SORNG Report - continued from page 24

- If your life works, you influence your family.
- If your family works, your family influences the community.
- If your community works, your community influences the nation.
- If your nation works, your nation influences the world.

Remember that your influence begins with you and ripples outward. So be sure your influence is both potent and wholesome.

In the workshop section on caring for colleagues, Dr. Smadu recommended (i. Networking, (ii. Mentoring,(iii. Sharing Vision and Values, and (iv. Using humor. "Generosity is the Key'', she said. "If you share your best nursing practice, you get it back throughout the unit. Like the candle, you don't lose the light when you give it away, and you don't lose your power when you share it. You empower others."

Margaret Fullerton, a nurse consultant with Allegiance, presented at both the SORNG meeting and the Alberta OR Conference the next week. Her "Managing Your Manager" presentation offered scenearios of tricky situations involving verbal abuse issues, noise levels, dealing with rumors and professional practice issues. Her suggestions for challenging management and living to tell the tale were valid, highly original and applicable in most workplaces. Watch for these techniques in a future issue.

"Turning Off the Nightmare - Surgery for Parkinson's Disease and Fine Tremors" was jointly presented by Lori Stricker and Laureen Kreiger. This presentation was seen on Telemedicine Canada before it ceased to exist in February, 1998. Lori is currently writing-up this 12 hour surgical case for an early 1999 issue of this Journal.

NBC's *60 minutes* introduced this tremor halting surgery this past September with great fanfare, however, a Regina General surgeon has been refining the procedure for several years. Watch for the article in March'99, it's a remarkable story. ■

Overheard in the OR ...

There are very few personal problems that cannot be solved through a suitable application of high explosives.

Hey is your postal code correct? Hey did you get married again? Hey do you get all your mail? Hey have you moved?

The Canadian Operating Room Nursing Journal is mailed quarterly to 3,000 Operating Room Nurses across Canada, a few to the U.S. and some to foreign soil. If your Journal is not arriving, or if you change your name, address or postal code (particularly your **postal code**....please please send us your changes via FAX or mail only. *Please no phone calls!*

In the months of October and November there were 30 postal code corrections, two marriage name changes, and two address changes. Please check your mailing label, ensure your postal code is correct. If not Fax or mail your old and new address and code to us at (604) 535-9000. See our full address on page 3.

Bursary for OR Nurses

The ORNAC/Johnson & Johnson Medical Products 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.

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.

The personal profile/resume must be typed and supporting data enclosed with the completed application form. 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 **March 15th yearly.**

Applications are judged by the ORNAC 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. The bursary funds are designated specifically for tuition and books. The final approval for disbursement of funds rests with the Awards Committee and the Board. Contact your provincial representative for more information and assistance in applying.

Planned Change in the Evolution of Cataract Surgery

By Teresa Taylor, BScN, CPN(C) & Theresa Tremblay, BScN CPN(C)

Perioperative nurses are challenged, in these times, to keep ahead of new techniques and newly designed intraocular lens implants for cataract surgery. Cataract removal through small incisions and foldable lens implantation have become increasingly popular.

Our goal, as perioperative ophthalmic nurses in a community hospital, is to continue to provide the patient-centered care for patients with cataracts but still maintain efficiency. We found that a change in the overall process in our hospital was required to meet the challenge of the new faster surgical technique. There were several problems that created stress and disruption in the previous system.

No matter how well things are functioning in an organization, such as a hospital, it is unlikely that a system will reach a stable equilibrium (Bernhard & Walsh, 1981). Our surgical environment needed to change in response to the demands of safety and performance with the new surgical techniques and new technologies.

In Kurt Lewins' theory, the development of a need for change is the " unfreezing" mode, i.e. disturbing the equilibrium, (Lippitt, Watson and Westley, 1958). Awareness and a desire for change is the first step. Once the equilibrium is upset then change can occur, (Bernard and Walsh 1981). Lippitt et al(1958), have expanded on Lewin's theory to include five phases of the change process:

- the development of a need for change, (*unfreezing*);
- establishment of a change relationship working towards change, *(moving);*
- generalization and stabilization of change, *(freezing); and*
- achieving a terminal relationship.

Abstract

The subject of this paper is a description of how perioperative nurses and other health care professionals worked together to meet the demands of change.

New technologies and new techniques in cataract surgery with lens replacement has decreased dramatically the amount of operating room (OR) time required. With the reduction in OR time, the process of moving cataract patients through the perioperative experience became chaotic. Change was necessary. Planned change and teamwork made the change process less chaotic and more rewarding.

Unfreezing

In our operating room (OR), surgical delay problems became a major impetus for change. We identified problems that caused delays in areas of patient preparation, administrative requirements, patient transport, theater preparation, turnover times, instrument processing and standardization and documentation. Failure of a nursing care delivery system to meet the needs of its practitioners, patients or employers ensures change or death of the system, (Douglas and Bevis, 1981).

Authors

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Our patients with cataracts are generally elderly, have limited mobility compounded with the vision deficits, hearing deficits and therefor sometimes comprehension problems. For example, they have difficulty preparing for surgery such as changing personal clothing to hospital attire and climbing onto a stretchers. They require assistance time and patience to get ready. Attempting to increase the pace was frustrating for everyone.

The start time of personnel in the admitting department and ambulatory care department did not allow enough time for patient preparation for an early morning start. As the surgery time decreased and the caseload increased, patient delays increased dramatically.

The administration requirements, history and physicals, electrocardiograms, and blood work were sometimes a last minute scramble, when the patient did not make a preadmission visit. The preadmission visit was sometimes difficult for elderly patient. It was time consuming and physically and emotionally demanding to make two visits to the hospital.

The transporting of patients to the operating room for cataract surgery was included in the mainstream with other surgeries. Other patient surgery often took priority over the cataract surgery. When the surgery time for cataracts decreased dramatically, there was such a demand for stretchers that the porters had to go on a search to find a stretcher for the next patient. At this time, patients remained on these stretchers for post operative recovery, first going to the post anaesthesia care unit (PACU) then to the ambulatory care department, making stretchers less available.

The shortened procedure caused pressure for shorter turnover time, affecting the scrub and circulating roles, housekeeping and the processing aides. There was a limited supply of instrument sets and these delicate and microscopic instruments were difficult to clean and required extra care and handling. At this time the scrub nurse was responsible to clean them properly. The processing aids were then pressured into flashing them quickly for the following cases. There was also a delay in waiting for housekeeping to clean the room, change linen and garbage bags, then mop the floor before nurses could open the several sterile packages required for each procedure.

The circulating nurse was also under pressure to hurry the preoperative assessment and bring the patient to the OR suite. This caused anxiety, and anxiety and rushing have the potential to cause mistakes. With the shortened procedure time, it was also difficult for the circulator to complete the documentation before the surgery was ended.

To reduce the frustrations, a diverse group of team members collaborated as change agents. Establishment of a change relationship and working towards change to solve problems is the "moving" phase of Lewins' model (Lippitt et al, 1958). At different times in the unfreezing phase and moving phase different team members acted as change agents.

Moving

Firstly, physicians worked on administrative process changes. The surgeons and anesthetists identified policy changes such as the removal of the requirements for history and physical, electrocardiogram and blood work. Rationale for this removal was that the surgeon was now using topical anesthetics instead of blocks with limited IV sedation given by an anesthetist. The anesthesia department devised an anaesthesia questionnaire with the information they required. This would be given to the patient in the surgeons' office and reviewed with the nurse in the ambulatory care unit on admission, thus omitting the need for a preadmission clinic visit. This benefited the elderly patient who would no longer be required to make two trips to the hospital.

Secondly, the Ophthalmic team researched and trialed eye stretchers in order to reduce extra moves for the patient and to examine ways to keep the flow of patients more continuous. We wanted a head and neck stretcher that simulated the hydraulic capabilities of an OR patient table and were patient, physician and nurse friendly. One person was able to operate this new eye stretcher easily. On cataract procedure days, we evaluated the benefit of having a designated porter to bring the patients to and from the OR. We then purchased six stretchers to make the system work smoothly, and the overall result was increased patient comfort and reduced waiting time.

Standardized Packs and Procedures

We trialed custom packs that were designed for cataract surgery in order to avoid opening several packages. This accomplished two things; the three surgeons had to standardize their instruments and supplies, and the time to open cases was reduced significantly.

Next, the surgeons learned to perform the same technique for the small incision cataract removal with foldable intraocular lens implantation. Then, they collaborated with the nurses on standardization of

instrument sets. This facilitated the education of the nurses orientating to the room and the processing aides.

In order to deal with the demand caused by the shorter time frame and the increase in the booked procedures, the admitting and ambulatory care department assigned an earlier shift. The shift relieved the backlog of patients waiting to be admitted .The ambulatory care department worked out a rotation system so that patients were assessed as they came in, placed on a stretcher, given eye drops, vitals taken then placed in order of admission so that no one would be taken out of turn. They also developed an eye drop kit that followed the standard orders of the doctors. The pharmacy also cooperated with drugs required in the OR and ambulatory care department by starting earlier and providing the service needed.

A Patient Friendly Process

The process for cataract surgery became more and more patient friendly as changes were made. The patients no longer had to undress completely, only their tops. They now keep their dentures and hearing aids throughout the surgical experience. Once on the stretcher, they remain there till after surgery and their family remains with them up to the time they enter into the OR. The outcome was a decrease in the amount of moves and less stress on the elderly patients. At times, family members came into the OR to interpret for the patient. This gave them a greater sense of control and less anxiety. Ongoing communication between the OR and ambulatory care prevented problems caused by untoward changes. Ambulatory care nurses worked on a systematic approach to move patients in and out of the hospital with the help of their families in approximately a two hour total time span.

The porter now brings our patients directly outside the ophthalmic suite where a registered nurse is assigned to do the preoperative assessment. This includes interviewing, explaining the steps of the procedure, discussing patient participation, positioning patients comfortably for surgery, preparing for, or establishing an IV line, attaching monitor leads and blood pressure cuff and generally beginning discharge planning. The nurse documents on the chart form and communicates any concerns to the other team members. This preparation reduces the overwhelming pressure on the inside circulator and increases the quality time between the patient and the perioperative nurse.

The processing aides were instructed on the proper cleaning and processing of the delicate eye instruments for *just in time use*, which reduced the pressure on the nurses. We also increased the number of instruments sets to prevent waiting time on sterilized instruments. Specialized cleaning equipment was invented to make the job easier. As the aides learned and developed their own routine, the tasks became less stressful.

We made a decision to reduce housekeeping but still follow the Operating Room Nurses of Canada (ORNAC) standard of spot cleaning between procedures. The patient stretcher became the OR patient table, as well as transport stretcher, so that OR table cleaning was eliminated. Nurses and housekeepers worked out a system of double sets of garbage and linen containers so that when one was filled it was pushed outside the room and replaced with a clean container.

Changes allowed the anesthetist to take a few minutes, prior to surgery, to start the IV and talk with the patient about the neuroleptic sedation. They also decided to bypass PACU because of the decrease in neuroleptic drugs required, but the option for PACU was still available, if required.

Further change included designing a specific record for cataract eye surgery. We trialed the record and received feedback from staff, then made changes for easier documentation, for example, tick off boxes.

"Freezing"(Generalization and Stabilization of Change)

One of the important questions about any process of change is whether or not the change, which has been accomplished, will remain a stable and permanent characteristic of the system, (Lippitt et al, 1958). Our change process was deemed successful because it actually affected the efficiency and productivity of the staff. Once the nurses firmly believed in the process that was developed, more procedures were accomplished in less time. A retrospective evaluation identified that our caseload had increased 60%, from 12 cases to 20 in a four hour period. Turnover time was decreased from twenty minutes too less than five. Changes have resulted in a system that allows the hospital to book cataract surgery with implants every fifteen minutes.

One strategy for increasing the caseload without compromising quality care, was to simplify the nursing roles. Utilization of three registered nurses, one for preoperative assessment, one for the circulating role and one for the scrub role brought about a synchronized focused approach that used nurses efficiently and resulted in increased teamwork and less turnover time. These roles are interchangeable since all nurses were oriented to each role.

Other working staff, such as porters and processing aides became dedicated team members. This staff felt a responsibility to their roles because they had input to the changes that were made.

Economical advantages of change were also realized by the hospital. Cost reduction came about in the following areas:

- no preadmission clinic visit
- no lab., EKG, history and physical
- no sutures
- no recovery room visit
- no hospital stay
- less equipment, i.e. blades
- less eye medication, i.e. miochol
- less anaesthesia meds. and equipment, and
- less exposure to nosocomial infection.

The high volume caseload lowered cost in all areas and volume buying and standardization of lenses and equipment reduced cost. Reusable equipment also made an impact.

Our goal of quality patient care was measured by patient satisfaction surveys. Survey results showed that the operating room process, procedure, nursing care and efficiency were excellent 90% of the time and satisfactory 10% of the time. One patient wrote that the operation was so uneventful that she never recalled being in the operating room. Research has shown that outpatient cataract surgery is as safe but more cost effective than inpatient cataract surgery.

We noted several benefits to our patients that included but are not limited to following areas:

- increased comfort by avoiding the debilitating effects of movements,
- limited sedation eliminating unsettling after affects,
- minimal separation of family and support networks,
- family involvement when required, i.e. interpreter,
- minimal interruption from their regular routine including diet and medication,
- reduced anxiety from explanation of the process,
- participation in the procedure and post-op discharge instructions given by the nurse, and
- reduced pain by elimination of injections and the use of topical anaesthesia.

There is a reduction in the chance of endophthalmitis related to the small incision with a cartridge delivery system of a foldable IOL, which eliminates the contact between the eye and the IOL, (Kellan, 1996). Eliminating injections leads to an easier and safer procedure, (Fine, 1996). Patients experience less trauma in the eye because instruments are not physically introduced into the orbit, (Rowen,1996).

Success is measured by the way planned change is transformed into actual achievements. One critical factor in the stabilization of change, is its affect on other systems where there is a strong likelihood the innovation will be esteemed and retained, (Lippitt et al, 1958). Our change in the process has made our cataract surgery program successful as other ophthalmic teams have adopted our system. Ophthalmic surgeons and operating room nurses from across Canada and the U.S.A. attended workshops to view the procedure and the process, in place at our hospital. All who attended were extremely impressed by the efficiency, skill and care provided by the team. They expressed a keen interest in adopting all or part of the program at their hospital or clinic. We continue to have visitors from all parts of the country to view the process.

Conclusion

Cataracts are a significant cause of visual disability for the elderly patient. This patient population values their independence and the demand for good quality vision is increasing. The idea that they can walk in, have a two-hour stay, participate in the process, walk out with immediate vision and without a patch gives them satisfaction and increases the demand for this procedure. It's nice to have them sit up after surgery and be surprised that they are able to see and that the procedure is over. ❐

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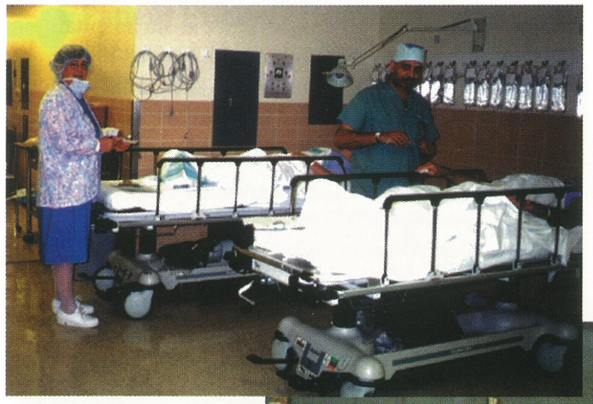
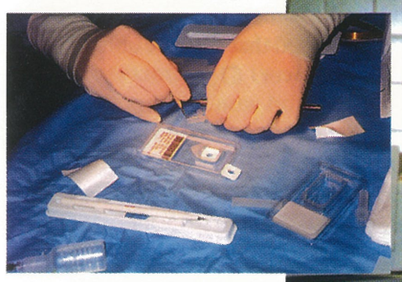
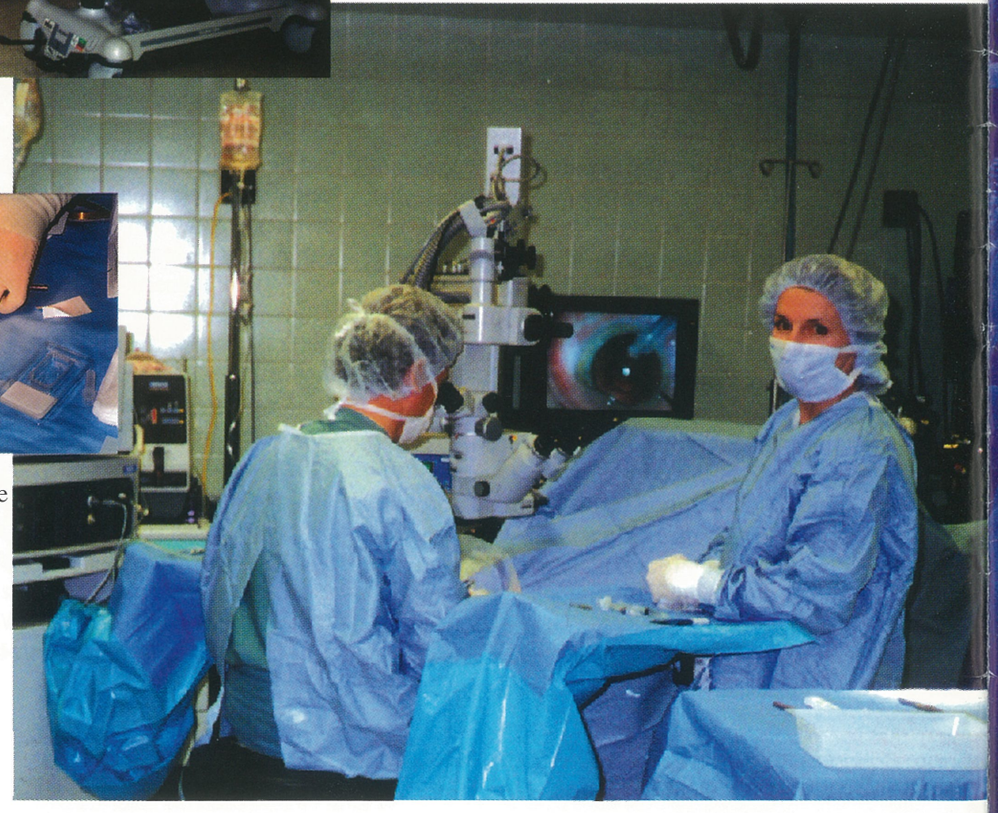




▲ Insertion of the new foldable I.O.L.



Acknowledgments

The authors would like to thank Dr. Fouad Tayfour for his commitment and his leading edge of technology approach in the advancement of cataract surgery, which continually motivated us in planned change.

Thanks to Ross McDonald , Surge Canada Co, for his initiative, assistance and support in setting up three seminars Re. Clear Corneal Incision and OR Efficiency at our hospital.

We would also like to thank the anesthesia department, RNs. and all OR staff at Hotel Dieu Grace Hospital. As team players, they made change possible. ■

Theresa Tremblay

Teresa Taylor

◀ Carmen Murdock, RN, (left), Dr. Brijesh Arya (right) in the Eye Surgery Assessment Area outside the OR. Also shown are the special *Eye Stretchers.*

▼ Cataract Surgery in progress. Victoria Lypps, RN, scrubs for Dr. Fouad Tayfour.