Canadian Operating Room Nursing Journal

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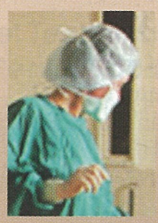
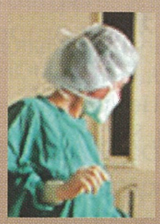
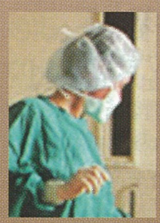


THE SACRED COWS OF ASEPSIS



IS BOWEL TECHNIQUE NECESSARY?



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New Directions

By Vija Hay, RN, CPN (C)

I have just returned from Dallas, Texas, having attended the 43rd AORN Congress, and communications and networking are fresh in my mind. We share common issues and trends in healthcare with many parts of the world. However, the message I heard from delegates, as well as speakers was: collaboration, interdependence and partnership among nursing associations, and international networking. The emphasis was on partnerships.

As we prepare for the upcoming ORNAC Executive/Board meeting in April, it is timely to talk about our role and partnerships in the healthcare community. Shall we follow the traditional path or take a close look at our organization's direction to ensure ORNAC is in alignment with today's and tomorrow's issues and trends, to position ourselves for positive professional and surgical patient outcomes.

We are all aware it is no longer "business as usual". As you know, ORNAC already reviewed the Executive/Board structure, and subsequently changed the executive structure to make it a more streamlined, cost effective team. The Provincial Boards are also reviewing their board structure and by-laws in alignment with ORNAC.

I am pleased to note that ORNAC collaborates, communicates and networks with many other organizations, such as the Canadian Nurses Association (CNA), Canadian Standards Association, Canadian Anaesthetist's Society, Canadian Standards Association, the Canadian Council on Health Services Accreditation, the AORN and other National and International Health and Nursing Organizations.

Let me expand on ORNAC's formal relationship with the CNA. ORNAC is an Interest Group member of CNA. To be a member, more than 50% of ORNAC's nurses must be CNA members. The president of ORNAC attends CNA's annual Advisory Council meeting, and a Networking session with the other 21 Interest Group representatives. As well, we receive copies of CNA's policy statements, new publications and newsletters and other pertinent information. CNA advises Interest Group Presidents on activities of direct relevance and solicits input when issues are being studied. ORNAC in turn informs CNA of critical and emerging issues in our association and perioperative nursing. And, of course, you are aware of our success story of Perioperative Certification through the CNA.

In light of healthcare changes, CNA is taking a new direction. A new Board structure is being recommended that is smaller, more representative of all nurses and placing emphasis on the interest of the public. This recommendation will be voted on at the June Annual General Meeting in Halifax, Nova Scotia. If you can, attend this General Meeting.

ORNAC is now a well established and recognized professional association, and as such, collaborates and networks with other association. Today nursing issues are of local as well as global concern. As an Association we need to be progressive in response to these issues and develop further partnerships and alliances to influence the direction of professional practice, while retaining our core beliefs and values of perioperative nursing. ■

Vija Hay, R.N., C.P.N. (C), is the President of the Operating Room Nurses Association of Canada. She was most recently Director of Nursing Services, Queensway Carleton Hospital, Nepean, Ontario.

The Sacred Cows of Asepsis

By Muriel Shewchuk, RN, BScN, CPN(C)

Introduction

The radical challenges and changes in the operating rooms are cracking the massive foundation of six decades of "the evolved art of operating room aseptic technique". Our American colleagues fondly labelled the practices, without a scientific basis, Sacred Cows. The "Society of Sacred Cows" have grazed the hallways, theatres and supply rooms of Canadian operating suites in an even more protected manner. What happens to our Sacred Cows, will they all be slaughtered or temporarily put out to pasture as an integral part of our nursing practice?

The saying, "In God we trust, all others must bring data", (source unknown) probably best defines the current reference point to effectively manage the challenges up against aseptic practices, maximize resources, provide patient safety and protect health care providers. The entire health care system is under scrutiny, evaluation and outcome measures, and aseptic practices are no exception. In our past, information published in a text book or article, was sufficient evidence to establish credibility of practices.

Society in general, multidisciplinary team members, and inquiring nurses are challenging everything. The "burden of proof", accompanied by resource management are forces that challenge and force change within the fundamental fabric of our practice.

Florence Nightingale and Joseph Lister pioneered the concept and foundation of asepsis, based on research, statistics, and the epidemiology of their time, dramatically reducing mortality and morbidity. These principles have withstood the test of time, however, the detailed development and implementation of many of our aseptic practices are based on belief, sense of security, safety, common practice, "expert opinion", without the proof that the rituals and practices really make a difference.

Author

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Changes in the Past Ten Years

The last ten years have seen tremendous change in many areas, although many operating suites hold on to the traditions for a multitude of reasons. Lack of information, loss of control, disbelief and fear contribute to the resistance and actual non acceptance of radical change. Attitudes of "it's always been done that way", "just do as I tell you", "don't you dare challenge my instructions", and a general feeling of the loss that goes with structure as it is dismantled is quite wide spread. Complete changing of rigid rules is not unlike trying to change values to one of "it's okay to steal". It is also human nature to resist change, and particularly that which makes you feel like the principles you stood up for all those years were a sham. A certain amount of credibility is lost as the "mavericks" appear to take joy in discrediting practices they believe to be bogus and a self-serving tradition.

"Role reversal" in the principles of asepsis has occurred in many instances. For decades the patient was being protected from the harm of the health care providers and the environment, whereas, many principles now are related to protecting the environment and the health care providers from the patient's blood and other body fluids. Three hundred and sixty degrees of change in rationale is undoubtedly hard to accept.

The incredible saviour of antibiotics to treat both gram positive and negative organisms is in serious trouble. The new generation of highly resistive nosocomial organisms, which become colonized in hospitals, are winning many races. The ever increasing viruses, with no treatment in sight, combined with cross species disease transmission provides a new focus to change practice and abandon tradition.

Universal Precautions, with the many definitions and beliefs, have placed a different focus on aseptic practices. As the new organisms are better understood and control measures evolve, so will the recommended aseptic practices.

Extinct Sacred Cows

Evolution is often accompanied by extinction. Extinct practices, are now a subject for a humor lecture in the aseptic history of operating room nurses. It is somewhat humbling to have been a part of the development of those practices, implementation and enforcement and then having to dismantle and discredit them. The most tolerable recovery is to assure yourself that the only constant is change. Credible, sound rationale will assist you to either change that situation or discontinue practices in an planned, orderly, systematic fashion. If you cannot find a reason for doing things you probably should not do them.

A trip into the not so long ago, yesteryear, finds a multitude of Sacred Cow carcasses, enshrined in "witchcraft", disbelief, and ridicule. Reflecting back on past practices we often laugh at ourselves and the associated rituals. However, it must always be remembered that at the time there were good reasons. One has to ask themselves "will we be laughing at our current practices in 10 years or will we revert back to very rigid controls due to the evolution of organisms".

Practices of slain Sacred Cows include:

• FOGGING

Fogging of theatres for infected cases, particularly gas gangrene was a relatively short lived innovation. The process involved the equivalent of a reverse vacuum cleaner, whereby the theatre was filled with aerosolized chemical disinfectant, doors taped shut and a wait of 72 hours before the mop-up process began. The magic did not occur, in fact , while testing the theatre environment, with strategically placed blood agar plates, it was found only to stir up dust and lint particles laden with organisms. Increased environmental contamination resulted. At the same time rotting mattresses and pitting stainless steel became a problem.

• WHEELS

Forbidance of patient beds into the operating suite and elaborate washing of stretcher wheels prior to entry into the hallowed halls of the operating room have a long history. Operating room designs and the nurses were fixated on preventing a major source of contamination which was assured to be on the wheels. Of course there were organisms on the wheels, but how they were to traverse to the patients wound was not considered. Some operating rooms were designed to utilize a stretcher top transfer, keeping the transport base with "clean wheels" in the operating room and the "dirty wheels" on the outside. Creative systems were developed to clean wheels from chemical baths, to disinfectant soaked sheets on the floor to roll wheels through, and manual washing of each wheel on entry to the suite.

• SKIN KNIFE

A highly ritualized ceremonial act was performed around the initial skin incision knife, which under no circumstances, could be allowed to touch or traverse the subcutaneous layers. Once the incision was made, the knife was isolated in a kidney basin on the table.

• APPENDIX TECHNIQUE

All instruments utilized on the appendix stump were isolated in a kidney basin, and ceremonious painting of the stump would occur with cotton applicators and prep solution. Further isolation followed inversion of the stump prior to purse string tightening.

• BOWEL AND CANCER CELL TECHNIQUE

In all cases where the bowel or stomach were opened and where cancer was expected, double sterile set-ups were required. Two Mayo stands, two sets of instruments and a complete gown and glove change and a great deal of time was involved. Once the viscus was closed or all tumor removed, the entire scrub team changed gown and gloves, dirty Mayo stands were removed, redraping completed, then closure could start with a new set of instruments. A kelly clamp was placed in a special container to allow the scrub nurse to pick an instrument off the back table should the Mayo stand not be complete.

• FLOOR WASHING

Floor washing between cases was a highly ritualized, lengthy procedure. Evolution has included large mops, two small mops and a two bucket technique. Flooding the entire theatre floor for ten minutes, carefully rolling all the furniture wheels through the disinfectant, followed by wet vacuum, with all furniture moved into the corridor, made change over very long. The size of area to be mopped started to shrink, going from full theatre floor, down to 12 foot squares and then to eight foot squares. Progression continued to only wiping a two foot path around the table, without having to move the operating table, and then of all horrors - not washing the floor between cases.

• SEPTIC CASE TECHNIQUE

Septic case technique lasted for several decades only recently to be replaced by Universal Precautions. All excess furniture was removed to the hallway, the case, irrespective how sick the patient was, had to be done as the last case of the day, since the room would have to be closed for a lengthy period. In addition the cleaning process could take a hour, including double bagging of all garbage and laundry at the door, flooding of the room, soaking all furniture, beds and mattresses. A "runner nurse" would be stationed outside the OR throughout the entire case to clean up, to manage the isolation and the comprehensive protocols. Once the cleaning had been completed all health team members would stand at the door, take one shoe cover off, put the uncovered foot into the hallway, then like a flamingo on one leg, take the other shoe cover off. I know with confidence that all those organisms in the room knew not to cross the magic line.

• RESTRICTIONS ON CASE PLACEMENT

A patient with hemorrhoids, open bowel or an infection would never be allowed into an orthopedic or ophthalmology theatre.

• STICKY ENTRY MATS

Adhesive type mats were placed on the floor, at the entry to the door of the main operating area, once again to prevent the dreaded organisms on the floor from coming into the area, not unlike sticky fly catchers. The mats were quite exciting if you wanted to look at suture pieces, occasional needles, a few blood clots and dirty shoe covers that had been pulled off. The impact on infection rates of course was non existant, but an excellent sales promotion.

Extinct Sacred Cows Role

Extinct Sacred Cows serve as a reference point to ask yourself, what are we doing? Why do we insist on specific practices? Does it make a difference to the infection rates of the patient? Are the health team members being protected? What is the fundamental microbiological principle?

Current Sacred Cows Under Attack

• PATIENT PERSONAL CLOTHING IN THE THEATRE

The radical advances, particularly in ophthalmology surgery, over recent years have had a great impact on the rigid rules of patient dress for surgery. In Alberta, patients may have their cataract surgery in the hospital or in a private clinic. The same attending surgeons and anaesthetists work in both settings, each very carefully monitoring infection rates.The trend has been to minimize the time and inconvenience for the patients. Undressing of the elderly patient for eye surgery has been changed in a number of settings where the patient comes fully clothed, shoes and all, into the regular theatre. The patient lays down on the operating table for surgery, stands up and immediately sits back in a comfortable lounging chair on-wheels, has a snack and goes home, with no change in infection rates. In addition, a large number of patients walk to the OR and need to have their shoes on for safety. It makes no difference in infection rates.

• SHOE COVERS

The historical purpose of shoe covers started with an essential need for conductive rubber soles to ground static electricity to reduce the risk of explosions. Shoe covers were also believed to protect the operating suite floor from the dreaded organisms on the floor outside the red line of the "Do Not Enter"!! sign. The only use of shoe covers now is to protect shoes from the blood that results from trauma cases, and in procedures where high speed drill and pressurized irrigation systems spray body fluids. Bloody shoes in lockers and taken home present a potential risk to staff and family members. Whether shoes are worn outside the hospital or not, probably makes no difference. The important thing to remember is that bacteria do not walk, fly or crawl.

• MASKS

A number of hospitals, with the approval of the Infection Prevention Committees, have deleted the requirement for the circulating staff and the anaesthetist to wear masks.Masks are not worn during the entire sterile set up and surgical procedure. Procedures where prosthesis are being implanted have been maintained as the exception. Rates of infection have not changed. Significant cost savings can be achieved, however, the practice will likely take a long time to change. New concerns are being raised about the exposure to the aerosols with body fluids liberated from the pneumoperitoneum as instruments move in and out of ports during endoscopic surgery, particularly near the anaesthetist. Masks provide some protection from splatters. Some Scandanavian countries have only used masks for the scrub team for years.

• COVER GOWNS

Rigid rules existed for nurses to wear specific cover gowns, buttoned up, when leaving the operating suite, again to protect their operating attire from the dreaded organisms outside the suite. The theory was challenged that if surgeons and anaesthetists do not wear cover gowns and definitely do not button up, what purpose does it serve? Is it conceivable that only nurses contaminate the environment? Highly unlikely.

A study over a one year period was done at Foothills Hospital in Calgary, with the approval of the Infection Prevention Committee and the Operating Room Management Committee. Parameters to monitor infection rates were established and all cover-up gowns were removed. The change made no difference. The cover up gowns were permanently eliminated with significant cost savings for the laundry.

• CLOSED PANT CUFFS ON SCRUB SUITS

The long discussed topic of perineal fallout and skin shed having to be contained with closed pant cuffs was also studied at Foothills Hospital. The impact of closed versus open cuffs was measured using a slit sampler technique. There is no need for a closed cuff.

• SKIN PREP SOLUTION

The use of aseptic paint is being challenged, some areas use only a scrub brush and rinse with saline, others believe a saline wash may be just as effective. The psychological comfort of the prep solution color within draping margins probably will sustain the practice.

• SCRUB TIMES

The times have been reduced from ten, to five, to three minutes. Some challenge the use of a brush and claim a wash and disinfectant dip will be just as effective. Much ritual surrounds scrubbing, and it also can be somewhat of a social event with little real attention paid to the clock, except of course for the nurse.

The Future for the Sacred Cows

Where do we go from here? Immediate answers are not in front of us, we must search, study, review and be brave to lead the revolution. Laying on the track as the train moves forward, usually results in one of two situations - dead or cut off at the knees. Neither is acceptable. Unless we are able to prove the principles and practices make a difference, the aseptic practices will be dismantled like the Berlin wall.

The other scenario, is that the antibiotic resistant organisms, the new viruses and the resistant tuberculosis may become out of control. A reign of fear could bring back many of the Sacred Cows currently in the pasture to once again stalk the halls of the operating room suite. An attitude of "I told you so", might be in the offing, however it may be far enough down the road that the new investigative research teams will develop new strategies we have not imagined.

Every health care provider should read *The Hot Zone*; Richard Preston; Anchor Books Doubleday, a pocket book currently on the high profile newstands and book stores. The book describes the real, horrific disease process of the deadly *Ebola virus*. Major cities in Canada that receive international flights have protocols in place to deal with an infected patient. When this virus, or its hemorragic relatives arrive, there will be a terror that may well bring a whole herd of Sacred Cows back, on the gallop.

Summary

The black and white Sacred Cows are clearly having a tough challenge against extinction with the lack of scientific proof of validity. The profession is increasingly challenged by increased work and stress, leaving little time to step back and study what is happening. We must not be defensive but seek to find the truth in the best interest of patient care, health and safety of the health care providers and a safe environment. Credibility of our specialty must also be preserved through thoughtful, focused, research based change. Finally maximizing the use of resources with cost reduction is also very high on the agendas of health care reform. ▪

Bowel Technique in the O.R. Is it Really Necessary?

By Joan Porteous, Delores Gembey & Marlene Dieter

Abstract

Existing inconsistencies in the practice of bowel technique prompted a study to validate this operating room procedure. Minimal reference to intra-operative bowel technique was found in the literature. Needle drivers and tissue forceps utilized to anastomose large bowel were cultured, and the results were analysed. Needle drivers and tissue forceps used to anastomose small bowel were also cultured and used as a control group. Only elective bowel surgery cases were included in the study. The study demonstrated that there was consistent contamination to those instruments used for bowel anastomosis, with significantly greater contamination for large bowel resections. These results indicate that isolating those instruments and equipment which come into direct contact with the bowel lumen is a perioperative practice which will reduce the surgical patient's risk of postoperative wound infection.

Introduction - Research Problem

The perioperative nurse has a responsibility to provide quality care to all surgical patients during their surgical experience. An integral part of this responsibility involves serious efforts to reduce the post surgical infection rate. A major nursing goal is to prevent contamination to the surgical wound.

During surgical procedures involving the bowel, bowel technique may be carried out to prevent the spread of microorganisms from the gastro-intestinal tract to the peritoneal cavity and the tissues of the abdominal wall. In bowel technique, instruments which have come into contact with the intestinal mucosa are not used after the lumen of the intestinal tract has been closed.

The use of bowel technique is often based on surgeon's preference, and each surgeon may want to use a different technique during bowel resections. Some surgeons use bowel technique for every bowel case, others use a modified bowel technique, and some surgeons use no bowel technique at all.

During bowel surgery, the scrub nurse is in a position to isolate instruments which have come into contact with the bowel mucosa. Does this procedure contribute to the safety of the surgical patient? As one of the patient's advocates during surgery, the perioperative nurse is responsible and accountable for providing optimal nursing care. It is essential that nurses be persistent in their efforts to provide the rationale for the care they give.

Research Problem: There is an inconsistency in the practice of isolating surgical instruments which have come into contact with the contaminated mucosal lining of the bowel.

Purpose of the Study: The purpose of the study is to determine if there is significant contamination to surgical instruments which have come into contact with bowel mucosa.

Authors

Joan Porteous, RN, BN, CPN (C), is Clinical Educator, Operating Room Dept. Health Sciences Centre, Winnipeg. Delores Gembey, RN, ORPG, recently retired as Operating Room In-Service Teacher, HSC, after 42 years as a perioperative nurse; and Marlene Dieter, RN, BN, CNAHS is a perioperative nurse, Health Sciences Centre, Winnipeg, Manitoba.

Review of Literature

The aim in the O.R. is to prevent contamination of the open wound, as well as to create and maintain a sterile field in which surgery can be performed safely (Oliver, 1992).

Bowel technique is usually carried out during surgical procedures involving the small and large bowel. The flora in the bowel varies from that found in the upper gastro-intestinal tract. Also, the number of bacteria increases as one moves down the gastro-intestinal tract (Volk, Benjamin, Kadner and Parsons, 1991). Bowel technique is carried out to prevent these organisms from spreading into the peritoneal cavity and the abdominal wall. In bowel technique, all instruments that have come into contact with bowel mucosa are not used after the lumen of the intestinal tract has been closed.

An extensive literature search revealed minimal information regarding the effectiveness of bowel technique. Atkinson (1992) as well as Meeker and Rothrock (1991) state that separation of instruments used for bowel resection and anastomosis, from those used for abdominal closure is essential. However, no other data were found regarding the effectiveness of bowel technique.

The American Operating Room Nurses' Association does not have a specific bowel technique procedure recommendation (A.O.R.N., 1991). No information is offered by Canadian nursing organizations. No studies in this area were identified.

Hypothesis

It was our hypothesis that bowel technique procedures carried out for the surgical patient by the surgical team decreases the amount of contamination to the abdominal wall and peritoneal cavity from the open bowel.

Research Method

In order to determine that the type of research selected was appropriate for the problem to be studied and the purpose of the study, we collaborated with the Infection Control Department within our hospital.

References in this study to large bowel include cecum, ascending, transverse, descending and sigmoid colon, as well as rectum (excluding the anal canal). References to small bowel include duodenum, jejunum and ileum, all of which are unobstructed at the point of surgical anastomosis.

The study compared the amount of contamination to instruments used during large bowel surgery, to the amount of contamination to instruments used in comparative cases. The comparison cases included surgical procedures involving small bowel which has less microbial growth.

Forty cultures were taken from twenty surgical cases involving the large bowel. Two instruments from each case were cultured. These instruments included the needle driver which was used to grasp the needle that perforated mucosa when the cut bowel was anastomosed, and the tissue forceps which was used to grasp the edge of the cut bowel during anastomosis. Twenty cultures were also taken from the comparative cases involving small bowel. The same two instruments were also cultured.

The study consisted of only elective bowel surgery cases. The pre-operative bowel preparations varied from surgeon to surgeon, and were not considered in this study.

Data Collection

The surgical instruments were put into separate sterile plastic pouches and transported to the microbiology laboratory wrapped in sterile towels. Each instrument was immersed in a culture bottle containing 5ml of trypticase soy broth and agitated vigorously with a "to and fro" motion 20 times followed by vortexing for 5 seconds. Aliquots of 0.01 and 0.001ml respectively were transferred from each culture bottle to each of the following plates: Blood Agar (BA), MacConkey Agar, Brucella Agar supplemented with Vitamin K (BAK), and Laked Brucella Blood Agar containing Kanamycin and Vancomycin (L.K.V.). In addition, one aliquot of 0.5ml was transferred to Robertson's meat broth. The L.K.V. and B.A.K. plates were incubated anaerobically and the remaining plates and broth bottles, including the remaining approximately 4ml of original broth suspension, were incubated aerobically. All cultures were held for five days. All organisms detected were identified by routine methods, and colony counts were performed for quantitative analysis.

Each surgical procedure involved in the study was assigned a specific number. This "case number" was the only means of identification recorded on the microbiology requisition accompanying the instruments to be cultured.

In order to promote effective communication to all O.R. staff during the study, a protocol was developed which offered guidelines for managing the instruments to be sent directly to the lab for culturing.

Data Analysis

The total number of instruments with positive cultures were compared between the large and small bowel operations. The mean number of organisms for all individuals, and for only those with positive cultures were also compared. Chi-squared tests or Wilcoxon-Rank Sum tests were used where appropriate. The proportion of all organisms which were anaerobic, suggesting a large bowel source, were then compared to the needle driver and tissue forceps used for large and small bowel cases.

The results are summarized in **Table 1**. Although the numbers enrolled were small, the proportion of individuals with any positive cultures tended to be higher for the large bowel needle drivers only. The total number of organisms isolated was markedly greater for the large bowel than for the small bowel group. The mean numbers of organisms was significantly greater for large bowel, for the needle drivers for all individuals enrolled, and for the tissue forceps when considering only the mean number of organisms per positive culture.

In addition, the proportion of anaerobic organisms was greater in the large bowel group for both needle driver and tissue forceps. This was significant only for the tissue forceps, however. Concordance in isolation of organisms between the needle driver and tissue forceps was uncommon. Thus, for the large bowel, only 13 (31%) of species occurred in both the needle driver and tissue forceps, and for the small bowel only 2 of 9 (22%) occurred in both. **Table 2** compares the organisms isolated in the surgical cases studied.

Discussion

A total number of 30 cases was adequate to clearly demonstrate the significant difference in the level of contamination to instruments between large and small bowel resections. The data demonstrate that there is definite contamination to instruments coming into contact with the bowel lumen during bowel resection surgery. Therefore, a greater potential exists for contamination to the peritoneal cavity and abdominal wall tissue from these bowel organisms if those instruments are not isolated.

Perioperative nurses should support and encourage bowel technique procedures initiated by surgeons. A standard bowel technique practice should be developed between nurses and surgeons in each health care facility so that consistent practices can be easily taught and maintained during all bowel surgery procedures. In all bowel cases, the scrub nurse should consistently isolate any instruments, needles or equipment which have come into contact with the bowel lumen. This isolation procedure is a nursing activity which will decrease the surgical patient's risk for post-operative wound infection.

Additional research is needed to compare the types of organisms involved in post-surgical wound infections in those patients who undergo bowel surgery to the types of organisms isolated and identified in this study. ■

Appendix A

Table 1:

	Large Bowel (n=20)		Small bowel (n=10)	
	Needle	Tissue	Needle	Tissue
positive	12 (60%)	11 (55%)	3 (30%)	5 (50%)
broth only	5	7	1	2
number of organisms	33	37	4	7
mean*	1.65	1.85	0.4	0.7
mean/positive**	2.75	3.36	1.33	1.4
organisms+				
anaerobic	18	24	1	1
other	15	13	3	6

* p = 0.045 needle, p = 0.1099 tissue

** p = 0.14 needle, p = 0.05 tissue

\+ p = NS for needle, p = 0.020 tissue

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Appendix B

Table 2: Organisms isolated

	Large Bowel		Small Bowel	
	Needle	**Tissue**	**Needle**	**Tissue**
Anaerobic gram negative bacillus	7	6	1	1
Anaerobic non-sporeforming gram -ve bacillus		4		
C. perfringens	3	3		
Anaerobic gram positive cocci	3	2		
Anaerobic non-sporeforming gram +ve bacillus	2	3		
E. coli	6	7	1	1
E. faecalis	2	1		
Diphtheroids	2	1		
S. bovis			1	2
P. aeruginosa	1			
E. aerogenes			1	
viridans streptococcus	2	3		2
Streptococcus coagulase negative	2			
B. melaninogenicus		3		
Clostridium spp		1		
Anaerobic non-spore-forming gram +ve cocci		1		
Non-fermenter species		1		

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Planning for the Profession:

Recruitment, Retention, Research, Resources

By Gloria Stephens

In order to plan for the profession of nursing, we must first "care" about the profession.

The complexity of patient care, advanced technology and financial constraints within the operating room requires nurses of this specialty to have specific competencies, a matrix of practice levels, as boundaries shift and perhaps overlap for a time, in response to these variable demands.

To cope, we as nurses must learn to plan our nursing resources, cost our services and document our effectiveness in terms of interventions and patient outcomes.

The future of nursing may well depend on the study of its history. The vision of nursing needs to be controlled by nurses. The vision must have a basis for change anchored in the past. Tradition needs an openness to the future. The movement from vision to action requires creativity, imagination and a singleness of purpose - inspired by those who are living examples of the profession's values and mission.

Post Basic Operating Room Nursing programs are essential, and to be valued and credible, they must provide career laddering for the graduate, and benefit the employing agencies by enhancing recruitment and retention.

Florence Nightingale saw nursing as an unending experience in learning, so she never believed in ceremonies to mark the completion of nursing education. In her *Notes on Nursing* (1859) she state: "No system can endure that does not march". Are we marching to the future or to the past? What is your vision of the future of our nursing profession?

I believe a future vision to be interactions that nourish the human spirit where we live and work. We need to be deliberate with our time, energy and resources as we work towards our goals and no longer drain our energies on dead-end issues. We need to lead others to lead themselves. We need to envision and coordinate other modalities of delivering care - not only to the patients we serve, but to each other, if we are to survive as a profession. Fundamental to our nursing profession's future is our ability to honour, respect and value ourselves, as well as our interpersonal and inter-professional relationships.

The basic tools will be the use of our intuition, and a genuine human response to "caring" and "trust" which is so important in this topsy-turvy world. It is definitely time to end this litany and theme: "Why can't nurses get unified?" Unity begins on the smallest units in every aspect of our working environment. Every nurse counts!

We must use and/or develop skills of valuing diversity, encourage discussions and transform conflict into windows of opportunity. The following are the four R's of preparing for the profession of nursing: recruitment, retention, research and resources.

1) Recruitment

We must "woo" the high school students to the nursing profession through our image. We must market ourselves as professionals and take a business approach to our career. Learn to dress for power and

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This article was originally presented to the IX World Conference of Operating Room Nurses in Hamburg, Germany in September of 1995.

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success. Appearance is a major part of wellness, but many health care professionals look more like "illness" models. We need to develop writing skills to improve our communications and publish our ideas. We need to keep abreast of trends and increase our membership in professional organizations. We need to sell ourselves. It is time for ALL nurses to critically examine our acceptance of certain tenets of professionalism.

Generic Nursing Programs:

Houle (1980) claimed that more importance should be given to the admission process - to the selection of individuals who have already given evidence that they have a thirst for knowledge and who will likely retain that thirst throughout life. Dubin (1981) states lifelong education/learning is necessary to ensure professional competence and thus increase the public's confidence in that profession. One professional characteristic is the university-based education for registered nurses.

Orientation:

Following graduation some nurses entering the "specialized areas" - where professionals with unique patterns of behaviour and thinking are encountered - experience cultural shock. How rigid are you in your practice setting? Staff orientation periods need to be individualized (remembering the "learning curve" of adult learners and including not only the transmission of technical information, but also an understanding of the adjustment that must be made in terms of culture shock.) The rights of adult learners should be respected in a risk-free environment with peer interaction. We often destroy our "young". We must consider the "genealogy" of our profession.

In Canada, our Nursing Code of Ethics (CNA, 1992) states: "With the changing scope of nursing, educators are obligated to treat student nurses with respect, honesty and dignity and provide fair guidance in developing the nurses' competence. The profession has a responsibility to students entering nursing. Nurses have an obligation to uphold the code."

2) Retention

Autonomy will be one of our strongest retention tools and will be acquired through an increase in our knowledge base. But until such time that we, as a whole, agree to obtaining a specialized knowledge based on research, and make a strong commitment to the service ideal, autonomy will be some distance away. We're probably closer than anytime yet in history, but we still have miles to go. We still need that "giant step" taken for mankind - in nursing. We'll either make it in the 90's or lose it altogether. It's up to us! Nursing could die of "whittle's disease" if we're not careful to monitor what is happening around us, and stop saying "It's not my job."

Professional autonomy is limited by conflict with; a) the medical profession autonomy. Patriarchal dominance will take some time to change because it has been embedded in all human cultures worldwide for most of recorded history; b) concerns of hospital administrators; c) social conventions; d) attitudes among nurses themselves. We complain that we don't have all the above and this drains our energy. We should invest our energy in a creative way. Some nurses will never burn out, but that's because they've never been lit! They'll just rust out.

Standards:

Professional and Clinical Standards are guidelines to assist the practising nurse in meeting the objectives of patient care and are a method used to measure the competence of a professional person, as well as the validity and credibility of the nursing profession.

3) Research

Research will help us find our direction and have a positive effect on our professional status. Success will only be guaranteed if and when we decide to innovate, create new ideas and systems and take new risks.

4) Resources

The Operating Room Nurses Association of Canada (ORNAC) has published Position Statements on many important issues, and two of the most important are: "Staffing an OR"; and support for "OR content in the University Generic Nursing programs".

Competent Nurses

Competent nurses instill credibility. The ORNAC competencies are clearly defined for clinical practice and program curriculum development in the document published 1993, *"Professional and Clinical Practice Recommended Standards"*.

Certification

In Canada, the first OR certification exam for nurses occurred in June, 1995 with the highest number of participants in any specialty area - with 96% of Canada's OR nurses passing the exam. For continuous certification there must be a credit-laddering system developed.

Laddering

The concept of "laddering" was first described by Zimmer (1972) as a focus on the recognition of nursing service and competence. Laddering has two areas to consider: clinical and educational.

Clinical laddering offers recognition to those who provide excellent patient care and perform activities beyond the scope of their job description. Individual financial rewards are not common and in most cases are impossible in Canada, as hospitals are government-controlled and employees on the whole are members of a professional collective agreement. Therefore, other means must be developed, such as the use of the concept of "shared governance" that is practiced in my hospital, St. Paul's Hospital, Vancouver, B.C.

Educational laddering can be achieved with cooperative balancing efforts between academic and clinical programs. It is evident that higher education opportunities must keep up with the changing trends to maintain career mobility.

A very high percentage of Canadian nurses have their degree. Many more would reach this goal should continuing education be credited. Many successful, employed nurses with rich life-experiences, varied social and personal histories, who achieved recognition, assumed leadership positions, developed professionally and contributed to the growth and changes in nursing, and yet, no credit toward a degree i s possible. Educational institutions must become more responsive to the needs of nurses in practice.

An intangible reward of educational laddering is the opportunity for staff to share their expertise with students and entice potential recruits. It is also best for staff because it encourages them to keep abreast of new knowledge while serving as a role-model. For the institution, the advantage can be the determination of which student has the best potential for the OR role.

Lifelong Learning

We may quickly become professionally obsolete after graduation. Lifelong learning, like taxes and death, is a fact of life today, and is a vital component of professional development as we prepare for career transitions. It should be self-directed, and self-motivated by career responsibilities and changes.

Advocacy and Mentors

We have to consciously and actively be first an advocate for the nursing profession. We must be able to stand up and shout proudly - "I'm a nurse". We must value being a nurse. We must value the nursing practice. Let us re-dedicate ourselves and be recognized by futurists, not only as the specialty of the past, but the specialty of the century. This is my continual theme.

We must be an advocate of each other. Recognize and value colleagues. Competition among nurses is costly. Why is it so difficult to accept that our varied talents and expertise should complement rather than conflict? Acknowledging the accomplishments of one another is central to promoting pride within the profession and to increasing our credibility and value as professional people.

Most nurses today have a mentor; one of nursing's greatest resources. Mentors do not make great people; they nurture the greatness in people.

If we, as nurses, are to have a future, we must be prepared in the 90's to renew our spirit. Never has there been such a diversity of opportunity. Some people expect the door of opportunity to be opened with an electric eye. It won't happen! We have the responsibility to exhibit role-model behaviour, consistent with values of the profession. As Florence Nightingale stated: "Progress can never end but with a nurse's life".

In summary, state your dream for nursing loud and clear. Present ideas positively and take risks. Living creatively eliminates failure. It's appropriate to take a moment to review yesterday's dreams and to consider tomorrow's future with hope. There must be a sharing of faith, trust and respect so as to permit an exchange of information, a sharing of values and expectations and a pooling of our great reservoir of strengths and knowledge.

Conclusion

Where do we need to go? We know what lies ahead; more restrictions, regulations, fewer dollars and limited personnel resources. There will be continued changes in nursing education, autonomy, advocacy for consumers, as well as a re-establishment of

values. As a catalyst to initiate changes, nurses will assume more responsibilities and be leaders. It takes only the vision of tomorrow, entrepreneurial spirit and commitment to create the reality from the dream. The future is not something you predict, it is something you invent. It is too important to guess at.

As visionaries, we have an opportunity and should be committed to shaping, as architects, the future of our profession. There are three kinds of people; those that make things happen, those that watch things happen and those that wonder what happened. It isn't the burdens of today that drive us mad, it is the regrets over yesterday and the fear of tomorrow.

Most of all, we must not forget humour in our lives. To know even one life has breathed easier because you have lived - this is to have succeeded, to have had a reason for having once been.

To strengthen your vision, this poem by D. Ritter may be appropriate:

If you think you are beaten, you are,
If you think you dare not, you don't,
If you like to win, but you think you can't
It is almost certain you won't.
If you think you'll lose, you've lost,
For out of the world we find
Success begins with a fellow's will -
It's all in the state of mind.
If you think you are outclassed, you are.
You've got to be sure of yourself before
You can ever win a prize.
Life's battles don't always go
To the stronger or faster man,
But soon or late the man who wins
Is the man who thinks he can!

May your vision of nursing, your expectations for your career and your personal life be fulfilled. It's just the beginning!

Measuring Quality:
Evaluating Personnel Competencies

By Audrey Macdonald, R.N., Hon.B.A.

When I heard the topic which I was to present to the World Conference, I did two things. First, I reflected on my career as a perioperative nurse and reviewed in my mind how both quality and evaluations had changed throughout those years, as well as how my feelings about them have changed. Second, I began to review the literature on both topics to determine whether we agreed on what the changes were. For the most part, we were in agreement even if my views were expressed in more simplistic terms.

I will briefly review quality and personnel evaluations from the past to the present based on a personal perspective and a literary perspective. However, the main thrust of this article will be my challenge to you for tomorrow. To get to that future, I am asking you to consider the elimination of performance appraisals as they exist today. In their place, each nurse will be required to develop a continuous improvement plan based on established competencies and quality indicators as they relate to expected internal and external client outcomes.

As you read this article, I would request that you reflect on your personal experiences with respect to quality and evaluations. What have they meant to you and how would you like to see them change or improve?

When I began my operating room nursing career, quality assurance was not in existence. Not until the early 1970s was quality in health care given much emphasis. Since that time, the concept of assuring quality has gained momentum, moving from retrospective audits to the current status of continuous quality improvement (CQI). In essence we have moved quality by inspection (bad apples theory) to quality by process improvement (quality improvement theory). At this time I would like to point out that the word "quality" is really redundant when used with continuous and improvement. If we achieve continuous improvement, we are producing quality as the end result. Also, we have moved from a system which saw quality assurance as a management responsibility to continuous improvement which is everyone's responsibility. These changes have been driven by government agencies, accreditation bodies and a more informed and knowledgeable client (patient).

Abstract

Historically, quality and performance evaluation have been considered a management responsibility and have been completed retrospectively. In this article, I am proposing a radical shift. Specifically, I am encouraging the elimination of performance appraisals and, in their place, the introduction of continuous progress reviews and competency assessments which are initiated by each individual, not by management. Quality care will continuously improve in direct relationship to improved personnel competence which can be measured by using established quality indicators and expected client outcomes.

Author

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If the continuous improvement process is to succeed, we must change the way we deal with issues.

One of these changes must be the elimination of traditional performance appraisals. Now, this suggestion is downright frightening! How else can we ensure that employees are working according to expectations and requirements? Why are we using them? What purpose do they serve? If considered realistically, the performance appraisal is dangerous and detrimental to performance as well as manipulative and controlling. Think about how you feel when your manager tells you that your performance appraisal is due and to start thinking about it. I can recall shaking in my boots, struggling to recall the positive things that I had done over the last year. In some instances, it may have been more than a year. Frequently, this was the only time that I had any discussion with this individual, and they were telling me what I should do to improve, and where I went wrong. I often wondered where they discovered all this information and whether everyone I worked with were paid spies.

"The performance appraisal is dangerous & detrimental to performance as well as manipulative & controlling."

In the early days, and indeed even today, performance appraisals were used to determine the amount of the merit increase in salary. They were also used, and still are used, to promote individuals into positions of greater responsibility. As well, they are required by the accreditation bodies. Some of the reasons given for support of the performance appraisal systems are to:

1. Improve communication between the employee and the manager
2. Discipline and take corrective action
3. Develop personal goals
4. Assess competence.

What is wrong with these reasons? Communication should be a daily, on-going process. Discipline and corrective action should be immediate. Goal development should be an on-going process, not just an annual exercise. Competence assessment should be neither subjective, nor based on evaluator bias.

Based on these facts, elimination of performance appraisals must be considered since they are designed to "catch" people, with management placed in the role of cop. The idea of the "trained nurse" comes to mind. "Do as I say and you will get your reward!" They are a yearly ordeal in which both parties get together to dig up the ghosts of past performance.

We must move toward a system of progress review and improvement assessments which facilitate learning. How frequently these reviews and assessments are performed must be left to the discretion of each individual, but they must be more frequent than yearly. Management becomes the facilitator, helper and enabler. Individuals should learn about the impact of their performance, where their efforts are making a difference, where they are not and what they can do to improve. In addition, they must be given the freedom to identify barriers to improved performance, to experiment with new approaches and to learn from what did not work so that improvements can be made. When I refer to individuals, I refer to everyone in the organization. Managers must ask their team what is working, what is not and what they can do to help the team and each individual accomplish the desired outcomes. Competency assessment tools enable employees to develop and improve personally and as a team. Managers gain from the employees the knowledge and insight critically needed to improve the processes and systems within which the employees are working.

The foundation for improvement is laid when all employees are encouraged to develop personal leadership skills. This makes a very powerful statement - "We believe in you. You have much to contribute". Self-improvement is the beginning point to team and organizational improvement.

"Everyone has a responsibility to solve performance problems and initiate improvement."

Improvement should become a part of our daily routine such that as we work, we develop the discipline and skill to continually look at whether we are doing the right things in the best way. Everyone has a responsibility to solve performance problems and initiate improvement, whether they are personal, team or procedure related. There are leaders in every department and at every level of an organization. A title or position does not a leader make, and we must look at ourselves and realize we have a responsibility to ourselves and our profession as perioperative nurses to become leaders. We must take the initiative to develop a continuous professional and personal improvement system which will interface with the continuous improvement program within our practice setting.

About now, you are probably saying, "This all sounds great but how can we do it". I have faith in all of you, but you must be committed and willing to take chances. Our first attempt may not be perfect but that is what continuous improvement is all about. The words "Well done!" should become the most commonly heard in the department.

In Ontario, our credentialing body, the College of Nurses of Ontario, must by law have a quality improvement program in place by 1997. In developing the program, Standard Statement Number 5 states:

> "Each nurse assumes the responsibility for maintaining competence while striving for improvement in the quality of service in her/his dimension of practice".

These dimensions of practice are direct practice, education, administration and research. From this statement, we are made aware of our responsibilities and as never before, competence and quality have been placed under one umbrella. They go hand and hand on parallel tracks. Also, everyone is placed in a leadership role since competence, improvement and quality of service are made a personal responsibility.

Quality Options

To assist us in this endeavour, four quality options are being offered whereby nurses will be able to demonstrate their competence. These options are:

1. Agency assessment
2. Formal education
3. Professional improvement profile
4. Professional portfolio

The agency assessment option must meet the College's quality improvement requirements, based on specific criteria for professional development. My proposal will focus on this particular option.

The formal education could include the pursuit of a degree, post- graduate work or obtaining and maintaining a certification in a specialty.

The professional improvement profile is similar to competency scales and would allow each individual to do a self-assessment, compare yourself to the ideal to identify strengths and potential areas for improvement. (Note the absence of the word "weaknesses".)

Finally, the professional portfolio is similar to a detailed resume with the addition of a section about on-going professional improvement activities. In Great Britain, the nursing regulatory body is in the process of making a professional portfolio mandatory.

The purpose of these four options is to provide a framework for each individual nurse to evaluate her competence and develop plans for improvement. One must be selected in January, 1997, but over the years, a nurse may find herself using all four as our needs change. Clearly, the emphasis is on personal responsibility for our own performance and maintaining competence as well as accountability for our actions, and resultant consequences of those actions.

In everything we do, every action we take, there will be an outcome for someone. That someone may be the patient, our coworkers, the surgeon, anaesthetist, other nursing units, other departments, the health care facility, or even the community we serve.

Each one of us, as individuals and as team members, will play an important role in whether those outcomes are positive or negative. Our goal as professional perioperative nurses has always been to strive for the positive outcome. To accomplish this goal, our competence must be not only maintained, but continuously improved.

ORNAC 's Definition of Competence

According to the Operating Room Nurses Association of Canada (ORNAC), the definition of competence is "the knowledge, skills and abilities necessary to fulfil the professional role/functions of a registered nurse in the operating room, regardless of the practice setting". Competencies will range in progression from beginner to expert, which is defined as "requires supervision" to "functions independently", adapting to changing situations and demands.

Suggested competencies for perioperative nurses as outlined by ORNAC are:

1. Practices professionally
2. Provides physical care
   - circulating role
   - scrub role
3. Provides supportive care
   - to patient and family
   - to team members
4. Provides a safe environment
5. Responds to urgent/emergency situations
6. Manages resources

More detailed statements have been provided to further define each of these competencies, some of which I will be discussing in more detail later.

When considering each competency statement, we must apply the following characteristics: knowledge, clinical decision-making, team skills, communication skills, organizational skills, teaching and leadership, as well as accountability and responsibility. Knowledge is not enough. Skills come from knowledge and practice. They are learned, practiced, mastered, and reinforced until they become an integral part of the individual who self-evaluates and knows what is needed to reach excellence. Clinical decision-making involves analyzing what is required to perform a procedure, what the outcomes may be, and whether the resources are available to manage the outcomes. A highly effective team is a group of individuals who are committed to one another's personal growth and success, one that is continually learning, growing and developing. Personal leadership is at the core of all of these characteristics. Management's role should be one of servant-leader. Management must guide and direct. Management does not problem-solve, they make sure the right problems are being solved by equipping and supporting the team to solve these problems.

I am now going to take specific competencies statements and relate them to who the clients may be, what the expected outcomes may be and suggest indicators whereby one can determine if the outcomes are being achieved. While reading through these statements, think about the characteristics I have just mentioned, and how they impact on each outcome.

1. Practices Professionally

"Recognize self-limitations and expertise in providing patient care."

The potential 'clients' are the patient, the coworkers, the surgeon and anaesthetist, the health care facility and the community.

Expected outcomes are:

- the patient receives the care they expect and deserve.
- the team members and the health care facility provide the assistance needed to increase skills.
- the community recognizes the quality of care available to them.

Indicators of whether the outcomes are being achieved are:

- the nurse knows how and where to find relevant information and invests time and energy in improving knowledge, skill and judgment required for effective practice.
- the nurse is not afraid to ask for help and other nurses are willing to share their experiences for the common good of the patient.
- educational resources are made available to the nurse.

2. Provides supportive care to patient and family

"Provide explanations and demonstrate a caring attitude to the patient."

The potential 'clients' are the patient, family, and the health care facility.

Expected outcomes are:

- the patient and family feel important and can verbalize a basic understanding of the perioperative processes.
- the image of the health care facility is strengthened

Indicators of whether the outcomes are being achieved are:

- the patient and/or family are greeted by name and the nurse introduces herself by name.
- the nurse describes the course of events which will take place, and what role she will perform during the perioperative experience.
- the nurse discusses issues of concern to the patient and answers their questions.
- the health care facility recognizes the importance of patient input and provides the freedom and means whereby the perioperative nurse can alter procedures to meet the patient's needs and expectations.

3. Manages Resources

"Organize and coordinate patient care and the surgical team, maximizing efficient use of energy, safety procedures and time."

The potential 'clients' are the patient, the family, coworkers, the physicians, the other nursing units, the other departments, the health care facility and the community.

Expected outcomes are:

- the anxiety level of the patient and family are kept to a minimum.
- the surgeon and anaesthetist begin the first case of the day at the scheduled time.
- other nursing units and departments can organize their activities based on the operative schedule.
- the health care facility does not incur costly overtime expenses.
- the community views the health care facility as responsible and efficient.

Indicators of whether the outcomes are being achieved are:

- the patient is called and arrives in the operating room just prior to their scheduled time.
- number of delays in starting of the first sched uled case on time.
- interruptions in patient care in other nursing units and other departments due to operating room delays.
- record of overtime and call-backs worked and paid.
- number of cases cancelled due to schedule delays.
- number of patient complaints related to surgical delays or cancellations.
- number of cases cancelled due to unavailability of supplies and/or equipment.

These are but a few examples of how we can do a competency assessment. Utilizing these examples, each statement could be developed as a part of the competency assessment tool. All the perioperative nurses must be involved in the development of the tool as well as other health care workers in the facility, since what we do can directly affect what they do.

I hope I have helped you to see the advantage of continuous competence assessments and how they will lead to continuous improvement personally, professionally and organizationally.

To help us focus on our performance and the effectiveness of our performance, we must continually ask the following questions:

1. Why do we do what we do?
2. How do we know that what we do works?
3. How can we improve what we do?
4. How do we know we have improved?

We all must decide which type of person we are and which type of person we want to be. Which one are you? One who makes things improve, one who watches things improve, or one who wonders what is improved. I sincerely hope that all of you fall into the category of making things improve.

In closing, I quote a statement made by Isabel Stewart on the science and art of nursing in 1929:

> "The real essence of nursing, as a fine art, lies not in the mechanical details of execution, nor yet in the dexterity of the performer, but in the creative imagination, the sensitive spirit, and the intelligent understanding lying back of these techniques and skill. Without these, nursing may become a highly skilled trade, but it cannot be a profession or a fine art. All the rituals and ceremonials which our modern worship of efficiency may devise, and all our elaborate scientific equipment will not save us if the intellectual and spiritual elements in our art are subordinated to the mechanical, and if the means come to be regarded as more important than the end."

Sixty-six years later, this statement remains pertinent and reflects the importance of continuous improvement through personal improvement. Let us all make our personal commitment to quality, and consider promoting the abolishment of traditional performance appraisals and to move toward continuous progress reviews and competency assessments. Remember, success is never-ending, and failure is never final.

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Eye Glasses and Dentures in the O. R.: The Choice is Yours!

By Sonya Atkinson, Felina Brydges, Joan Eagle, Darlene Marshall & Judi Tyndall

Abstract

Historically, patients have been required to remove their dentures and eye glasses on the pre-surgical ward before being taken to the Operating Room (OR) on the day of surgery. This descriptive study examined the choices made by patients pre-operatively regarding dentures and/or glasses, the reasons given for the choice, and the relative satisfaction with the choice post-operatively.

Of the 213 patients enrolled in this study, 66% were female with an average age of 57 years. Only patients wearing eye glasses or dentures were included. Sixty-nine percent of the patients wearing glasses and 85% wearing dentures chose to wear them to the OR. When asked post-operatively about their satisfaction with their choice, 95% indicated that they were very satisfied with their choice and that it was the best decision they could possibly have made. No glasses or dentures were broken or lost during the study.

Introduction

Nurses are well aware that most patients prefer to have control over their lives as long as possible before surgery. Porteous & Tyndall (1994) reported that, when given a clear choice most patients opt to walk to the Operating Room prior to surgery rather than go by stretcher (regardless of the type of surgery).

Historically, patients have been required to remove their dentures and/or glasses, before coming to the Operating Room from another ward. Intuitively, nurses know that most patients prefer to keep their glasses on and their dentures in place as long as possible before surgery.

This descriptive study will examine the choices made pre-operatively regarding dentures and/or glasses, the reason given for the choice, and the relative satisfaction with the choice post-operatively.

Literature Review

A literature search did not reveal any information or research studies regarding patients wearing dentures and/or glasses to the Operating Room (OR). Four studies were found concerning involvement of the patient in selecting various options for hospital care. The most pertinent study in the area of patients' choice regarding operating room procedures was done by Simpson & McCallum (1992). This study examined the feasibility of involving the patient in the scheduling of their elective surgery. They found that not only was patient involvement in OR scheduling feasible, but by using patient choice, OR cancellations

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were reduced by 32% and failures to attend were reduced by 68% in a three-month time period.

Other studies cited in the literature involved less related areas of patient choice such as:

1) in selecting childbirth settings [Acheson, Harris & Zyzanski, 1991];
2) in choosing not to resuscitate when critically ill [Gleeson & Wise, 1990]; and
3) in participatory perinatal care [Littlefield, Chang & Adams, 1990].

Since no studies were found which examined the question of patient choice in relation to the wearing of glasses and/or dentures to the operating room, it is relevant to pursue the following questions.

Study Questions

When offered a choice pre-operatively:

1) Did patients want to wear their dentures and/or eye glasses to the Operating Room?

2) What reason(s) were given for the patient's choice to either wear or not wear their dentures and/or glasses?

3) Post-operatively, was the patient satisfied with the choice he or she had made pre-operatively?

Study Design

A prospective, descriptive survey.

Study Population

All pre-operative patients, who wore dentures and/or glasses and were admitted the same day as their surgery were eligible for the study regardless of whether or not they had pre-operative sedation. The patients represented in this study included those having general, gynaecology, oncology, orthopedic, ear nose and throat, urology, dental, and plastic surgeries.

Study Method

1. Implementation of the Dentures and/or Eye Glasses Procedure

Several days before their scheduled surgery during their pre-operative visit to the Pre-Admission Clinic, eligible patients were told about the option of retaining possession of their dentures and/or eye glasses until the induction of anesthesia in the Operating Room (OR), or leaving them on the pre-admission ward.

On admission the day of surgery, the patient was asked to make a choice with regards to wearing dentures and/or glasses to the OR. If the patient chose to wear dentures and/or glasses, a bag labelled with the patients' name which contained a denture cup and/or padded eye glass envelope was prepared. The bag was placed on the patient's IV pole and travelled with the patient to the OR. The "same day" nurse documented on the Perioperative checklist whether or not the patient was wearing dentures and/or glasses.

On admission to patient receiving, the "patient receiving" (PR) nurse asked the patient if s/he was wearing dentures and/or glasses. If the patient's decision had changed, for example, the patient had left the dentures and/or glasses with a family member, the PR nurse documented the exact location of the dentures and/or glasses on the patient's chart. If the patient had retained his/her dentures and/or glasses, the PR nurse informed the OR nurse before the patient was admitted to the OR theatre.

Before induction, the OR nurse removed the dentures and/or glasses from the patient and placed them in the proper container with labels, and documented on the perioperative checklist that the dentures and/or glasses were removed in the OR theatre. At the end of the surgery the labelled bag containing the dentures and/or glasses was placed on the IV pole of the transport stretcher.

On admission to Post Anesthetic Recovery Room (PARR), the OR nurse included in the report the whereabouts of the dentures and/or glasses. The PARR nurse then documented the information on the PARR flowsheet. The patient had the choice of wearing the dentures and/or glasses when alert. On transfer to the Post-operative Ward, the PARR nurse included the whereabouts of the dentures and/or glasses in the post-operative report.

2. Study Interview/Questionnaire

For the 4-week study period, on the day of surgery, the patients with dentures and/or eye glasses were asked to make their choice and the results were documented. In addition, reasons for retaining possession (or not) of eye glasses and dentures were documented. It was anticipated that approximately 200 patients would be surveyed Pre-operatively in the 4-week time period. Demographic data such as age, sex, type of surgery and disposition post-surgery (ICU, ward, or Short stay/home) were collected.

Following surgery, the sub-set of patients who returned to the Short Stay unit for a matter of hours before returning home were asked an additional question concerning their satisfaction with their choice. It was anticipated that approximately 50% of the patients would return to the Short stay unit. The pre and post-operative questions are available upon request.

Data Analysis:

All data were analyzed using descriptive statistics.

Study Results

Two hundred and thirteen surgical patients were included in the study. Sixty-six percent of the population were female. The average age was 57 years with a range from 15 to 91 years. The median age was 61 years with a bimodal distribution at 70 and 72 years. As shown in Figure 1, the most common type of surgery was major gynecology (20.7%), followed by minor general surgery (12.8%), minor gynecology (12.2%), minor orthopedic (11.7%), and major orthopedic (11.2%). Following surgery, 55% of this population were admitted to a hospital ward, 3% went to the intensive care unit (ICU) and 42% returned to the short-stay unit and then home. (Figure 2).

In general, on admission to the pre-surgery clinic, 40% of this population (N = 86) were wearing glasses, 20% (N = 43) were wearing dentures, 33% (N=70) were wearing both glasses and dentures, and 7% were not wearing their glasses as they were used for reading only (N = 10), or had left their dentures at home (N = 4) (Figure 3). One hundred and sixty-six people had glasses and of these, 114 (69%) chose to wear them to the OR. The major reason given for choosing to wear their glasses was that they could not see without them (61%) and that it felt more comfortable (34%). Interestingly, 6% of the population chose to wear their glasses in the belief that they would receive them sooner after surgery. Of the remaining 52 people who chose not to wear their glasses to the ORs 85% (N = 44) felt they didn't need them and 12% (N = 6) were afraid that they would get broken or lost.

Of the 117 people with dentures in this study, 4 had left them at home and the remaining 113 people were wearing dentures at the time of admission prior to surgery. Of these, 96 (85%) chose to wear them to the OR. The major reason given for choosing to wear their dentures was that they felt more comfortable with them (46%), they felt they looked better (31%), or they needed them to talk (3%). Again, 6% of the population chose to wear their dentures in the belief that they would receive them sooner after surgery. Of the remaining 17 people who chose not to wear their dentures to the OR, the prime reason for their choice was a fear that they would get broken or lost.

When asked post-operatively about their satisfaction with their choice, 95% indicated that they were very satisfied with their choice and that it was the best decision they could probably made. Specifically, for those who chose to wear their glasses to the OR, out of a possible score of 4.0 ("the very best decision I could have made; would definitely do it again"), the average rating was 3.98. For those who chose not to wear their glasses to the OR, the average rating was 3.78. Similarly, for those who chose to wear their dentures to the OR the average rating was 3.97. For those who chose not to wear their dentures, the average score was a perfect agreement of 4.0 ("the very best decision I could have made; would definitely do it again").

Conclusion and Discussion

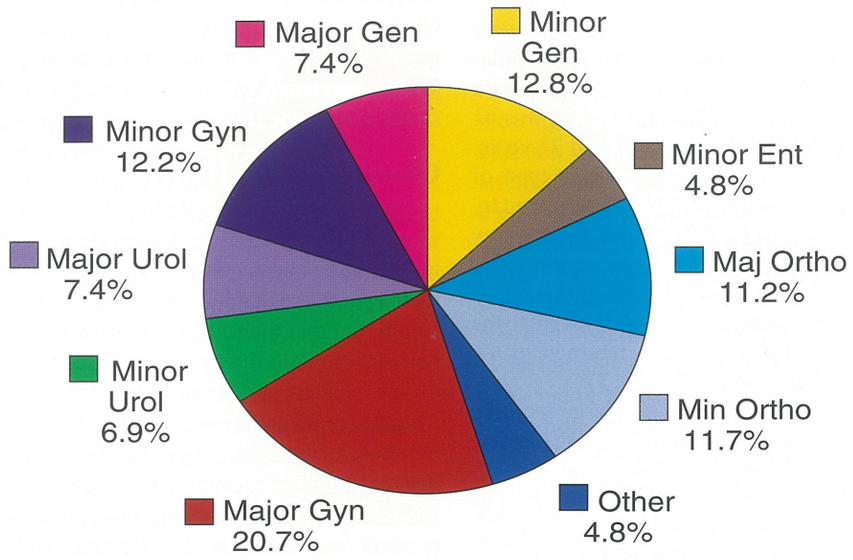
On the basis of the finding from this study, we conclude that not only is it important for the patient to be able to make a choice regarding the wearing of their eye glasses and/or dentures into the Operating Room, but that their choice is essential to enable our patients to retain their personal identity and sense of dignity. This is particularly important when it comes to dentures. Ninety-one percent of the denture-wearers chose to wear them right into the operating theatre because it felt more comfortable and "looked better".

When we first began this study, many nurses expressed concerns that the dentures and/or glasses would be lost or broken in transport. Another concern voiced by physicians and nurses was the potential for injury related to retained dentures during anesthesia and surgery. Also, the Post Anesthetic Recovery Room staff were concerned about the dentures being returned too soon post-operatively. By having the Same Day Unit, 0perating Room and Post Anesthetic Recovery Room nurses working together on this study, the nurses on each unit developed a method of handling and tracking of dentures and/or eye glasses throughout the perioperative period. There were no dentures and/or eye glasses lost or broken in this study. These has been no incident of retained dentures or injury related to patients having their dentures and/or eye glasses returned too soon post-operatively. The practice of the patients wearing dentures and/or glasses into the operating theatre has continued beyond the study with no mishaps.

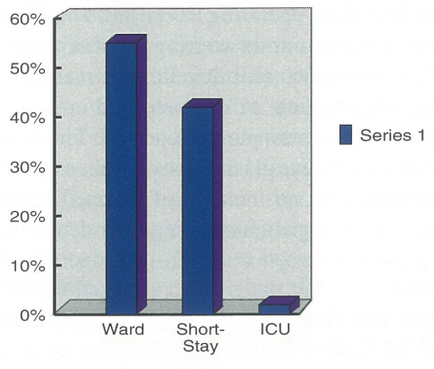
Study Limitations

The study was limited to patients admitted on the day of surgery. The post-operative questions were limited to patients being discharged on the day of surgery. The study group felt this method facilitated more accurate return of data because patients generally would be feeling better and more alert than those assigned to the ICU or ward. However, less than half of the study population was discharged to the Short Stay Unit and then home and thus available for feedback concerning their satisfaction with their choice.

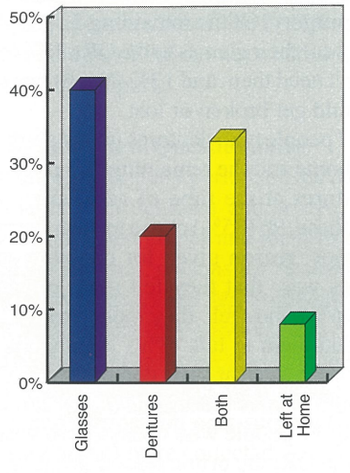
Type of Surgery
Figure 1



Post-Operative Disposition
Figure 2



Proportion Wearing Glasses/Dentures
Figure 3



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ORNAC/Johnson & Johnson Medical Products

Bursary for OR Nurses

By Shelly Zareski
Chairperson
ORNAC Awards Commmittee

This bursary was established to financially assist ORNAC members in furthering their education in areas that will enhance perioperative nursing practice. The ORNAC Awards Committee, comprised of members from across the country, choose successful applicants in accordance with established selection criteria

Eligibility Requirements

The applicant must be a registered nurse who is licensed with the Provincial Professional Association. The applicant must also be an active member of the Provincial Operating Room Nursing Association two consecutive years prior to submitting the application. The individual must be employed, with a primary focus on perioperative nursing, according to the official ORNAC definition.

Funding is available for post basic operating room nursing programs approved by ORNAC, Baccalaureate nursing programs and Masters and Ph.D. nursing programs related to health care and considered an enhancement to existing perioperative employment.

Application Requirements

The personal profile / resume must be typed and supporting data enclosed with the completed application form. The application will not be considered if this criteria is not met. This data includes letters of reference as indicated on the application form, photo copies of nursing license, membership in a provincial OR association, perioperative nursing certification (if applicable) and proof of acceptance in an education program.

The complete, typed application form and supporting documentation must be submitted to the Chair of the ORNAC Awards Committee before is **March 15th each year.** This information can be found in every issue of the *Canadian Operating Room Nursing Journal*. Late submissions will not be considered.

This bursary is jointly funded by Johnson & Johnson Medical Products and ORNAC and is administered by the ORNAC Awards Committee. The applications are judged by the committee based on established criteria. If there are no suitable applicants, the award will not be presented and funds will be carried over to the next year. Bursary funds are designated specifically for tuition and books. Final approval for disbursement of funds rests with the Awards Committee and the ORNAC Board of Directors. At the end of the term, proof of successful completion of the course must be forwarded to the Chair of the Awards Committee in order to close out the file.

ORNAC recognizes that the education of perioperative nurses plays a pivotal role in providing a strong and successful national organization. The ORNAC Executive and Board of Directors appreciates the financial support provided by Johnson & Johnson Medical Products.

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's Awards Committee yearly. Deadline for submission is March 15th. Bursary application forms are available from:

Shelly Zareski
Chairperson
ORNAC Awards Committee
5572 North Ridge Road, #1206
Halifax, Nova Scotia
B3K 5K2
Telephone (902) 454-0463
Fax: (902) 428-3214

Telemedicine Spring 1996

April 24 - Setting Up a Latex Allergy Protocol - Denise Masterman, Lynne Freeman, Alaine Young, Hamilton, Ontario. Moderator: Monique Perazzeli, Ste. Justine Hospital, Montreal, PQ.

May 15 - To Risk or Not To Risk: The Reuse of Disposables in the Operating Room - Elaine Hersey, Halifax, NS. Moderator: Marion Morrison, Royal University Hospital, Saskatoon, SK.

June 05 - Oral Maxillo-Facial Surgery - Theresa Markowski and Joan Hutchins, Kingston, Ontario. Moderator: Margaret Doyle, Charlottetown, PE.

June 26 - Prevention of Blood Borne Pathogens in the OR - Clare Barry, Kathy Isman, Toronto, Ontario. Moderator: Kay Dolan, Newcastle, NB.

May 5-8, 1996

Operating Room Nurses of Ontario

4th Provincial Conference!
International Plaza Hotel & Conference Centre
Toronto, Ontario

Sunday, May 5 - (9-12 noon) Hands-On Workshops on (1) Total Knee Arthroplasty and (2) Phacoemulsification 1300-1600) (3) Outpatient Laser (TURP) (4) Electrosurgery Safety. (1600-1800) Preregistration. (1830) Fashion Show. (2000) Welcome Cocktail Recption.

Monday, May 6 • Keynote address (9:15): **Positioning Nursing in a Reformed Health Care System**
By Kathleen MacMillan
• Novel Approaches to Liver Metastases, by Steve Gallagher.
• Let Me Decide - Advanced Directives by Willie Molly.
• Role of the Registered Nurse in the OR - Focus Group.
*Johnson & Johnson Medical Products Night (1900-2030).

Tuesday, May 7 • Resilience - How to Bounce Back from Adversity by Reeva Nelson.
• To Be Menopositive. (Part 1) Larry & Joan Komer.
• Lasers: New Technologies, New Treatments.
• When Laugh Lines Meet Life Lines, Reeva Nelson.
• To Be Menopositive - Part 2. Larry & Joan Komer.
• Everything Yo've Wanted to Know About Women Abuse and Were Afraid to Ask, Lisa Duggan.
• Breast Diseases - Anna Kobylecky.
• Complementary Medicines - Reflexology & Acupuncture - Pamla Holt. (Repeat of Morning Session - Lisa Duggan)
*Exhibitors' Cocktail Party & Comedy Cabaret - Dinner & Dance. (18:30-01:00)

Wednesday, May 8 • Managing Change & Stress for Survivors of Restructuring (Part 1) - Ellen Silverstein.
• Conjoined Twin Separation - Trish Rutherford.
• Total Quality Management - Part 1 - Ellen Woodward, Diane Barkey, Marg Fevang, Dale Fisher.
• Beijing Women's Conference - Health Priorities for Women - Diane Rivington.
• Shared Visions and Hallucinations L: Acquiring a Taste for Chaos - Bev Mallone.
Conference delegates are requested to make their own arrangements with the Interntional Plaza Hotel, 655 Dixon Road, Toronto. For Reservations call: (416) 244-1711 or 1-800-668-3656. ORNAO delegate rate is $85/Night.
Exhibit Chair: Sharon Ball @ (416) 586-3205

Conference Calendar

June 14&15, 1996
The Manitoba Operating Room Nurses Association and the Manitoba Association of Post Anesthesia Nurses 3rd Joint Provincial Conference. Holiday Inn, Crown Plaza, Winnipeg, MB. Conference Contact: Marian Ulyatt.
Fax: (204) 254-4423

ORNAC '97 - April, 1997
15th National ORNAC Conference
Ottawa, Ontario.
Sponsored by the Canadian Operating Room Nurses Association,

September, 1997
World Conference of Operating Room Nurses, Toronto, sponsored by the American Operating Room Nurses Association.

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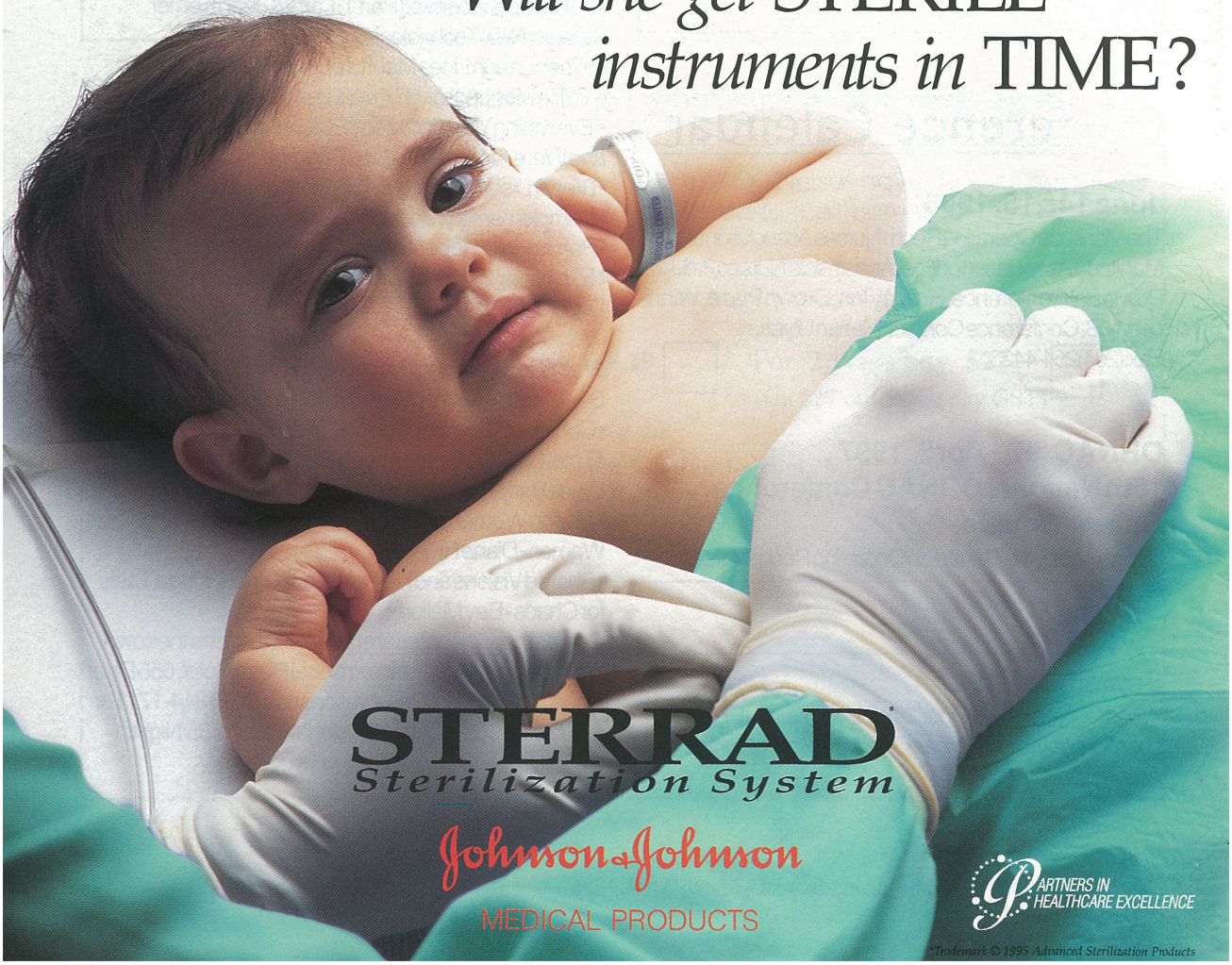

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