of a person or a situation. Giving feedback is not "psychologizing" or motive interpretation. It is simply a reaction to what was observed. Feedback, to be successful, goes in two directions and is the responsibility of the "sender" to verify the understanding of the feedback.

Acceptance of feedback with critical examination and testing for validity is the most constructive use of feedback in which the recipient listens to and attempts to understand and to digest what is being said. Assumptions made on feedback must always be "checked out" as a wrong assumption will invariably create a wrong behavior. Therefore, all feedback must not be blindly accepted nor blacked out or rejected.

Both positive and negative feelings and reactions are equally useful in feedback. Feedback is not a form of criticism but a form of reporting observations and reactions. Feedback becomes the property of the recipient and he/she alone needs to decide what to do about it; to defend, rationalize, accept, make some readjustments or change.

We give and receive feedback daily in our personal and professional lives, and it is important that we understand the dynamics involved in utilizing this skill. Use it to its fullest in your relationships with your nursing colleagues and your superiors, as well as with your professional nursing associations and the board of ORNAC.

Gloria Stephens is President of the Operating Room Nurses Association of Canada, and the Clinical Instructor, St. Paul's Hospital, Vancouver, B.C.

Living on the cutting edge:

(The compelling culture of OR nursing)

By Heather D. Wood, R.N., B.Sc.N., M.N.

Introduction

Operating room nursing is a unique, challenging, and often satisfying career. Operating room nurses like the feeling of "living on the cutting edge." They like the challenge of a highly skilled and co-ordinated atmosphere. They like the respect they engender in their colleagues for their mastery of the skills inherent to operating room nursing.

The purpose in conducting this study was to identify variables that attract, maintain nurses' interest in, and foster work satisfaction within the operating room setting.

Significance

The need for patient safety, coupled with the highly skilled nature of operating room nursing, demands that a consistent flow of new graduates learn the intricacies of this specialty. In order to enhance the image of the nursing profession as a whole, and more specifically operating room nursing, it is imperative that we be able to articulate the rewards, and the sources of these rewards not only to prospective nurses, but to those already in the profession. This study is significant for the following reasons:

- Operating room nurses and operating room nursing are under-researched areas;
- Although work satisfaction has been extensively studied in other areas of nursing, few studies have been conducted in the operating room setting;
- No investigations to date, have addressed what attract nurses to the O.R. and why they stay.

Method

Because the elements of the attraction to, and satisfaction with a career in operating room nursing are relatively unknown, the constant comparative techniques of grounded theory (Glaser & Strauss, 1967) were used to generate a conceptual framework from the data. Observational and in-depth interview data were coded for substance, categorized and linked to form an integrated framework. Data was collected in the form of unstructured interviews with ten OR nurses. All participants were women whose ages ranged from 25 to 48. Years of experience as an operating room nurse ranged from 11/2 to 20. At the time of the interviews, three nurses were employed on a part-time basis, while the remainder worked full time. Collection sites were from four separate hospitals of varying size in Eastern Canada.

Findings

In the compact, cultural configuration of the operating room, nurses are expected to practice on the cutting edge of their craft. Operating room nurses gain this cutting edge through the central process of ***mastering***. In order to become effective, operating room nurses must master the technological skills and unique nature of the work, the compact culture of the operating room, and the isolation from others.

The attractions of OR nursing

The attraction of operating room nursing was found to be dependent upon the participant's basic education. Those nurses fortunate enough to have

an operating room practicum of 4-6 weeks were attracted by the nature of the work, which they described as "exciting, challenging, fast-paced and highly complex." The technical nature of the work was an attraction in itself. Those nurses without the benefit of this type of exposure were willing to take a chance in the operating room in return for full-time employment. One nurse with very limited exposure stated: "I thought the O.R. was going to be monotonous, but it's not; it's anything but."

(Larsen & Brown, 1984), in a study of nurses' work satisfaction found that accurate expectations play an important role when entering a job, in order to avoid unrealistic work expectations and the resultant work dissatisfaction. How can a nurse with only two days exposure have a realistic expectation of what it's like to be an operating room nurse?

Becoming an OR nurse

The process of becoming an operating room nurse is arduous. New operating room nurses describe the first months as "terrifying and extremely stressful." The data tell us that a neophyte operating room nurse must practice her/his craft for 1-2 years before feeling comfortable. Feeling comfortable means not being worried about what might be facing them the next morning when they get to work. As put by one experienced operating room nurse: "God be with you girl...until you get some experience and confidence."

An effective monitoring system where skilled, experienced O.R. nurses act as "grey gorillas" to the novice can help these nurses gain the "tools of the trade" required to be an effective team member.

Work satisfaction

Work satisfaction is a complex concept. Affected by many variables, it can be defined simply as obtaining gratification from one's chosen career or work. Needs that are individual to the differing personalities found within a setting must be met in order that the employees feel good about the work they do and about themselves. One nurse interviewed indicated this by saying: "You need to feel that the work you do is valued; that this work and you are worth something." There is not one simple prescription for making an environment, or a job satisfying. Nor does the task of enhancing work satisfaction rest entirely with management. Individual operating room nurses must reflect upon their needs, and the sources of work satisfaction that are significant to them.

The operating room nurses participating in this study reflected upon how their work meets individual needs, and have identified areas that enhance work satisfaction. The data indicate that mastering the nature of the work and skill such as scrubbing and circulating for complex operative procedures, help complete the role transformation needed to become an operating room nurse.

Mastering the culture of OR nursing, with its norms and values built on the concept of teamwork and the interaction between team members is a source of satisfaction for OR nurses. The concept of teamwork, although not unique to the OR, is indispensable in this setting, as it is tantamount to getting the job done. A smoothly functioning team, with each member fulfilling his/her role, contributes greatly to OR nurses' work satisfaction. On the other hand, when the team breaks down for what ever reason, cohesiveness is threatened and the nurses in this study felt that dissatisfaction results. The tight working conditions of the operating room team tend to magnify the interactions of the various members. One nurse put it this way: "When the team doesn't work well, it becomes very obvious. You just have to look at the faces sometimes - faces that are long and drawn. Everyone is so glum." For example, team-work is highly valued among operating room nurses. A person who prefers to function alone and derives satisfaction from this, may find it difficult to work in a setting that is dependent upon effective team work.

Culture

The isolation from other sections of the hospital environment was found to be a key factor in the formation of the culture of the operating room. The operating room nurses participating in this study perceived little connection between themselves and nurses in other areas. One nurse described it this way: "We [operating room nurses] have different skills, different knowledge and use it in a different way. We perceive things in a different way. We have a whole different focus [from nurses in other areas]. Operating room nurses value their "differentness" and their isolation. They either consciously or unconsciously erect fences to preserve their uniqueness. Maxwell (1979) in a study of elder models and their proteges found that groups fence off their territory in order to protect model importances such as elements of a group culture. To the OR nurse, information about technical skills, " trade secrets," and interactions are factors that are symbolically associated with the specialty. One

nurse said: "I'm not just a nurse, I'm an operating room nurse." Operating room nurses erect fences to protect their turf from those who do not understand the essence of OR nursing.

Mastering

Mastering the stress intrinsic to operating room nursing appears to be linked to mastering of skills. The data indicated that as the OR nurse progressively masters the skills needed to do the enterprise, the perceived level of stress decreases. This development is seen as another origin of work satisfaction.

Two stages of the process of ***mastering*** were identified. The first stage is the gaining of the technical skills and procedures which are the heart and soul of OR nursing. The OR nurse knows that he or she is mastering the skills when "the big cases" are seen as a challenge rather than looked upon with dread and apprehension. The second stage of mastering is accomplished when the nurse acquires the knowledge and ability to act as a mentor to a protegee. This ability to act as "a grey gorilla" is cited as being a source of satisfaction to the expert operating room nurse.

The constant challenge and triumph of the process of ***mastering*** were found to be the variables that attracted and retained operating room nurses to the setting. The consequences of ***mastering*** are O.R. nurses who are confident in their abilities, respected for their skills and satisfied with their work. From this comes the power to work as an equal team member and to control and change their working environment in order to meet their needs.

Perhaps the most significant impact of work dissatisfaction on direct patient care is the depersonalization of the patient. The nurses interviewed felt that, when unhappy with their work situation, operating room nurses have a tendency to attend only to the technical aspects of their job.

Implications

Operating room nurses secure the majority of their work satisfaction from the doing of the work itself. Although the OR is an isolated and compact culture, the sources of work satisfaction may mirror those of nursing in other areas. Nursing, as a profession is continually striving to reach new pinnacles in the standard of patient care. In order to achieve this peak, mastery of the skills fundamental to nursing of all specialties is critical. The cultural importance of the workplace must not be overlooked. Each nursing unit has values and norms unique unto itself. These need to be identified and made known, not only to new staff, but to seasoned veterans as well. If we, as nurses are able to combat the current nursing shortage, we must be able to verbalize the potential and realistic rewards that come with being a nurse. In order for this to transpire, we must help mold the workplace into an environment offering rewards and incentives for excellence in nursing care.

Recommendations

Recommendations to promote work satisfaction among OR nurses include expanding the traditional role of the OR nurse to include peri-operative nursing. This role may help dispel some of the myths that surround OR nursing, and increase the visibility of the OR nurse. The opportunity to work hours that enable the nurse to fulfill the desired commitment at home while remaining an active operating room nurse is significant. The cost of developing a highly skilled operating room nurse is substantial. It is not cost effective to have operating room nurses transfer to another area in order to gain suitable working hours.

The opportunity to form cohesive teams that function well as a unit should be explored. Because OR nurses work so closely, staff must be able to work well together. Conflicting personalities working on the same team detract from efficient functioning and lessen the perception of work satisfaction.

The reinstatement of the OR experience into basic nursing education would help to clarify the expectations of new graduates thinking of choosing OR-nursing as a career.

In conclusion, this study has provided insight into the sources of work satisfaction among OR nurses. Operating room nurses derive satisfaction from ***mastering*** the role transition as they acquire the complex skills required to do the work. They enjoy the nature of the work itself, even with the inherent stress. The OR nurse gains satisfaction from the integration of self into the unique culture of OR nursing. Living on the cutting edge provides the OR nurse with a feeling of satisfaction. This cutting edge is achieved through the process of ***mastering.***

Author

Heather Wood, R.N., B.Sc.N., M.N.,is Head Nurse, Medical-Surgical Unit, The Moncton Hospital, Moncton, New Brunswick. She received her B.Sc.N.from the University of Moncton, and her M.N. from Dalhousie University. This paper was a presentation to the 11th National Conference of ORNAC '90 in Toronto, Ontario.

Gas gangrene

A surgical emergency - Part 1

By Diane Aboud, R.N. and Jan Williams, R.N.

Gas gangrene is caused by a local infection with anaerobic, spore forming, gram positive *Clostridium perfringens* or *Clostridium septicium.* It is masked by the presence of gas in the soft tissues. Because gas gangrene is a lethal process, it is imperative that the muscle necrosis be recognized quickly and that the appropriate treatment be initiated immediately. This "Clostridium myonecrosis," as it is called, is a rapidly progressive medical-surgical emergency.

Etiology

There are a number of Clostridium species but 80-95% are caused by *Clostridium perfringens. Clostridium septicemia* is the second most common etiologic agent. *Clostridium perfringens* is prominent among normal bowel micro flora, and is 10 to 100 times more prevalent than *E-Coli* in fecal specimens. Clostridium can be found on the skin, especially over the buttocks, thighs and perineum, and less frequently in the vagina and in the diseased biliary tract. Our environment is heavily contaminated with Clostridium, which is on clothing, in the air of operating theatres, in water, on food, in dust and soil. The ability of Clostridium to form spores allows them to persist in the environment under adverse conditions.

Isolates from normal bowel flora and from fatal cases of myonecrosis are no different in toxin production. Rather, myo-necrosis occurs because damaged tissue presents this anaerobic organism with an opportunity to proliferate. When *Clostridium perfringens* invades soft tissue, it produces thrombosis of regional blood vessels, tissue nec-rosis and localized edema. The necrosis releases both carbon dioxide and hydrogen subcutaneously, which produces interstitial gas bubbles.

Sign and symptoms

Between 60% and 70% of gas gangrene follows trauma, usually a major injury that breaks the skin, crushes tissue, compromises vascular supply and introduces dirt. Between 20% and 30% of cases follow clean surgical procedures such as common bile duct exploration, bowel surgery or attempted vascular repair. The remaining 10%-15% of cases occur after I.M. injections, minor trauma, or in immuno-suppressed patients.

The first symptom of myonecrosis is the development of heaviness or pain in the affected area beginning 24-48 hours after injury. The pain is constant and increases steadily. The painful area is not red or inflamed, but appears cool, pale, and swollen, often with bronze or brown discoloration appearing on the skin. Soon the skin and the wound may rupture, revealing dark red or black necrotic muscle. Gas gangrene produces early signs of toxemia and hypovolemia, such as tachycardia, tachy-

pnea and hypotension. Even though they are pale, prostate and/or motionless, most patients remain alert and oriented and are, understandably, extremely apprehensive.

Diagnosis

A history of recent surgery or a deep puncture wound and the rapid onset of pain and crepitation around the wound suggest the presence of gas gangrene. The diagnosis is confirmed by anaerobic cultures. This shows large gram positive, rod-shaped bacteria. These cultures are taken from debrided tissue. Blood cultures are also done.

Treatment

If signs of myonecrosis occur, immediate treatment is necessary. This means a wide surgical incision of all affected tissues and necrotic muscles. If there is a delay, very often the limb cannot be salvaged and must be amputated. Surgery is supplemented with blood, plasma and fluid replacement to correct any existing hypovolemia. Fluid balance, urine output, central venous pressure, cardiac status, and renal function must be monitored.

High doses of penicillin are given. Although the antibiotics cannot penetrate the heavily infected necrotic tissues, they help in preventing the invasion of healthy muscle and can treat bacteremia.

After debridement and/or amputation, hyperbaric oxygenation is used, if available. Every 6-8 hours, the patient is placed in a hyperbaric chamber for between 1-3 hours and is exposed to pressure (usually three atmospheres) designed to increase the oxygen tension and prevent multiplication of the anaerobic clostridia.

Prevention

Probably the most important aspect of prevention is through debridement and cleaning of traumatic wounds, and through the administering of therapeutic doses of anti-microbials.

Hyperbaric oxygen

The objective of hyperbaric oxygen therapy is to raise the oxygen saturation of tissue to a level at which pathogenic Clostridia cannot continue the process of myonecrosis.

"Hyperbaric oxygen earned its stripes in preventing the bends and countering gas gangrene, but it has application in many other acute situations." [1]

Some other uses are in the treatment of air embolism, carbon monoxide poisoning, cyanide toxicity (caused by smoke inhalation), burns, crushing injuries, frostbite, acute blood loss, anemia, closed head injuries, spinal cord injuries, strokes and myocardial infarctions.

"Before the use of hyperbaric chambers, the only treatment for gas gangrene was extensive surgery such as high amputation or 'commando' debridement, such as the removal of the entire abdominal wall. Without such drastic action, death occurs within as little as six hours." [2]

With hyperbaric oxygen therapy, morbidity and mortality are greatly reduced, and surgery can be less drastic, permitting the salvage of entire limbs. Hyperbaric oxygen therapy chambers come in two basic types - monoplace and multiplace.

A monoplace unit looks like an over-sized iron lung with clear plastic sides. The patient can be on a ventilator that fits inside the unit, but is controlled from the outside. All I.V. lines - arterial line, B.P. and EKG monitors - are capable of being established and monitored outside. The chamber is pressurized with 100% oxygen, so the patient breathes the oxygen without a mask.

These chambers cut the isolation time because the patient can be brought back to surface pressure in 10-15 seconds, if necessary, because they are breathing pure oxygen. If breathing air, which is 80% nitrogen, an air embolism would be a possibility.

Monoplace hyperbaric chambers are about one-tenth of the cost of a multiplace chamber and are readily adaptable to a hospital setting.

The multiplace chambers are walk-in or climb-in units that allow physicians, nurses and technicians to enter and attend to the treatment needs of several patients at a time. Patients breathe 100% oxygen via mask or endotracheal tube. The multiplace chamber is pressurized with air rather than oxygen. This makes them a bit safer than monoplace units, as flash fires are possible when oxygen is greater than 27%.

"Whether a multiplace or monoplace chamber is used, the bottom line is delivering oxygen according to guidelines." [3] ■

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Gas gangrene

A patient's history from an OR nurse's perspective Part 2

By Diane Aboud, R.N. and Jan Williams, R.N.

Recently, at the Riverside Hospital in Ottawa, an active treatment community hospital of 274 beds, the operating room encountered a case of gas gangrene in a young female patient. The case touched the entire operating room nursing staff, most of whom are mothers with teenage daughters. We were all shaken by the fact that the patient was also in her teens.

To help us understand this infection (gas gangrene) and to work through our grief at what was happening to this patient, we assiduously undertook the task of being well informed about gas gangrene and the events that lead up to the surgery that our young patient had to endure.

Before her first admission to our hospital, Lianna (not her real name) had been a normal, healthy, active and sports-minded teenager. She had been ill with cramps and diarrhea for a month. She had been treated with Imodium, which was discontinued as it made her vomit.

She was sent to the Emergency Department by her family doctor in mid-March, 1990, with a diagnosis of diarrhea and anemia. She was very pale and weak on admission and had lost ten pounds in one month.

Her haemoglobin was 8.0 g/dl (normal is 12-16 g/dl). She was typed and cross-matched, transfused with blood and the investigation into her illness was initiated.

A sigmoidoscopy and biopsy were done, which were found to be normal. A chest x-ray and ultrasound found nothing out of the ordinary. Blood and stool cultures showed no abnormalities or growth.

A barium enema and colon air contrast studies showed extensive deep mucosal ulceration involving the cecum, ascending, transverse and descending colon. A preliminary diagnosis of Crohn's disease was made.

She was discharged home two weeks later and was prescribed Prednisione and six Mercaptopurines and was to be followed by her family physician. At home, her diarrhea improved, but her haematological status worsened.

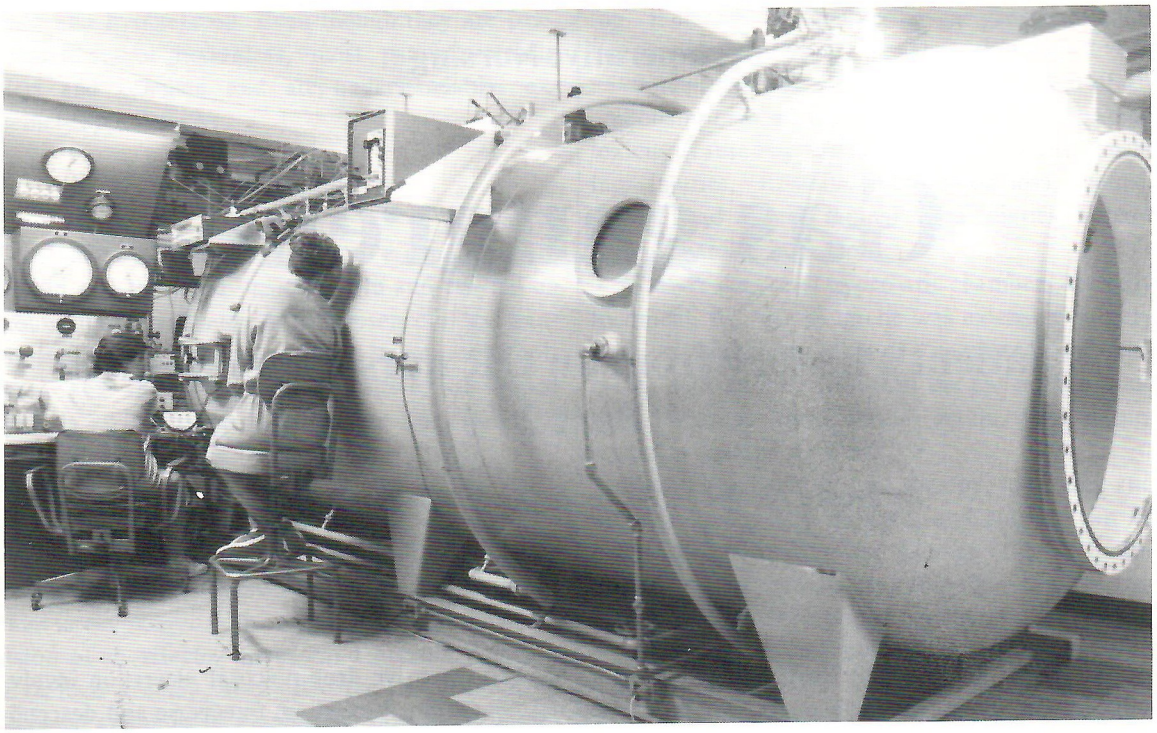
Crohn's Disease

Lianna was re-admitted twenty-four hours after her discharge on April 24, 1990, with a diagnosis of Crohn's disease and profound anemia. Her haemoglobin was 5.5 g/dl. She was weak, pale, tachycardiac and febrile.

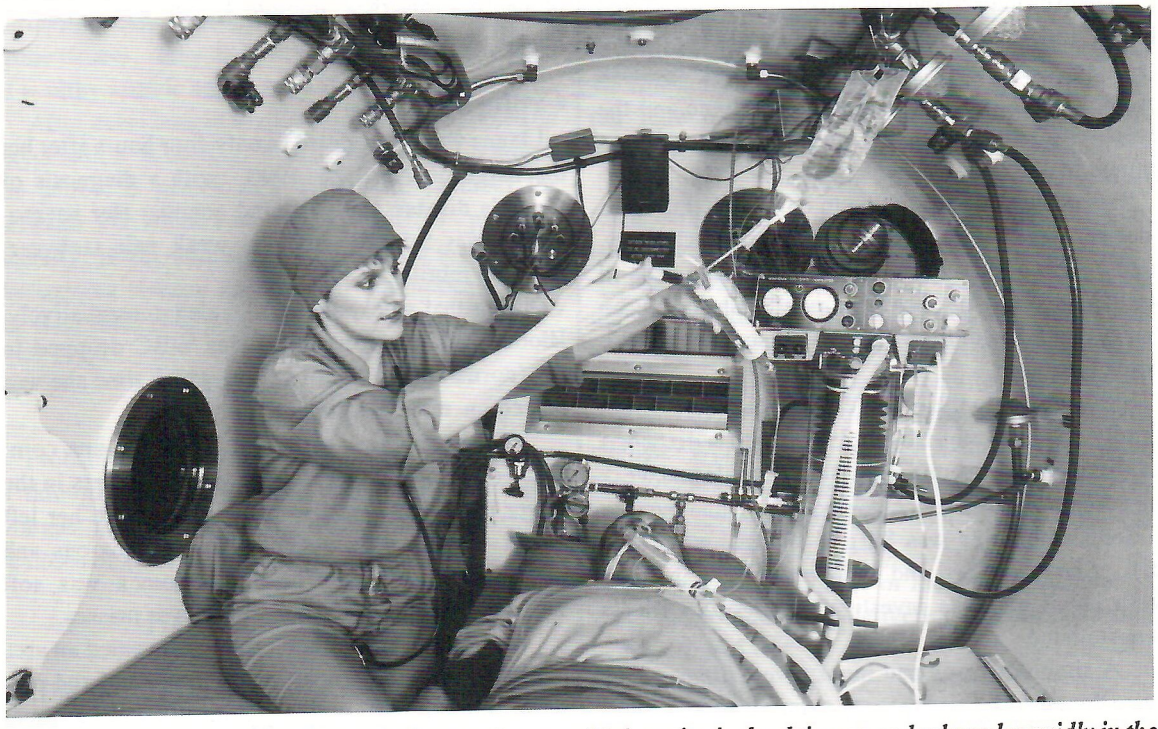
During that week, she was treated conservatively. Blood work was done daily. Her WBC dropped to 0.9 (normal being 4.0 - 11.0), at which time she was placed on reverse isolation.

On the morning of May 1, 1990, Lianna complained of pain in her left thigh, numbness in the lower extremity, and an inability to move her left ankle. Examination revealed a pale, anxious and distraught young women. Her abdomen was soft with no distention and no tenderness or masses.

An examination of her left thigh revealed an area of bluish-purple discoloration on the medial and posterior skin surfaces, with swelling in the middle one-third of the thigh. There was obvious crepitus and extreme tenderness on palpation. The knee jerk reflex was preserved, but the ankle jerk was absent, and she



Hyperbaric oxygen therapy is an outgrowth of diving medicine. Over the decades, the treatment of divers, compressed air workers and eventually aviators was refined. Experimentation with oxygen breathing under pressure eventually led to the realization that oxygen was the breathing gas of choice. Oxygen therapy under pressure had other applications and hyperbaric therapy came into its own. Acute Ischemia, Gas Gangrene, Carbon Monoxide Poisoning, Gas Embolism and Compromised Wounds are other conditions treated.



Gas Gangrene is caused by a bacteria that produces multiple toxins in dead tissues and rebreeds rapidly in the absence of oxygen. Hyperbaric oxygen therapy results in the cessation of toxin production, which is life saving. Photos show the interior and exterior of the monoplace hyperbaric chambers at The Toronto Hospital.

had no sensation from the level of her knee down. Leanna was unable to planter flex or dorsal flex her feet.

A diagnosis of gas gangrene with an involvement with the sciatic nerve was made. This diagnosis was made by the general surgeon called in for a consultation. Intravenous antibiotics (Pipercillin - 2G, Gentamycin - 80mg, and Flagyl - 500 mg) and morphine were given stat and the patient, who by now was in septic shock, was rushed to the operating room. Although only semi-conscious, Lianna was extremely apprehensive.

After intubation, a double lumen C.V.P. catheter was inserted by the anaesthetist in the right internal jugular vein. In addition, an arterial line was established.

After the incision was made, (a long vertical cut on the posterior-medial border of the thigh) a foul odour was noted. The entire posterior and medial compartment muscles were bluish-black in color and were totally necrotic, with a large amount of crepitation. The deep fascia was also necrotic. Gas gangrene was the confirmed diagnosis.

The gracilis adductor longus and magnum muscles were debrided to expose the sciatic nerve. This nerve, from the pubic area to the knee, was surrounded by necrotic fatty tissue. There was crepitation along the anterior aspect of the thigh as well.

After consulting with two orthopaedic surgeons and another general surgeon, a mid-thigh amputation was done with further extensive debridement of the medial compartment. Drains were placed and part of the skin incision was closed. The rest of the incised area was packed open with idioform gauze.

The patient was then transported to the ICU. The surgical pathology report confirmed gas gangrene in the tissue of the leg amputated. The blood cultures done on May 1 incubated *Clostridium septicum.*

A decision was made that evening to send Lianna by air ambulance to Toronto where a hyperbaric oxygen therapy chamber was deemed necessary to stop the growth of the Clostridium.

The next day, a total colectomy (for extensive Crohn's disease) was done. This left her with a permanent ileostomy. After a two week stay in Toronto, she was transferred by air ambulance to the pediatric hospital in Ottawa.

Clostridium was again being cultured a week later and she was returned to Toronto where she received two more treatments in the hyperbaric chamber.

Again she was transferred back to Ottawa for convalescence and rehabilitation.

It has now been five months since we had Lianna in our OR. She appears to be on her way to a complete recovery. She has adjusted well to her ileostomy and is comfortable in looking after it. Her stump from the amputation is still healing and when it has completely healed, she will be fitted for a prosthesis. In the meantime, she is mobile on crutches, is back in school and plans on attending university next fall. ■

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Crohn's Disease

Crohn's Disease is an inflammation of any part of the G.I. tract (usually terminal ileum), which extends through all layers of the intestinal wall. The exact cause is unknown, but possible causes include allergies, and other immune disorders, lymphatic obstruction and infection.

Whatever the cause of Crohn's disease, lacteal blockage in the intestinal wall leads to edema, and eventually to inflammation, ulceration, stenosis and abscess with fistula formation.

About the authors

Diane Aboud, R.N., is currently a staff nurse, Operating Room, Riverside Hospital, Ottawa, Ontario. She received her R.N. from St. Boniface General Hospital in Winnipeg. Prior to joining the staff at Riverside Hospital, she worked as a staff nurse at the Holy Cross Hospital in Calgary, Alberta, the Victoria Hospital in Halifax, Nova Scotia, and the St. Boniface Hospital in Winnipeg, Manitoba.

Jan Williams, R.N., is a graduate of the Ottawa Civic Hospital School of Nursing and has a Certificate in Operating Room Nursing from Algonquin College in Ottawa. She is presently on staff in the operating room at the Riverside Hospital, Ottawa.

Vyse vs. the Sisters of St. Joseph and Sweeney*

A case of a retained eye needle

By Lorne E. and Fay A. Rozovsky

On July 10, 1981 Dr. John P. Sweeney operated on the left inguinal hernia of Mark Vyse at St. Joseph's Hospital in London, Ontario. Following the first phase of the operation a needle count was conducted. It was found that an eyed needle was missing and a hunt was commenced. Clothing, including hats and masks, drapes and flooring were checked as well as the site of the wound. No trace could be found.

An x-ray machine was brought into the operating room to have an x-ray taken of the abdomen. The x-ray did not disclose the presence of a foreign object. A certain amount of confusion existed, however, whether the x-ray was taken of the proper area. The next day the radiologist's report identified the x-ray as being that of the chest. Over five years later the radiologist amended the report to indicate that it was an x-ray of the abdomen. This was done about two months after the patient brought a lawsuit against the surgeon and the hospital.

Unfortunately, the truth could not be discovered since the x-ray had been disposed of in keeping with the hospital's retention policy of six years. This occurred despite the fact that litigation had already been commenced.

The evidence during the subsequent trial indicated that 18 swedged needles were used and accounted for in the O.R. In addition, three eyed needles were used. Dr. Sweeney testified at the examination for discovery which proceeds the trial that he probably used an eyed needle. At the trial he stated that he did not use an eyed needle. He reached this contradictory conclusion by referring to the surgical count.

WHAT THE COURT FOUND

District Court Judge D.G.E. Thompson did not accept Dr. Sweeney's evidence, and reached the conclusion that in fact he had used an eyed needle. The judge noted that an examination of the record did necessarily justify such a conclusion. The court also concluded that Dr. Sweeney had in fact lost the needle and that it ended up in the left lower pulmonary lobe. This was not discovered until December, 1985 when the patient was x-rayed after a fall. This was the first time that Mark Vyse knew of its existence and that it had been lost during the previous operation.

Without any evidence as to what had actually happened during the operation or what part of the body had actually been x-rayed, the court concluded that the needle lost during the operation had in fact gotten into the wound and almost certainly moved to its present position by passing through a large vein to the heart, passing through the heart and then into an artery leading to the lung and then to the present position.

The action against the hospital had been dismissed previously. This left the court to determine whether the surgeon was negligent. The court was satisfied that the doctor was negligent. The judge said that this incident would not have occurred without negligence. He said that on the balance of probabili-

ties the needle would have been seen if a thorough, appropriate and accurate search had been carried out including the taking of an x-ray in the proper area.

The judge commented that he was not impressed with the evidence respecting the x-ray not disclosing a foreign object. He found it surprising that the radiologist was not called to give evidence why he changed his report six and a half years after the event. The court also found the destruction of a vital piece of evidence during the course of litigation as being highly unusual.

THE LESSONS

Malpractice cases involving the so-called "retained" sponge, needle or instrument have always been considered as among the most obvious to prove. Because of the obvious risk of a lawsuit involving the retention of a foreign object during surgery, the steps taken to prevent and subsequently handle such a situation should also be well entrenched in any surgical administration. This case illustrates that despite this awareness, some of the more obvious mistakes can still be made. Many of these could have been prevented if effective risk management measures had been used in this case.

(1) The loss of a foreign object during surgery gives the court an opportunity to infer that there was negligence, even though there is no evidence of failure to meet reasonable standards.

(2) If an object is lost during surgery, the search should not cease until reasonable efforts have been made to locate it. While the operation may have to continue in order not to place the patient at risk, the search should not be abandoned solely on the basis that it cannot be found in the patient.

(3) A standard document should be used to record missing items and the steps taken to find them. The document should record what x-rays were requested and that these x-rays were in fact taken. The documentation should reflect that reasonable and prudent efforts were made to locate the missing item.

(4) While the case against the hospital and therefore the nursing staff was dismissed, under different circumstances the court might find a hospital and its staff negligent for allowing a surgeon to leave the O.R. without the object having been found. This would include a surgeon who refuses to assist in a search or to take appropriate steps to search. A hospital could also be considered negligent if its staff gave incorrect count information to the surgeon or did not conduct a proper search on its own.

(5) If the O.R. staff could not find the object, immediate notification of supervisory authority should be given and the risk manager and claims manager involved.

(6) The patient should have been informed of the mishap which might have prevented him from taking legal action.

(7) All records involved in any incident in which there is an obvious risk of litigation should be segregated by the risk manager and should not be tampered with or destroyed either before or after litigation has been commenced. This does not prevent additional notes being made which would correct any misinformation on the records. The records as originally made should not be changed.

There is no doubt that retained foreign objects will continue to occur from time to time. A stricter control over this risk, however, might have lessened the consequences.

* Dist. Ct. Ont., July 11, 1990, London #4939/86 (unreported)

Authors

Lorne E. and Fay A. Rozovsky are principals with LEFAR Health Associates Inc., a consulting firm specializing in quality assurance and risk management for hospitals, nursing homes and home care agencies. Regular columnists for several trade journals and authors of several books, they are co-editors of RRM Report, a monthly Canadian health care risk management.

You are Invited to Attend...

...the 12th National Conference of the Operating Room Nurses Association of Canada

Banff, Alberta - May 12-17'91

Welcome

The Banff Springs Hotel and surrounding area will provide a perfect setting to share ideas, broaden your education, renew old friendships and begin new ones.

From "Mountains to Climb" in Jasper 1984 to "Moving Mountains" in Banff 1991, we signify the changing, ever growing role of the Operating Room Nurse. Reaching one summit inspires us to climb onward and upward to reach another!

Not often does one have the opportunity to meet the challenge of "Moving Mountains, Mastering Skills and Maturing Professionally" and be in a picturesque setting as beautiful as Banff.

A dedicated committee has organized an unforgettable week of experiences for you.

Jackie Waisman, Red Deer, Alberta,
Conference Chairman - Banff'91

Social Events

Sunday, May 12

Pemican Firewater Pow Wow (Cocktail Party)

Monday, May 13

Enjoy "Alberta Hospitality" at its best and attend an evening of chowin' down and dancin' at the Country and Western night. Bring a warm Western outfit and prepare for an evening under Alberta skies. Cost included in registration fee, cash bar, transportation from Banff Springs Hotel provided.

Tuesday, May 14

A Nurses Convention Dream - "FREE TIME". The choice of activites is yours from 1300 on so you can enjoy the beauty of Banff. Enjoy **skiing** and **golfing hiking, horseback riding, a visit to the Hot Springs, a ride on the Gondola, or shopping!**

Wednesday, May 15

Join your friends at the "Great Canadian Buffet and Dance" at the Banff Springs Hotel from 1800 to 0100. Casual dress. Cost extra.

Thursday, May 16

All delegates are invited to Ethicon Night Enjoy the hospitality of the Johnson &Johnson Companies and be prepared for a wonderful evening. Semi-formal.

Program

The Alberta O.R.N.A.C. Conference Planning Committee has chosen the theme: "Moving Mountains - Mastering Skills and Maturing Professionally". Using this theme, a program has been developed to enhance the professional growth of nurses. The topics and speakers listed here are subject to change.

Monday, May 13
Opening Ceremonies

Key Note Speaker: **Ginette Roger**, R.N., M.N.,Ph.D. Student, Past Director CNA - Keynote address title - **"Moving Mountains, Mastering Skills, Maturing Professionally".**

O.R.N.A.C. Meeting
"Your Organization Moving Mountains"
President: **Gloria Stephens**
and O.R.N.A.C. Executive Member.

"Malignant Hyperthermia"
Dr. Richard Bergstrom, Anaesthesist, Royal Alexandra Hospital, Edmonton.

"Surgical Hypothermia - Not Just Cold Feet"
Dr. Richard Bergstrom, Anaesthesist.

"Legal Implications for O.R. Nurses in the '90's"
Changing public expectations and medical practice impacts on O.R. Nurses' responsibilities and accountability in the '90's. Also includes documentation requirement. **His Honor, Judge Allan Fradsham**

"How Adults Learn" Professor Roger Boshier, Adult Education U.B.C.

"How to Promote Adult Learning in a High Stress Area". Marion Boyd, B.Sc.N., M.Ed., Director Critical Care, The Royal Alexandra Hospital, Edmonton, Alberta.

Tuesday, May 14

"The Primacy of Caring in the Operating Room" .The results of a research project that identifies the caring activities of O.R. Nurses. **Carol Lenox-McDougall**, R.N., B.Sc.N., M.S.N. - Unit Manager O.R., Milton Hospital, Ontario.

"The Dynamic Shift from Inpatient to Outpatient Surgery". Discusses changes in medical practice, surgical techniques and management of patients requiring day surgery and trends for the future.

Muriel Shewchuk, R.N., B.Sc.N., Director of Nursing - Foothills Hospital, Calgary

"Make that Successful Career Move"

Glenda Wade, R.N., B.Sc.N., President of Comprehensive Career Services Ltd.

"Intraoperative Blood Salvage"

Dr. Raymond Martineau, M.D., FRCP(A) - Anaesthesist Ottawa General Hospital and Clinical Lecturer University of Ottawa.

"Blood Born Viruses of Concern in the Operating Room"

Current disease trends, dangers and precautions for blood born viral infections. **Dr. K. Buchanan**, M.D., Department of Microbiology, University of Calgary.

Wednesday, May 15

"Organ and Tissue Donation and Transplantation - A Cooperative Effort"

Janice Mann, R.N.,
H.O.P.E. Coordinator, Calgary.

"Coping with the Stress and Distress of Organ Retrieval". An insightful look into the emotional management of one of the most difficult O.R. procedures

Rev. James Strachan, B.A., S.T.M., Director of Pastoral Care - Foothills Hospital, Calgary.

"Islet Cell Transplant"

What's in the future for the diabetic patient?

Dr. Norman Kneteman,M.D., F.R.C.S. (C) Associate Professor of Surgery,University of Alberta Hospital, Edmonton.

"Recharge Your Batteries, Reaching Your Summit, Soar with the Eagles". Techniques for O.R. Nurses to survive and thrive in the turbulent '90's

Melodie Chenevert, R.N., M.N., M.A.

"Cadillac Service - Quality Improvement"

A discussion of the worldwide revolution of improving quality and service while meeting the critical challenge of budgets. **Barry Sheehy**, Executive Vice President of "The Achieve Group".

"Canadian Standards Affecting O.R. Nurses in the '90's"

Carole Starr, R.N., Peterborough Civic Hospital, O.R.N.A.C. Standards Representative to C.S.A.

Thursday , May 16

"Recharge Your Batteries, Reaching Your Summit, Soar with the Eagles"

Melodie Chenevert, (Repeat Lecture).

"Money Talks - The Changing Face of Hospital Funding"

Eric Taylor, Vice President, Finance, University of Alberta Hospital, Edmonton.

"Coming Clean - Pre-operative Skin Preparation"

Elaine Larson, R.N., Ph.D., F.A.A.N., C.I.C. Johns Hopkins University, School of Nursing.

"All the Right Moves - Positioning of the Patient in the O.R."

Regina Leonard, R.N., B.Sc.N., M.Ed.

"Renovate - Improve Services, Reduce Costs"

Methods for improving the existing physical environment through renovation to improve service.

Sarah Doughty, R.N., B.Sc. N., M.N., O.R. Supervisor, Port Alberni Hospital, B.C.

"The Greening of the Operating Room"

O.R.'s generate massive amounts of garbage. Considerations on how to contribute to a safer and greener environment while maintaining standards and costs.

Herb Dixon, B.Sc.N., Pharmacy, M.Ed., Education Consultant,Alberta Hospital Association.

"The New Frontier in Computerization of the Operating Room"

Donna Prokopczak, R.N., B.Sc.N., M.Ed. Manager/Clinical Nurse Specialist Operating Room Suite, University of Alberta Hospitals, Edmonton.

Friday, May 17

"Reaching the Top"

Join in the excitement and challenge experienced by Sharon Wood as she shares the ultimate thrill of achievement in conquering Mount Everest.

Sharon Wood , Mountain Climber - First North American Woman to Climb Mount Everest is the Closing Speaker.

Transportation

Complimentary bus transportation from Calgary International Airport to Banff Springs hotel twice daily on Saturday, May 11 and Sunday, May 12. Airporter bus service also available to Banff twice daily (every day) at approximate cost of $18.00.

Complimentary buses will return to Calgary Airport following closing Friday afternoon, May 17.

Bus schedules will be posted for your convenience upon your arrival at the Airport. While waiting for transportation to Banff, relax in the "O.R.N.A.C. Hospitality Room" at the Calgary Airport. Anyone not using air transportation is welcome to use the complimentary bus service.

Canadian Airlines International is the official airlines for the O.R.N.A.C. 12th National Conference.

***Receive a 15% discount on full economy fare and please quote Conference Registration Number 511 when booking with Canadian Airlines.**

Call toll free Canada: **1-800-268-4704** and U.S.A.: **1-800-426-7007 for Airline reservations.**

Exhibits

Make a daily visit to the Exhibit Area in the new Banff Spring Convention Centre and view over 100 Medical Display Booths. 3 1/2 hours of viewing time are offered Monday, Wednesday, and Thursday during the 12th National O.R.N.A.C. Conference. Tuesday, May 14 the Exhibit Area will close at 1300 to allow both delegates and Medical Company Representatives to partake in a "free afternoon" and enjoy the sites of Banff.

In the late afternoons and evenings relax in the Hospitality Suites hosted by many of the exhibiting companies.

General Information

Receipts for registration will be in delegates' registration packets at Banff '91 Conference.

A $25.00 administrative fee will be charged for cancellations. A request for refund must be received in writing by May 1, 1991.

Full time Nursing students will be admitted free of charge to Educational sessions only. Proof of student status at registration desk please.

Please arrange accommodations directly with Hotel. Do not send requests to the Registration Committee.

The Banff Springs Hotel will not accept registrations before 1600 on day of arrival.

If attending the World O.R. Nurses Conference in Vancouver, September '91, The American Operating Room Nurses Association (A.O.R.N.) will refund $75.00 U.S. if proof of attendance at the 1991 O.R.N.A.C. Conference is produced.

Registration Fees

Full 5 Day Conference (Before April 1, 1991) $250.00 (Includes most Breakfasts, Sunday, Monday and Thursday Social Events)

Daily Registration Fees:

Monday $70.00 Tuesday $40.

Wed. $70.00 Thursday $70.00 Friday $40.00

5 Day Conference Fee after April 1st, 1991 - $275.00 (Includes most Breakfasts, Sunday, Monday and Thursday Social Events)

Cheques/Money Orders payable in Cdn. Funds only to: **12th National Nurses Conference Banff '91**

Mail to: Carol Rolfe,
Registration Chairman Banff'91,
Box 8218, Edmonton, Alberta
T6H 4P1

Registration:
Carol Rolfe ..... (403) 343-2519

Exhibitors:
Muriel Shewchuk (403) 270-1378

Conference Chairman:
Jackie Waisman (403) 343-4751

Call now !!

Banff Springs Hotel

Banff is located 135 kilometers from the Calgary International Airport and has regular shuttle bus service between Calgary and the Banff Springs Hotel.

Many activities are available in Banff, such as cycling, hiking, a dip in the Hot Springs, golfing at the 27 hole golf course, or skiing.

A large convention centre, opened in 1990, adjoins the Banff Springs Hotel by a covered walkway. It includes interesting features such as a bowling alley and a miniature golf course.

Excellent rates are in effect for the 12th National from Thursday, May 9 to Monday, May 20, 1991.

Single Room - **$91.50** Twin/Double Room - **$99.00**

(Above rates do not include GST)

*Check in time1600 HRS*Check out time:1200 HRS

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Your Right to Pay Equity as a Registered Nurse

By Dana Slisarenko, R.N.

Nursing is a highly undervalued resource of the health care system. Regardless of whether you are working as a registered nurse in hospital, industry, public health, education, management, research or as a nurse practitioner, you have the right to pay equity as a woman working as a registered nurse.

The Pay Equity Act, 1987 in Ontario, is a one-time historical opportunity for women to correct the current wage gap between male and female work. The current wage gap in Ontario is 36%, which means that the average working woman earns $ .64 for every $1.00 earned by the average working man. Pay Equity is more than just a dollar and cents issue. It's an issue of fairness. It involves comparing the value of jobs traditionally done by women with the value of jobs usually done by men on the basis of skill, effort, responsibility and working conditions and rendering pay adjustments to ensure that they are equally compensated. The law protects the nurse from being intimidated, coerced, penalized or discriminated against for exercising the right to pay equity. Employers can be prosecuted for taking action against nurses who question or appeal their pay equity plan.

To date thousands of registered nurses have declared their dissatisfaction with the implementation of Pay Equity, and have filed about a third of the 110 applications for review before the pay equity tribunal. Registered nurses have been compared to a variety of male-dominated positions. At Mississauga Hospital the nurses were deemed comparable to an assistant pastry chefs. At Sick Children's Hospital, Toronto, and the Cambridge Memorial Hospital, they were equated with biomedical technicians.

In some establishments, the pay equity postings are declaring no male comparator, as is the case at York Central Hospital. Depending on where you work, your pay equity plan may not yet be posted. The Act has specific guidelines, timetables and schedules for various sectors of the population. For example, private sector employers with 100-499 employees were to post plans by January 2, 1991, whereas those with 10-99 employees are not required to post plans until 1993. The Act applies to all public sector employers regardless of size and all private sector employers with 10 or more employees. Where there is a union, the pay equity plan for bargaining unit employees is to be negotiated with that union.

The Ontario Nurses Association (ONA) represents 52,000 registered nurses and is presently faced with the onerous task of dealing with pay equity on a local level at each of its 350 bargaining units. Confusion evolves where pay equity issues are marred by labour disputes, and ONA to date has spent millions of dollars negotiating pay equity appeals for their nurses.

Nurses compared to police officers

Last year the in Haldimand-Norfolk, the public health nurses, represented by ONA, won the right to be compared to police officers when the Tribunal ruled in their favour. The basis of this appeal was that both the public health nurses and the police were employed by the municipality of Haldimand-Norfolk. The Act states that comparisons are to be made within the employer's establishment which in this case was disputed at great length before the decision became final. Another appeal presently before the tribunal involves Womens' College Hospital Nurses, represented by ONA. They are attempting to prove that the job evaluation tool used at the hospital was male-gender biased. The Act states that the comparison system used must be gender-neutral. The job evaluation tool in question is the Stevenson, Kellogg, Ernst and Whinney System commonly known as the S.K.E.W. tool. The outcome of this tribunal could be very significant since many hospitals across Ontario used the S.K.E.W. tool. This tool is the one recommended by the Ontario Hospital Association (OHA). Most unionized facilities have not proceeded with the implementation of pay equity pending the results of this tribunal. To date, ONA's talks with the OHA to work out a province-wide approach to pay equity have not been successful.

Author

Dana Slisarenko, R.N., is a staff nurse, ICU/CCU, Cambridge Memorial Hospital. She graduated from Conestoga College in 1975. She holds a Certificate in Critical Care, 1987 and a Certificate in Nursing Management, 1990. She is a member of N-CoPE, R.N.A.O. and Chairman of the Cambridge Memorial Hospital Registered Nurses Pay Equity Appeal Group.

More than half of Ontario's registered nurses are not unionized. Nurses working in non-unionized settings are faced with the prospect of exercising their right to pay equity independently and are fearful of incurring exorbitant legal costs. The Nurses Coalition for Pay Equity (N-CoPE) was formed to help nurses anywhere in Ontario to pursue their right to Pay Equity. N-CoPE is presently seeking status as a non-profit corporation. This support group evolved when nurses realized that Pay Equity Plans were publicly undermining the value of nurses' work. In the process of compiling job fact sheets, nurses began articulating what nurses do. They began to look at their work from a different perspective and to consider aspects of their job that had never been written in job description. This process reinforced the value of their work and their reaction, when compared to housekeepers, maintenance workers, technicians and assistant pastry chefs, was one of shock and disbelief. Unfair Pay Equity plans were failing to capture the responsibility, complexity and diversity of nurses' work.

If registered nurses continue to feel underpaid, unappreciated, unrecognized and overburdened as a result of unfair Pay Equity Plans, this will have dire consequences for the profession of nursing. In 1990, the then Ontario Liberal Government recognized that Ontario was in demand for clinical nurses. They developed the Ontario Nursing Innovation Fund in an attempt to help recruit, retrain and retain more Ontario Nurses. If the present demand for nurses in Ontario is already strained, the rising discontent with inept Pay Equity Plans will definitely augment the problem and the future quality of health care across the province will be in jeopardy.

Nurses are the life-line of any health care system. We are designated an essential service and it is illegal for us to strike. If we do nothing while unfair pay equity plans are adopted across the province, we will have no other opportunity to have our worth recognized and valued appropriately.

N-CoPE aims to educate all registered nurses, both unionized and non-unionized about their right to Pay Equity. Many nurses are not aware that employers were given direction to set aside a specific percentage of their global budget in preparation for financial repercussions resulting from compensation secondary to the implementation of pay equity plans. Nurses are so accustomed to hearing of the shortage of money in the health care system, they now accept this without question. However, as front-line caregivers, nurses are aware of where the health care dollar is wasted and how it could be more wisely spent. It is the opinion of some health care experts that nursing is the most cost efficient resource hospitals have, other experts would suggest nurses have subsidized the health care system long enough.

The future of health care in Canada depends on building a profession which is attractive to young women and men. In exercising your right to Pay Equity as a registered nurse, you are investing in the future of health care.

The Pay Equity Act, 1987, has acknowledged flaws. When this legislation was adopted, the Ontario Legislature acknowledged the injustice of the fact that women working in predominantly female sectors of the economy (ie. nurses, child care workers) who because their workplace lacks appropriate male comparators would be unable to benefit under the terms of the act as passed. During the Fall, 1990 Ontario elections, the NDP party promised they would amend the Pay Equity Act so that more women would be eligible to benefit. Now that the NDP government is in power, nurses should continue to lobby the government to amend the Act to include the proportional and the proxy comparison method. Regardless of whether nurses work in a unionized or non-unionized setting, they are still subject to the limitations of the act and unless this legislation is amended, their right to Pay Equity may be denied.

Bias-free evaluation tool needed

N-CoPE has been lobbying and will continue to lobby the government to amend the Pay Equity Act to make it more all inclusive in order that more women, especially nurses, will be eligible to benefit. The Registered Nurses Association of Ontario (R.N.A.O.) has also been lobbying for an amendment of the Act, and is advocating provision of funds for research on bias-free evaluation tools and funds for non-union nurses seeking to appeal their pay equity postings. In December, 1990 the government announced its intention to amend the Pay Equity Act to include more women, especially those with no male comparator, but no direct reference was made to nurses. If indeed the government does amend the Pay Equity Act, this does not guarantee that a nurse will achieve Pay Equity but it will expand her opportunity to exerciseher right.

N-CoPE has been established to help Registered Nurses pursue their right to Pay Equity. An unfair pay equity settlement will have an impact on health care. If the significance of the work that nurses do continues to be undervalued, the present problems of retraining, retaining and recruiting nurses will escalate.

Nurses are an indispensable resource of the health care system. Whether you are involved in nursing practice, teaching, management or research, you have the right to Pay Equity as a Registered Nurse and only you can exercise that right! ■

Occlusive dressings not only cheaper than conventional dry dressings, but reduce the incidence of infection

A reduction of 30% in both infection rate and cost has been reported from a comparison of the use of occlusive dressings on wounds with a control group of patients which used conventional dry dressings.

Occlusive dressings cover and/or grasp in various ways the opposite sides of a wound, whereas dry dressings cover the wound only.

Dr. Maryanne McGuckin, an infection control specialist, gave details and results of the study during the 3rd International Conference on Nosocomial Infections held in Atlanta recently.

The multicentre study involved a total of 103 investigations in which occlusive dressings were used on more than 5300 wounds, and conventional dry dressings were used on over 1700 wounds.

The infection rate for conventional dressings was 5.4%, as compared to 2.1% for occlusive dressings. In one study, cost per day was $7.89 (US) for conventional dressings, and $1.85 (US) for occlusive dressings.

Dr. McGuckin said that in contrast to dry dressing treatment, occlusive dressings allow the body's natural defence cells (neutrophils) to enter the wound and effectively fight potential infection-causing invaders.

McGuckin noted that occlusive dressings provide the optimum environment for re-epithelialization and angiogenesis, and an environment in which the host non-specific phagocytic defence mechanisms can function. ■

Failure to remove completely foreign bodies from wounds can be good grounds for litigation

In the United Kingdom, doctors there have been warned that failure to remove completely foreign bodies from a wound is a common reason for being sued.

The Medical Defence Union (MDU), the largest medical malpractice organization in the world, highlighted one such case recently of a foreign body left in a wound.

A young man had slipped and cut his right hand on glass. The wound was explored under local anaesthesia and a piece of glass removed.

However, despite further recourse to antibiotics, the patient's hand remained swollen with subsequent X-rays revealing a sizable piece of glass deep in the wound.

The MDU reported: "Removal of the glass was carried out just in time, as the glass had almost worn through both tendons of the middle finger. Extensive synovectomy and reinforcement of the tendons had to be performed."

The result was excellent and the MDU reports that the claim against the doctor who first examined the man's hand, settled for the modest sum of £1,000 ($2,200Cdn.). ■

Correction:

In the November/December, 1990 issue of this Journal we stated on page 28 that Gloria Stephens " was chosen to head the committee to establish 'Standards of Practice' for nurses across Canada." In fact, Joan Donald was Chairman of the committee to establish Standard of Practice, and Gloria Stephens was Chairman of the subsequent committee to develop Technical Standards. We apologize to both chairman and our readers for this error. Agnes Forster. ■

OR News

England developing a vaccine for genital warts

A vaccine against the sexually transmitted genital wart virus that has been strongly linked to the development of cervical cancer is currently under development.

The vaccine which is currently undergoing clinical trials at the Imperial Cancer Research Fund's laboratories in Cambridge, England, has provoked protective antibody production in animals that have been tested.

Cervical cancer

The human papilloma virus (HPV) is commonly found in the lining of male and female sexual organs and is thought to act as a promoter of cervical cancer when some other risk factor, such as smoking, is also present.

Once the vaccine has been developed it would be given to boys and girls to stop the spread of HPV infection. ■

Productivity, morale and health are the benefits!

Want to increase the productivity, morale, and health of your nursing staff? Establish a fitness and health-promotion program.

According to a study published recently in the *American Journal of Public Health*, organizations that establish fitness and health programs for their staff reap a number of benefits, including lower health-care expenditures for staff, less absenteeism, more staff productivity and increased morale. Such a program also assists in recruiting. ■

Antibiotic beads - new for wound management

It's one of the latest techniques in infection control - antibiotic beads. Since the early 1980s, doctors have been using antibiotic beads to protect open-fracture wounds from becoming infected.

The beads are composed of polymethyl methacrylate (PMMA), an orthopaedic bone cement that is porous. When moulded into beads, it can be left in place in bone cavities, with no apparent ill-effect.

Dr. Stephen Henry, an orthopaedic surgeon at the University of Louisville (Kentucky) Hospital, one of the eight U.S. medical institutions testing the technique with government approval, said that in trauma cases where a Grade III open fracture has been caused (by a power lawnmower for example), the use of the antibiotic beads results in antibiotic levels in the wound area up to 10 times the level that can be achieved with systemic antibiotics.

This sort of concentration (using antibiotic beads) often cannot be achieved with oral antibiotics because the level of dosage required can result in complications such as hearing loss and renal failure.

Dr. Henry maintains that wound irrigation ad debridement are still most important in treating open-fracture wounds, "but the use of the antibiotic beads allows for better wound mangement."

After stabilizing the bone in the wound area and inserting an overflow gravity drain, surgeons use 2mm, 4mm or 6mm beads infused with antibiotics and placed directly into the wound. The wound is then covered with a polyurethane dressing that is impermeable to bacteria or fluids. This treatment maintains an aerobic environment in the wound. The blood pooling in the wound cavity transfers the antibiotic from the beads to the wound.

The wound can be debrided two or more times, if required, thus resulting in a cleaner wound. The technique allows patients to be stabilized before the grafting of soft tissue or skin takes place.

A major reason for the grafting of skin or for free-tissue transfers, and the immediate closing of an open-fracture wound, is to protect the area from hospital borne (nosocomial) infection. To date, the technique has not been approved in Canada or the United States. However, a bead system of antibiotic delivery is apparently on the market in Europe. It is this system, called Septopal, that is being tested in several U.S. centres, including the University of Louisville Hospital. ■

W. Carsen Co. to operate with new corporate name

The president of W. Carsen Co. Ltd., E.E. Meltz, has announced that as of January 1, 1991, the following companies will operate under a new corporate name:W. Carsen Co. Ltd.,Carsen Medical & Scientific Co., Charvoz (Canada).

The new name **Carsen Group Inc.** will operate under the following divisions:

- Consumer Products Division,
- Business Products Division,
- Medical Instrument Division,
- Precision Instrument, and
- Industrial Technology Division.

Each division will have its own dedicated, national sales representatives with head office support staff located at the group's present location in Markham, Ontario.

The new Medical Instrument Division, will be directed by William Vella, vice president and general manager. ■

Taking the "slay" out of the "sleigh" for children

Several years ago, a number of provincial health organizations across Canada, were up-in-arms over the number of serious injuries associated with minor hockey: broken bones, lost teeth, eye injuries, shattered noses, spinal cord injuries, neck injuries, etc. But what about the other sports and recreational activities? Is hockey the most dangerous? Belive it or not, hockey isn't even close as a dangerous recreational pursuit.

The most dangerous childhood recreation is sledding.

33,000 accidents

According to an article in the October, 1990 issue of the *American Journal of Diseases of Children,* out of about 33,000 sledding-related accidents a year, serious injuries such as concussions, fractures and internal damage are often the result of collisions with trees, fences, and other fixed and hidden objects.

Although these figures are for the United States, they would be as high, if not higher for Canada with its more pervasive and lengthy winter climate.

Take the "slay" out

So, how do you take the "slay" out of the "sleigh?"

1. Check the sleigh's coasting area for obstructions such as trees, fallen and hidden debris and ice patches.
2. Avoid a too steep an incline.
3. Wear helmets and protective clothing. ■

Risk of getting Hepatitis 50% greater than AIDS

A new study has shown that health care workers are 60 times more likely to acquire hepatitis B virus (HBV) infection in the line of duty than human immunological virus (AIDS). The study of more than 750 health care workers also showed that the risk of HIV infection after an occupational exposure was 0.34%

The study, reported at a recent Interscience Conference on Antimicrobial Agents and Chemotherapy held in Atlanta, was done at a San Francisco hospital where more than one-quarter of the medical inpatients have AIDS, and where more than 2000 HIV outpatient visits a month are made.

(The study was reported in a recent issue of the *Medical Post.*) ■

Over 130 hospitals make pitch for nurses at world's largest "Job Fair"

Headbands, exotic spices, Creole goodies, $2000 signing bonuses, Elvis Presley brochures, monogrammed shoelaces, free housing offers, shift premiums, duffle bags, sewing kits and hourly raffles worth hundreds of dollars: these are just some of the numerous gimmicks and give-aways that assaulted nurses attending the world's largest Nursing Job Fair held in February in Toronto.

World's largest

Apparently, hospitals and other health care institutions just can't survive unless it has an up-front gimmick to attract and recruit nurses. And that's just what more than 130 exhibitors (representing medical facilities from Northern Ontario and B.C. to Texas, and from Honolulu to Saudi Arabia) did at the world's largest nursing job fair.

Organizers of the fair, which is a Boston-based group, rate the Toronto event as the largest employment bazaar for nurses in the world. Richard DeVito, director of the event, said that the fair has been roaming around Canadian and American cities for the past 17 years; but he can't explain why Toronto is the largest. Nor could he account for the great interest in this year's fair.

"There appears to be a sense of urgency among graduating nurses," he said. "For the first time in a long while, full-time nursing jobs are hard to find."

The recession, widespread bed closings, he figures, have combined to dramatically reduce the shortages that have plagued hospitals in Canada. He pointed out that many Canadian hospitals are only hiring part-time. Also, they only want experienced nurses.

Recruiting practices

As one graduating nurse said: "How are we supposed to get experience if no one will hire us?"

There were 55 Canadian hospitals represented at the fair. The consensus was that they are looking for full-time nurses, "but not as many as a year ago."

Less than a year ago, many Canadian hospitals were forced to shut down entire floors because of the shortage of nurses. However, a spokesperson for a nursing association said that "...hospitals may say there is no shortage now, but it's all relative to the number of beds. All they've done is close beds, eliminate full-time positions and begun hiring part-time nurses." Over half the more than 130 institutions represented at the fair were offshore recruiters. ■

Ph.D. in nursing program launched at U of Alberta

A doctoral degree in nursing, the first of its kind in Canada, has been underway since January at the University of Alberta. The new Ph.D. program currently has four students enrolled, with a total enrollment of 16 anticipated.

Presently, funding for the program is coming from the Department of Health, Province of Alberta. This funding, $730,000 for the first three years, will be taken over by the Alberta Advanced Education in the fourth year.

The funding will enable the Faculty of Nursing at the University of Alberta to hire two additional senior-level academic staff members, develop courses to augment those already developed, offer graduate assistantships and provide additional library resources.

It is expected that the demand for the new doctoral program will be high. Its is currently estimated that of the almost 200 nurses in Canada with Ph.Ds., less than 13% are in the field of nursing. ■

Nursing research group now a CNA interest group

Joining several other interest groups, including the operating room nursing interest group, that have attained formal recognition by the Canadian Nurses Association (CNA) is the Canadian Nursing Research Group (CNRG).

This interest group will have three major goals:

1. develop nurse researchers;
2. develop nursing research; and,
3. develop a research reality.

The nursing research group will be looking to collaborate with the CNA and other CNA interest groups, individuals and organizations to ensure the development of a national research network to foster communication and education between nurses, other professionals, the public and government agencies.

Interested individuals and groups wishing more information are asked to contact :

- Miriam Steward
  School of Nursing
  Dalhousie University
  Halifax, N.S. B3H 1P9.

- B. Ann Hilton
  School of Nursing
  University of British Columbia
  Vancouver, B.C. V6T 2B5.

- Ellen Hodnett
  Faculty of Nursing
  University of Toronto
  50 St. George Street
  Toronto, Ontario M5S 1A1.

Many hospitals being investigated for poor air quality

In 1987, according to a report in the *Toronto Globe and Mail* (July 8, 1990), over 1800 buildings, including hospitals, were investigated for poor air quality after complaints from workers.

The report mentions that the World Health Organization (WHO) is convinced that indoor air quality is a serious problem. It estimates that one-third of all new and remodelled buildings are sick.

Some experts speculate that it is higher than one-third. The World Health Organization is presently engaging in an effort to draft recommendations that could provide a framework for action in designing hospitals and other buildings around the world. ■

Calendar of Events

April 3 - 5, Las Vegas, Nevada: Basic Colposcopy and Colposcopy Laser Surgery Program, Caesars Palace Resort and Casino. Contact Biomedical Communications, P.O. Box 224, Komoka, Ontario N0L 1R0 Telephone/FAX (519) 471-0300.

April 4 - 5, Calgary, AB: Trauma Management for Nurses, The Palliser Hotel. Contact Conference and Seminar Services, Humber College, 205 Humber College Blvd., Etobicoke, Ontario M9W 5L7 (416) 675-5077 FAX (416) 675-0135.

April 7 - 12, Atlanta, Georgia: National O.R. Nurses Congress, American Operating Room Nurses Association (AORN). For registration contact AORN Meeting Services Dept., 10170 East Mississippi Ave., Denver, Colorado 80231 (303) 755-6300.

April 26 - 27, Edmundston, New Brunswick: 17th Annual Spring Institute, New Brunswick Operating Room Nurses Group, Howard Johnson Edmundston. Exhibitors contact Neoline LeBel, Edmundston Regional Hospital, 54 - 21st Ave., Edmundston, N.B. E3V 2C1 (506) 735-3361.

April 29 - May 1, San Diego, Calif.: 10th Anniversary Meeting, American Society for Laser Medicine and Surgery, Inc., Sheraton Harbour Island. *** **Biophysics and Nursing Courses, April 28.** Contact the American Society for Laser Medicine and Surgery, Inc., 2404 Stewart Sq., Wausau, WI 54401 USA. (715) 845-9283.

May 2 - 3, Mississauga, Ontario: Management Strategies for Nurses, Ramada Airport West Hotel. This is a new seminar sponsored by Humber College, Conference and Seminar Services, Humber College, 205 Humber College Blvd., Etobicoke, Ont. M9W 5L7 (416) 675-5077 FAX (416) 675-0135.

May 12 - 17, Banff, Alberta: 12th National Conference, Operating Room Nurses Association of Canada (ORNAC). Theme "Moving Mountains." (See pg. 18)

June 6 - 7, Toronto, Ontario: Trauma Management for Nurses, Holiday Inn Toronto Yorkshire. Contact Conference and Seminar Services, Humber College, 205 Humber College Blvd., Etobicoke, Ontario M9W 5L7 (416) 675-5077 FAX (416) 675-0135.

September 1 - 6, Vancouver, B.C.: VII World Conference of Operating Room Nurses, Pan Pacific Hotel and Vancouver Trade and Convention Centre. For more information contact: VII World O.R. Nurses Conference, Meeting Services Department, 10170 East Mississippi Ave., Denver, Colorado 80231 USA (303) 755-6300.

September 26 - 27, Toronto, Ont.: Management Strategies for Staff Nurses, Royal York Hotel, Toronto. Sponsored by Humber College, Conference and Seminar Services, Humber College, 205 Humber College Blvd., Etobicoke, Ontario M9W 5L7 (416) 675-5077 FAX (416) 675-0135.

September 26 - 29, Thunder Bay, Ontario: 9th Biennial Conference, Lakehead Operating Room Nurses Association (LORNA), Valhalla Inn, Thunder Bay. Contact Leona Barr, President, LORNA, 551 Piccadilly Ave., Thunder Bay, Ont. P7B 5C9.

October 18 - 19, Burlington, Ontario: Annual Regional Conference, Operating Room Nurses Association of Hamilton & District. Holiday Inn, Burlington, Ontario. Contact Alaine Young, Nurse Manager, O.R., Henderson General Hospital, 711 Concession Street, Hamilton, Ont. L8V 1C3.

February 5 - 7, 1992, Calgary, AB: "Quality of Nursing Life - Taking Charge of Change." An annual educational forum for nurses sponsored by the Alberta Hospital Association and a number of nursing services organizations in Alberta and Canada. Abstract requirements package available from Education Services, Alberta Hospital Association, 10009 - 108 Street, Edmonton, AB T5J 3C5 (403) 498-8403 FAX (403) 498-8465.

June 6 - 12, 1993, Quebec City, Quebec: 13th National Conference, Operating Room Nurses Association of Canada (ORNAC).

May 8 - 12, 1995, Vancouver, B.C.: 14th National Conference, O.R. Nurses Association of Canada.

ORNAC's

Recommended Standards

Recommended Standards for Operating Rooms in Canadian hospitals, as established by the Operating Room Nurses Association of Canada, are available for sale.

Recommended Standards
@ $12.00 per copy

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@ $20.00 per copy

Cheques or money orders should be made payable to the Operating Room Nurses Association of Canada. Postage will be added.
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Kelowna General Hospital
2268 Pandosy St., Kelowna, B.C.
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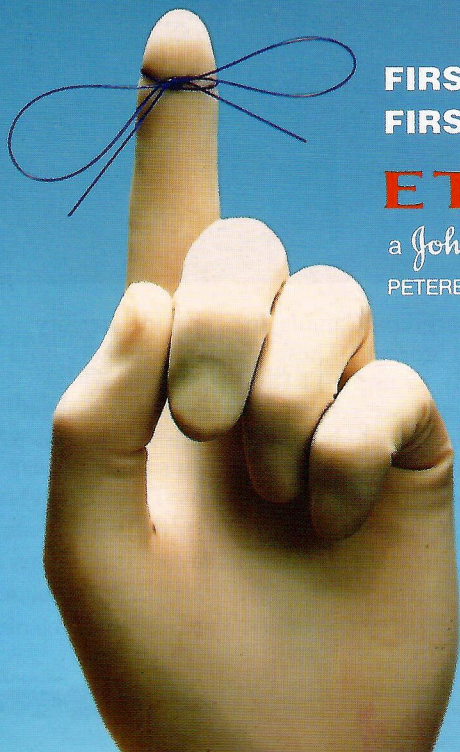

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