Canadian Operating Room Nursing Journal

Volume 8, Number 4, September/October, 1990

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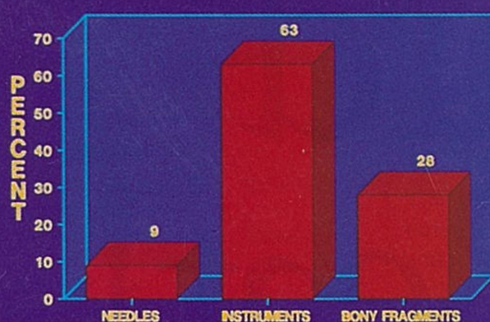

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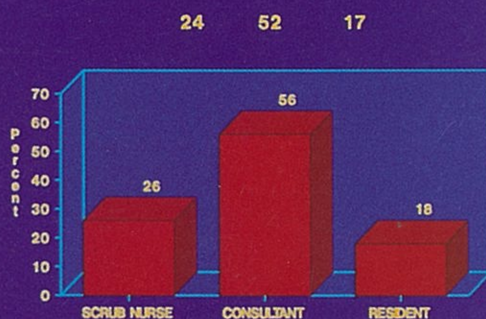

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Volume 8, Number 4, September/October, 1990

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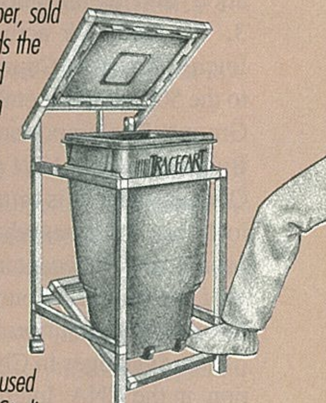

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Busy, productive Fall in store for ORNAC

After an enjoyable summer, it is now time to return to the harness, so to speak. The executive and board of the Operating Room Nurses Association of Canada will have a busy Fall as per our "strategic plan":

1. The first draft for review of the competency statements for operating room nurses;
2. A questionnaire drafted and sent to OR nurses across Canada in regard to R.N. as first assistant.

Should ORNAC go ahead with this project, it will be a major undertaking. At the least, it is important that the national organization be "on top of the situation" and be informed as to what is happening .

3. To lobby for active membership in the CNA's Interest Advisory Council. The CNA board has agreed to the 50% plus 1 membership in CNA by the Interest Groups. The important part, however, will be the Bylaw change in 1991 at the CNA Annual Meeting in Ottawa. Thus, it is vital that we (ORNAC members) lobby our delegates who will attend this CNA meeting in order to gain acceptance for this Bylaw proposal. As well, we should encourage all perioperative nurses to be members of our professional organization.

The advantages in CNA membership and participation in the CNA Interest Group Committees are:

- Most importantly, be a member of the CNA Interest Advisory Committee. It is important that ORNAC be represented at all CNA meetings to inform and be informed. This will enable ORNAC to have input into decisions that will have an influence on our specialty.
- Support for national activities.
- Speak not only as a national O.R. group, but have the power of the CNA behind us.
- With CNA we'll have a link with government, and the Power to change legislation with CNA support.
- Maintain and improve standards of patient care.
- Show a strong and cohesive professional front and improve the image of the OR nurse by being a member of the CNA.
- Research and certification support from the CNA.

4. Continue to lobby for operating room experience in the basic nursing programs.
5. Continue to promote ORNAC's standards.
6. Continue to promote ORNAC's position statement with regard to "staffing in the O.R."
7. Promote O.R. Nurses' Day - November 14.

ORNAC activities

(1) Members of the ORNAC executive attended the CNA's Annual Meeting in Calgary in June with specific objectives in mind:

- to promote the benefits of a national O.R. nursing voice; that is, lobby for active membership in the CNA Interest Advisory Council;
- at the ORNAC display booth, we promoted the Association's standards and the national association's (ORNAC's) position on staffing.

A very frustrating experience was attending the CNA Interest Advisory Council meeting - as an observer. There I was, the President of ORNAC, representing one of the oldest and largest interest groups in the country, and I was not allowed to speak because, with our total membership, we have less than 70% plus 1 members in the CNA due to membership from Quebec and Ontario.

I did, however, attend the Advisory Council premeeting where I was permitted to report on all the accomplishments of ORNAC. Members of ORNAC can be very proud to publicize their ORNAC association because, although we do not have active membership, we are very much respected as a productive and vital group of caring nurses. We are frequently asked for opinions and input into many CNA projects.

(2) ORNAC's Standards Committee - Approval Section reviewed an O.R. nursing program.

The ORNAC executive was quite busy during the summer, as the preceding shows. The provincial presidents were busy as well, maintaining their organizations. The membership will be informed of all these activities when they attend provincial meetings.

The strength of our specialty lies with the well-informed nurse and the support each nurse gives to the organization through membership dues and attending meetings.

Gloria Stephens,
ORNAC President

Competency for the OR registered nurse

By Gloria Stephens

Competency requires knowledge for critical thinking and decision-making, plus skills which are process-oriented to perform the technical components of perioperative nursing. Both (knowledge and skills) are integral components of the nursing process. Competency, therefore, is defined as the knowledge, skills, and abilities necessary to perform functions of a professional registered nurse in the operating room, regardless of the practice setting. Competency is performance expectations.

The complexity of operating room nursing increases almost daily; therefore, a highly skilled RN is essential to effectively and safely perform the nursing activities within the scrub/circulating roles.

The nurse is accountable for providing continuous individualized perioperative care which requires knowledge from nursing, the sciences, and the humanities. The professional nurse is also accountable and responsible for maintaining competence in the knowledge and skills required to perform patient care functions. The O.R. nurse therefore develops a desire for life-long learning. How well this is accomplished depends on the individual nurse's attitudes and values toward her/his nursing specialty.

Developing competency statements

The Canadian Nurses Association (CNA) and provincial nursing associations are developing competency statements for the beginning nurse practitioner. Many interest groups are also developing competency statements for their particular specialty and the Operating Room Nurses Association of Canada is no exception. In fact, we have a couple of steps completed with the two standards publications and the Post Basic O.R. Nursing Programs - Approval Process.

We all realize that people perform at different levels, and levels determine how well we perform. Each agency should establish their own minimum standard expectation. As long as everyone attains this level, there will be a competent staff. Through inservice and continuous education, the staff will be encouraged to strive to higher levels based on their ability.

Briefly, these levels may be defined:

Level 1. - Performance requires supervision
Level 2. - Performance occurs independently
Level 3. - Performance is at a mastery level.

Obviously, before levels can be determined there must be criteria for each level and function that the nurse performs. Criteria identify the knowledge and skills required to make clinical decisions, take responsibility and to be accountable to the perioperative role. The Standards Committee is working on this now and hopefully will have a draft prepared for the ORNAC Board to review by the first of the new year.

Why develop competency statements ?

Defining competency statements (criteria) and levels of performance will:

- provide a standard criteria for the measuring of performance levels for the perioperative continuum;
- provide a guide for self-evaluation;
- assist in the development of staff nurse job description;
- reaffirm that only registered nurses (RNs) can be responsible for nursing care to the surgical patient during the perioperative period;
- facilitate the basis for orientation, continuing and formal education programs;
- enhance the professional image of OR nursing;
- enable the development of a precursor for specialization and a first step toward certification (which is the validation of professional achievement through an examination).

Once approved by the executive and board, a 2nd draft will be sent to different hospitals across Canada for their input. Following the required revisions, the document will be published for distribution.

Operating room nursing research will be another active role for ORNAC. Research is vitally required to provide evidence, support, and enhance operating room nursing practice for the registered nurse. Nurses should encourage, participate in, and support, interdisciplinary research and work/study projects.

Another future function/decision for ORNAC: a certification program for operating room nurses.

Standards, O.R. educational programs, research, and certification are all components of competency. ■

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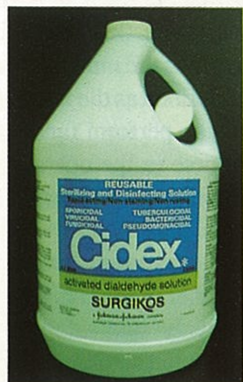

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Identifying the barriers to nursing power in hospitals

By Dr. Marie L. Campbell

This article is about power, specifically about the power of operating room nurses and how they exercise it in today's high-tech environment. The prospects for nurses being more influential in determining how ORs should run will be addressed, as will how the worklife of nurses might be better organized.

Nursing power and the organization of nurses' work are subjects I'm frequently called upon to discuss because of my research on the organization of nurses' work in hospital. In spite of all the difficulties facing nurses right now, I'm generally optimistic that now is a good time for nurses to be thinking of exercising more "power". Some of the same conditions that are creating challenges in today's hospital workplaces are also creating new opportunities for nurses to have a stronger voice. There is no question that nurses' knowledge and judgement could be put to better use.

What would have to happen to help OR nurses be more effective at getting their ideas acted on? What is power in the current context ?

One of the elements of power in which we are most interested is getting access to decision-making. We need to know who makes what decisions in the agency, and where and when and how. Some of this information is written down in mandates and terms of reference and is therefore available to be investigated and put to use when the need arises. Some other aspects of power are more subtle and are harder for newcomers to comprehend. "Knowing" itself or being "in the know" is one of the ways power is held. There is nothing that makes us less powerful than having things happen to us without warning, out of the blue.

Firstly, we will review nurses' relation to power over the recent past. Then we will discuss some of the changes in our health care system that seem to be breaking down the traditional ways of doing things and creating new opportunities for nurses. There are some interesting contradictions in these changes and nurses need to be familiar with these contradictions.

Finally, we will examine the challenges still facing nurses in trying to be influential both in their hospitals and in the health care delivery system in general.

Nurses haven't always talked openly about power but it has never really been off their agenda. More lady-like terms may have been applied, in the past. For instance, we have always heard a lot about nurses' "autonomy". If we look back into our history, we see evidence of nurses' continuing struggles for control over their education, their work and their workplace. Florence Nightingale was a woman who knew about power. Given the job of looking after wounded soldiers, she saw that her first task was to create order out of a chaotic system for provisioning the British Army. She saw that the regular access to food and supplies, cleanliness and discipline, were elements of the physical and moral order that nursing in the army needed. Later she brought these ideas into her training school, preparing her graduates to exercise the same organizational skills in civilian hospitals. Something we need to note about Florence Nightingale was that her own power to make change was always buttressed by her upper class position in English society. Her biography makes it abundantly clear that she always had, and used successfully, her social connections to politicians and bureaucrats.

In North America, influence gets exercised somewhat differently than in Victorian Britain. It is not done through direct social class connections. Susan Reverby (1987) has written a history of American nursing that gives interesting insights into how American nurses have worked to improve their professional status and power. She argues that nurses took their lead from the medical profession in North America. The Medical Association had seized control of university education and made educational credentials the

Author

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basis for physicians' access to hospitals. They built a medical monopoly which excluded competitors. Nurses too believed that education was the route to follow. Both in the U.S. and Canada, the nursing profession exercises careful control over the credentialling of nurses, levels of education, and so on. Even so, nurses have never been able to turn educational status and nurses' considerable knowledge into power for the profession or for individual nurses.

Traditional barriers

Why have nurses been unable to convert their knowledge into power ? There are a lot of reasons. Certain traditional barriers consistently undermine nurses bid for actual power. These barriers interfere with nurses being heard. These barriers are probably familiar to all nurses, but bear repeating here, if only to remind us that they still impact on our professional lives. OR nurses will recognize specific ways that these traditional barriers continue to interfere with their work.

One barrier that OR nurses must contend with is the traditional "gender relations" in the operating room. We are referring to something more insidious than being the butte of sexist jokes, although this is annoying too. Gender underlies what, and who, is considered important in the operating room. Nurses' work and nurses' knowledge can be taken for granted and undervalued because it is women's work and women's knowledge. Remember, women do the background work in our society, in homes and offices , as well as in hospitals. Like other women throughout history, nurses have not been expected to have opinions or to speak with authority. Their work consists of facilitating others. In hospital operating rooms, that is the organizing principle of OR nurses' work.

OR nurses pride themselves on having a thorough knowledge of all the surgical procedures so that they can think through their scheduled cases in advance and fill every possible need before it arises. This work has the character of being overlooked when its good, and becomes a cause for attention only when it's unsatisfactory. It is very easy then for others to subsume the OR nurses' knowledge under some kind of abstract notion of "good organization" and forget to recognize that a perioperative nurse has built a body of knowledge for use in daily practice, and that it is valuable.

To stress this important point here is an example:

An OR moved its booking desk out of the OR into the Admitting Department, when it computerized the booking function. It was apparent to efficiency analysts that having it inside the OR created a traffic jam at the desk. However, after a short trial, it had to be moved back inside the OR because schedules were always getting upset. Bookings had to be situated right where the nurses could have an ear on the activities of the booking clerk. "Case scheduling" is a job that relies on the working knowledge of the OR that operating room nurses, and only nurses possess. Knowledge of procedures, turn around time on special instruments, the availability of staff with specialized skills, and especially knowledge of surgeons and their idiosyncrasies, etc. Without that kind of knowledge attending the case bookings, there was confusion. Analysis of the booking function had not identified that "consultation with nurses" was a routine and crucial part of OR booking. It had always "just happened" and the contribution of nurses' knowledge was overlooked.

That kind of situation may not appear important, but when nurses' knowledge is overlooked again and again, it undermines a nurses' own sense of herself and her knowledge. It helps to reinforce nurse's subordination if she doesn't realize the value of her knowledge. We need to claim the knowledge that is ours and demonstrate its value.

Being able to explain what nurses know and do will continue to grow in importance as we deal with the issue of "pay equity" and "job evaluation".

The barrier of isolation

A second barrier preventing nurses from exercising power lies in how their work is organized. It doesn't help OR nurses that they work in small groups, isolated from their peers. This isolation deprives them of both information and solidarity within the nursing group that would be supportive. When women have things to say about their lives, they have found that they need the support of other women who see things the way they do. Isolation keeps OR nurses vulnerable in various ways, vulnerable to the special "facilitating" relations that we have suggested are part of their work to produce in the OR. The isolation helps to hide and undervalue their unique contribution.

There are other traditional barriers in hospitals that prevent nurses being heard and their ideas acted upon. The hierarchy in traditional hospital administration is one. Hospitals have always been rigidly hierarchical, with decisions affecting nurses usually being made elsewhere, up the chain of command, not where OR nurses are working and where their knowledge would illuminate what needs to be done. This, fortunately, is one thing that is changing.

The new realities

Traditional barriers are being weakened by hospitals having to respond to the "new realities". One of the most important things to understand about what is happening in health care right now is the contradictory effect on nursing. There are opportunities today for nurses even within the climate of fiscal restraint that is causing the profession so much trouble. When the money situation reaches serious enough proportions, even established traditions are no longer sacred and these circumstances can benefit nurses.

Budget troubles are the driving force behind most of the changes we are living through in the hospital. This new fiscal trouble is the origin of the "new realities". On the one hand we have the rising costs of new technology and increasing expectations from doctors and the public that hospitals must keep up with new procedures and buy the expensive new equipment, but, on the other, we have the government's emphasis on funding restraint. It puts a terrible pressure on all levels of administration.

Hospitals are responding by trying to be more business-like. To be more business-like is to act more like an industry where concerns about profit and loss define what is to be done. "Efficiency" and cost-saving have become the driving force, the focus around which all decisions must now be orientated.

Computers and information processing are an important part of the new focus on efficiency. Computers help to count and cost the use of equipment, supplies, staff and all other resources. Instruments can be tracked and systems for handling and storage made more efficient by the use of computers. Control mechanisms can be developed, comparing costs across different departments, and with similar departments in different hospitals. Utilization studies, in which all aspects of a department's functioning are costed and compared, are now an important part of managing a unit. This on-going scrutiny of "efficiency" depends on the production of lots of new kinds of information.

This means several things for nurses. It's both good news and bad news. The focus on "efficiency" permeates the OR nurses' work and makes some things more difficult, to be sure. Some may find that they are filling out more records and others may be expected to learn to operate a computer. OR nurses' are also expected to get more work done with fewer resources, including fewer nursing staff. For example, an Ottawa, Ontario community hospital's operating room, which normally handled 600 surgical cases a month in 1986 was handling 700 in 1989, with no increase in nurse staffing. That is the new reality. We also know about increased overtime. As women we know the pressures it creates in our personal lives. As nurses, we also know how it affects patient care.

Yet there is another side to this. The new "efficiency" focus also offers nurses some distinct benefits. There are new approaches to management being tried which reduce some of the old fashioned hierarchy which was so oppressive to nurses. As hospitals and administrators learn new management methods, nurses are being offered the opportunity to participate in decision-making, to use their own ideas. New structures are being created for nurses to be heard.

Decentralization is one example. Top level administrators realize that in today's hospitals they cannot have an intimate understanding of everyday functioning at the unit level. One of the things that decentralization does is to place control over unit budgets in the hand of unit managers. The new nurse manager then has the flexibility to run her unit as she wishes, as long as she operates within budget. She can make decisions to suit local conditions and people, including decisions about staffing. An effective nurse manager will listen to her staff and be open to their suggestions. She will make the necessary arrangements, through regular meetings, to tap the knowledge and wishes of her staff. If she can get her staff's cooperation in running the OR effectively and efficiently, she will be more successful at her job.

High commitment management

Decentralization means that budgets are administered at the unit level, and that the people most involved in the unit should be making decisions affecting them. This is the theory of "high commitment" management that many organizations, besides hospitals, are beginning to use. People work best under conditions that they understand and feel some measure of control over. Because the reactions of nurses to stressful and unpleasant working conditions have alarmed hospitals administrators, "better management" - more democratic management, is part of the solution that is being proposed. Besides using the good ideas of nurses' about how to organize work effectively, making nurses happier is today seen to be an efficiency measure. That is why committees have proliferated as hospital managements try to reduce nurse absenteeism and turnover of staff, as they puzzle over recruitment and retention of skilled nurses.

Nurses are being integrated into hospital governance. Changes in decision structures have been occurring at just the same time as nurses are becoming more militant about their demands to be heard. In Ontario, there has been a requirement, by the government, for hospitals to put nurses on Board Committees. There

have also been similar initiatives in Manitoba and Alberta. Nurses' Unions have long held that to be truly effective professionals, nurses need the same access to hospital Boards as physicians have.

What does "better management" and more involvement in management do for nurses"? It seems clear that for nurses to be involved in decision-making is an improvement over the old rigid chain of command. When management is decentralized, nurses can be more influential. People with power are listening and will be attuned to what nurses are saying more now than in the past, because there is greater necessity. Management committees make such communications possible. Routine meetings and "utilization reviews" offer nurses an opportunity to voice their ideas. This new atmosphere is having results. OR nurses tell me that doctors are noticing that the power in hospital is shifting away from them and towards nurses. It is not a landslide, but there is some movement.

An example an OR nurse recently discussed shows the combination of committee structure, data and willingness to listen to nurses. This particular OR nurse compiled data on "late starts" in the OR. She collected data showing conclusively that "late starts" contributed to *increased expenditure on nurses' overtime* and was able to explain this to her OR Committee.

The decision in the OR committee reminded the surgeons of their own interests in the hospital's financial situation, and it resulted in action being taken by the Medical Advisory Committee. This is one instance of how nurses, in their new role as unit managers, are influencing surgeons' behavior. Surgeons now are having to face up to their part in making ORs run efficiently. Whereas previously nurses might just be frustrated by having their well-organized day thrown off by surgeons being late, now there is a shared mindset, an administrative process and tools for data-collection, all directed towards action.

I have been arguing that the predominant framework for decision-making in hospitals today is cost-efficiency. It is also the underlying orientation for most of the decisions made in OR Committees. Computers generate cost-accounting data, and this data has no gender and no professional attachments. That is one of the interesting features about collecting management information. It creates a certain kind of equality by bringing issues down to dollars and cents. Old ideas that carry privilege and hierarchy often lose out in this new climate. You don't get something just because of who you are. But, and I want to emphasize this - traditional ideas about nursing may lose out too. That is what is contradictory about the new realities.

Nursing values are not always coherent with the predominant mind-set of cost-savings, and nursing managers are often held captive to the efficiency framework, even when philosophically supporting nurses' interests in patient care. Also, sometimes nurses' needs and wishes are going to be in direct conflict with physicians'. It may be necessary, in those cases to find support for nurses outside the nursing department, e.g. in nurses' unions.

Returning to the question of "what is power that affects nurses and that nurses can tap into to improve their work lives", we are now in a position to draw some conclusions. We've been thinking about intra-organizational power. Rules that hospitals make about their internal functioning. Hospitals themselves are less powerful than they were years ago. We see how they are under pressure from outside - the state exerts pressure on them through funding mechanisms - that's the pressure that has introduced the new mind-set of business practice that is altering so much in hospitals. The state also exerts regulatory pressure - hospitals must bargain collectively with staff, must follow labour standards, and implement aspects of pay equity. Finally, hospitals operate in a much more competitive environment with regard to a nursing labour force. This is reflected in the new democratic management.

Hospitals have OR committees with a chairperson, and departments with heads or directors, and board committees. All of these have written terms of reference that say what each is responsible for and how members of committees are selected. Some are appointed, some nominated or elected. The decision process in your hospital should be researched to see how nurses participate. If they don't, how might they?

If you are a staff nurse, and you want to make something happen, discuss it among your co-workers and your head nurse. If your OR is decentralized, your head nurse will understand her role as your voice in the OR Committee. She will help you strategize and collect supportive data. She will know how the committee agenda is set up and how to get your items discussed. If what you want fits the framework of cost-efficiency, you will likely be successful.

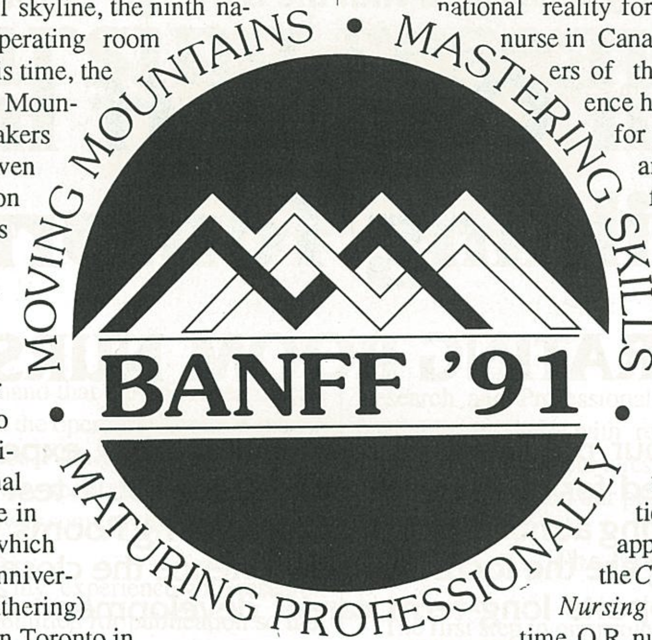
Conclusions

The most fundamental challenge for nurses today is learning how to make the most of the new opportunities to participate in managing their work and yet not lose nursing's own vision of patient care. We have only slowly gained sufficient confidence and insight to see that sacrificing ourselves for our patients is not the way to go. There is no foolproof plan for nurses, but the challenge of the day is an important struggle to be engaged in. We have tried to convey what some of the pitfalls along the way may be, in the hope that knowing the framework will help to avoid them. ■

Banff Springs Hotel to be site of '91 National OR Conference

In May, 1984, the 8th National Operating Room Nurses Conference was held in Jasper. The Operating Room Nurses Association of Canada (ORNAC) was still in its infancy. As a national organization of specialty nurses, it had "Mountains to Climb," which was the theme of that memorable Spring event.

Two years later, in 1986, among the cavernous heights of the Montreal skyline, the ninth national gathering of operating room nurses took place. This time, the theme was "Over the Mountains," the theme-makers aware of the fact that, even though ORNAC was on the way to emerging as a viable and productive association, there were still hurdles to overcome.



Over the next four years, from 1986 to 1990, ORNAC stabilized. Two more national events were held, one in Vancouver in 1988 (which celebrated the 10th Anniversary of the national gathering) and the most recent in Toronto in early April of this year. Although the mountain motif disappeared in the last two conferences, for those with long memories, the time has arrived to introduce that theme again.

Next year, from May 12 to 17, at the Banff Springs Hotel, Banff, Alberta, operating room nurses from across Canada will be asked to participate in "Moving Mountains," the mountain motif again recurring.

Added to this theme are two related conference objectives that will be part and parcel of the event, namely, "Mastering Skills," and "Maturing Professionally."

Earlier this past decade, ORNAC came into existence; it grew, it flourished; it evolved as a viable, national reality for every operating room nurse in Canada. Now, as the organizers of the 12th National Conference have pointed out, it's time for the association to mature and become more masterful in the pursuit of its objectives - and begin the new task of moving the mountains that stand in the way, and that epitomize the challenges of the 90s. Details of the Operating Room Nurses Association of Canada's 12th National Conference will be appearing in future issues of the *Canadian Operating Room Nursing Journal*. In the meantime, O.R. nurse delegates and exhibitors wishing information can contact:

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Banff '91
Box 8218, Edmonton,
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Phone (403) 343-2519.

Brits say their hospitals are environment hazards

Hospitals pose an environmental hazard and should be labelled with a health warning, the British Medical Association's (BMA) annual meeting in London, England, was told.

Dr. John Dawson, head of the BMA's professional division said: "You are looking at buildings which are potentially dangerous unless substances are washed out of the air that is discharged or filtered from water put down drains." "In hospitals now, you have a range of very high technology waste substances that are radioactive and in some instances are complex organic chemicals which may be biological hazards." Dr. Dawson called for better ways of cleaning up the discharges.

Dr. Sarah Divall, a London doctor, told the meeting that doctors had been accused of producing more radiation from X-rays than nuclear electric generators.

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Discovering nursing research

By Joyce Flemming, R.N., with Margaret I. Fitch, R.N., Ph.D

I discovered first hand that nursing research can be helpful to nurses in the operating room. Because of my recent experience I am convinced operating room nurses need to know about the research process and how it can help answer some of the questions they have about their practice.

This article describes my experience with research activity. I wanted it submitted for publication so that other OR nurses could share in my experience and understand the role nursing research can play in their work and practice. I would also hope that by reading this article, nurses will come to appreciate that research activity is not insurmountable. By proceeding step by step and taking advantage of the resources in your environment, successful research can be done.

The beginning

I was the clinical teacher in the cardiovascular operating service at The Toronto Hospital. The manager of Nursing Practice had been struggling with the question of how to prevent certain skin lesions in our patients. We had observed that some of our patients were developing "burn-like" lesions following their surgery. The lesions appeared within 24 hours post-operatively. Within the next 24 hours, the area blistered, the blister broke and a weeping ulcer remained. Patients reported considerable discomfort associated with the lesions and, in some cases, actually required surgical intervention to promote healing.

Our hospital recently hired a Director of Nursing Research and Professional Development who was available to help with research activity. We approached her with our question and, before long, we were launched upon our project.

The first step

The first step in our project involved reviewing the literature to see whether others had observed this problem and what they had done about it. We also contacted operating rooms in other hospitals and spoke with physician and nurse colleagues at conferences. We soon found that the problem of skin lesions was common enough. Yet no one had undertaken a systematic investigation about them. Hence, before we could think about strategies for preventing the lesions, we had to find out which patients actually developed the lesions and how often the lesions appeared. We wanted not know what type of intervention was apt to be helpful in preventing the lesions, or if any intervention we might try would really make a difference.

The second step

Our second step included designing the project. With our stated objective of determining the prevalence of the lesions and identifying factors influencing their development, we decided to conduct a prospective study. This meant that, rather than trying to look over medical records from former patients,

we would assess patients as they came into the cardiovascular service. The advantage in this approach was that we could obtain consistent and complete information for every patient.

Having decided that we would assess patients coming into the service, the next challenge was identifying what information we could collect about each patient, how this data would be collected, and how often and in what manner it would be recorded.

The process was most interesting! Everyone we talked to had a different idea about what might be causing the lesions. Different suggestions were made about the kind of data we needed to collect. We talked with nurses, surgeons, anaesthetists and dermatologists to gather our suggestions. We anticipated that we could collect data regarding the factors people thought caused the lesions and then relate that data later to the patients who actually developed the skin lesions.

The factors which were identified fell into the pre-operative, intra-operative and post-operative stages **(See Table 1).** This gave us our basic time plan for data collection and allowed us to proceed with the designing of the data collection tool. We knew that a number of different nurses would be collecting the data, so we had to design a data collection tool that was easy to use and would give us consistent data collection. There were many drafts and many trials before we were satisfied that we could get reliable information with our tool. We certainly learned about the value of seeking other peoples' input and conducting a pilot test of the data collection tool!

One of the strategies we used to help collect reliable data **(see Figure 1.)** involved using a picture of the human body on the data sheet so that nurses could mark the specific anatomical site of a patient's lesion. Later, the site was assigned a code number so we could enter the data in the computer. Also, we printed a ruler on the same data sheet so the lesion size could be measured accurately and easily. The feedback received from the nursing staff was that these strategies helped them record the data quickly and effortlessly.

Table 1 - Factors thought to be associated with the development of lesions following cardiovascular surgery at the onset of the study

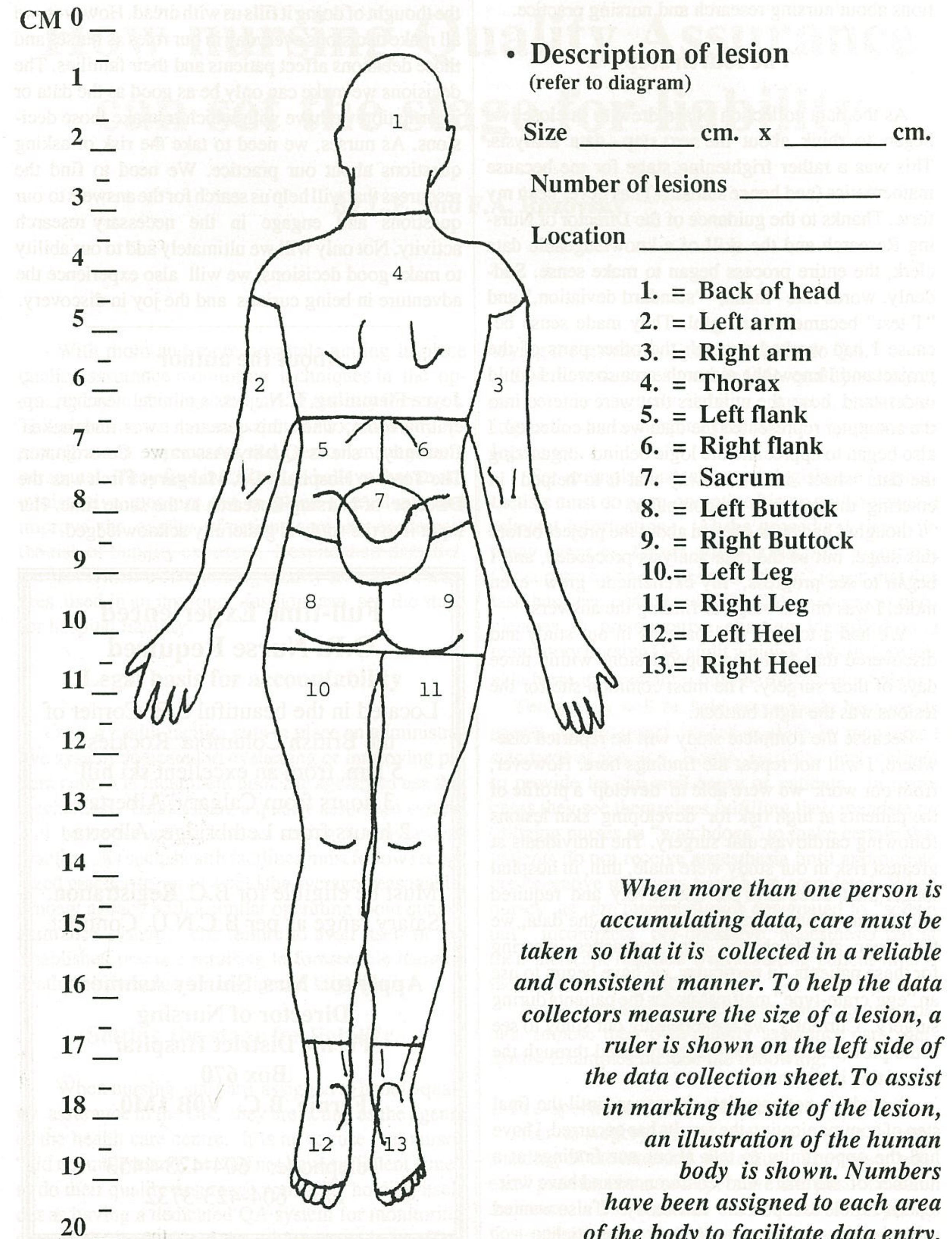
Stage	Category	Factors
Pre-operative factors...	Demographic:	Age, Gender, Race
	Previous health information:	Diabetes, Stroke, Aorta illiac disease, Lower back surgery, Allergies, Nutritional status
	Current health data:	Height, Weight, Appearance (body stature), Time from admission to surgery, Skin condition prior to surgery
Intra-operative factors...		Procedure performed, OR Personnel, Cautery plate position, Cautery machine used, Cross clamp time, Pump time, Vasopressers used, Vasodilators used, Level of vasoconstriction, Level of vasodilation, Skin condition at end of surgery
Post-operative factors		Temperature on arrival in unit, Time until temperature stable, Time to first turning

The third step

The third step in our project was the data collection. We had a team of nurses who assessed patients during the course of the study. At the outset, we held a teaching class on how to use the tool for the data collection and organized some "practice sessions." This is a very important step when you have more than one person collecting data for your project.

The data collection stage lasted six months. I thoroughly enjoyed the interactions with both patients and staff nurses during that time. I think patients appreciated the concern about their comfort while nurses were intrigued with the study itself. Because the study design

Figure 1: Tool for recording lesion information



When more than one person is accumulating data, care must be taken so that it is collected in a reliable and consistent manner. To help the data collectors measure the size of a lesion, a ruler is shown on the left side of the data collection sheet. To assist in marking the site of the lesion, an illustration of the human body is shown. Numbers have been assigned to each area of the body to facilitate data entry.

required patients to be assessed for up to six days post-operatively, I had the opportunity to interact with many critical care nurses with whom I could not normally interact. We had some very good conversations about nursing research and nursing practice.

The fourth step

As the data collection phase drew to a close, we began to think about the next step - data analysis. This was a rather frightening stage for me because mathematics (and hence statistics) has never been my forte. Thanks to the guidance of the Director of Nursing Research and the skill of a knowledgeable data clerk, the entire process began to make sense. Suddenly, words like "mean," "standard deviation," and "T-test" became meaningful. They made sense because I had worked through the other parts of the project and I knew the research area so well. I could understand how the numbers that were entered into the computer represented the data we had collected. I also began to appreciate the logic behind organizing the data sheet in such a way that it to helped in entering the data into the computer.

I thought I had been excited about the project before this stage, but as the data analysis proceeded, and I began to see progress, my excitement grew even more. I was on the verge of finding the answers.

We had a total of 451 patients in our study and discovered that 18% developed lesions within three days of their surgery. The most common site for the lesions was the right buttock.

Because the complete study will be reported elsewhere, I will not repeat the findings here. However, from our work we were able to develop a profile of the patients at high risk for developing skin lesions following cardiovascular surgery. The individuals at greatest risk in our study were male, thin, in hospital longer than three days pre-operatively and required a long pump run during surgery. Using the data, we have been able to change our approaches in caring for these patients. In particular, we have begun to use an "egg crate-type" mattress under the patients during surgery. Currently, we are repeating our study to see if the prevalence of 18% can be reduced through the use of this intervention.

A study is not complete, however, until the final step of communicating the results has occurred. I have had the opportunity to talk about our findings at a number of seminars and conferences and have written an article to report the full study. I also wanted to share the experience itself; thus, this article.

Conclusion

I think many of us are fearful of nursing research. We have not had the opportunity to learn about it and the thought of doing it fills us with dread. However, we all make decisions everyday in our roles as nurses and those decisions affect patients and their families. The decisions we make can only be as good as the data or information we have with which to make those decisions. As nurses, we need to take the risk of asking questions about our practice. We need to find the resources that will help us search for the answers to our questions and engage in the necessary research activity. Not only will we ultimately add to our ability to make good decisions, we will also experience the adventure in being curious and the joy in discovery.

About the author

Joyce Flemming, R.N., was a clinical teacher, operating room, when this research was undertaken. Currently, she is Quality Assurance Co-ordinator, The Toronto Hospital. **Dr. Margaret Fitch** was the Director of Nursing Research at the same time. Her input into the study is gratefully acknowledged.

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How nursing Quality Assurance can set the stage for liability

By L.E. and F.A. Rozovsky

With more and more hospitals putting in place quality assurance monitoring techniques in the operating room, the legal dangers of liability increases. This phenomenon comes as quite a shock to many operating room supervisors and senior management personnel. They find it difficult to believe that an administrative measure put in place to evaluate and improve the quality of patient care can exacerbate the risk of liability exposure. Despite their disbelief, the fact remains that nursing quality assurance measures used in an improper fashion can set the stage for hospital liability.

Legal basis for accountability

Once a health facility puts in place an administrative system dedicated to evaluating or improving patient care, it is incumbent upon the agency to use this mechanism. Establishing a quality assurance system will be construed in law as setting a standard of practice. As such, health facilities must follow recognized practice to act as would the average, reasonable, prudent agency with a similar operating room quality assurance system. The failure to avail itself of the established practice resulting in foreseeable harm or death sets the stage for negligence litigation.

Setting the stage for liability

When nursing staff are assigned to handle quality assurance in the OR, they are acting as the agents of the health care centre. It is no excuse that nurses "did not understand" or "did not have sufficient time" to do their quality assurance work. By holding itself out as having a dedicated QA system for monitoring care in the operating room, the agency is in effect saying the standard of practice is "to do QA."

Several techniques used in O.R. quality assurance can set the stage for liability. Indeed, some are imposed, not be hospital practice, but by provincial legislation.

For example, under Ontario legislation [1] anaesthetists must do a pre-operative history and document relevant information. At the procedural level in many agencies, the net effect is that prior to surgery, OR supervisors or nurses will "check" to see that this task has been completed. The failure to report deficiencies in pre-operative charting identified in a mandatory nursing QA audit which results in foreseeable harm to a patient would be the basis for liability.

The agency will be held accountable because its agents - nursing staff - failed to abide by recognized standards of practice. Health facilities feel obliged to provide for the well-being of patients. In many cases they see themselves fulfilling their mandate by utilizing nurses as "watchdogs" to make certain that patients do not receive anaesthesia until appropriate pre-operative measures have been completed. When nurses as the intermediaries designated to "screen out" incomplete pre-operative anaesthesia fail in their intercept function with resulting patient injury, the stage is set for liability.

Aside from legislated requirements, many hospitals impose their own quality assurance care standards. Examples include the following:

1. Pre-operative teaching sessions.

Prior to surgery nurses evaluate patient understanding of the intended procedure. They also "educate" patients about pre-operative and post-operative measures. This includes N.P.O. orders, prepping, post-operative support measures, discomfort levels,

etc. When, however, in the course of pre-operative teaching and assessment it is clear that patients do not understand the nature, purpose or severity of the surgical procedure, nurses record this information. The failure to communicate this information promptly to block the procedure until these deficiencies have been corrected is the basis for liability. Since the agency is held jointly and severally liable with nurses who know about such inadequacies, both will be held responsible for resulting patient injury.

2. Inadequacies in the consent process.

In many pre-operative patient teaching or audit sessions or in pre-op chart reviews, nurses will uncover incomplete consent procedures. Patients may have consented to surgical measures different from those found on the consent document. It may be that the patient discloses risk factors unknown to the surgeon. The failure to report such quality care deficiencies resulting in foreseeable harm or death is the basis for joint and several liability between the nurse and her employer.

3. Surgeon exceeding the bounds.

When nurses discover but do not act on doctors exceeding the scope of their privileges, the stage can be set for liability. Once a hospital knows or should know through its agents that doctors are exceeding the scope of delineated privileges, the health facilities and their nurses will be held responsible for foreseeable patient injury. Hence, when a nursing OR audit discloses that surgeons are exceeding the scope of delineated privileges it is imperative that this information be reported promptly to appropriate supervisory personnel.

4. Surgeon incompetence.

Although nurses are not in a position to judge surgical competency, they are able to assess whether physician performance is up to the usual and customary standard. When nurses see surgeons acting in an unusual way or they suspect alcohol or drug abuse, reason dictates that the nurse report her findings.

The failure on the part of nurse to "blow the whistle" resulting in reasonably foreseeable harm or death to a patient can be the basis for joint and several liability between the hospital and the nurse. The reason is clear: once a nurse knows or should know about surgeon incompetence, his/her "knowledge" is vicariously attributed to the hospital. The real problem occurs if the O.R. quality assurance monitors do not pick up on these problems. The fact that the system is in place will only serve to weaken any possible defences raised by the health facility.

Making the best of quality assurance

That quality assurance can be used as the groundwork for establishing liability should not be a deterrent to using such patient care systems. To put the matter in perspective, any administrative mechanism can be used as the basis for liability as long as there is proof that harm resulted from substandard practice or "use" of the system.

However, it is equally clear that proof of proper, reasonable and prudent use of patient care systems such as quality assurance can defuse litigation.

A reasonable approach should be taken with respect to quality assurance. It can be a useful system for improving the quality of patient care. However, it must also be recognized that once it is in place, inappropriate use of QA can be construed as a departure from an established standard of care.

For operating room supervisors and other members of the management team, it is essential to define the scope of the quality assurance programme. This should include consideration of the following:

- What will be addressed in OR "QA" monitoring?
- Who will be assigned to carry out the monitoring ?
- How will information be transmitted to superiors?
- How will O.R. nursing staff liaise with the Medical Director? Chief of Surgery?
- Who will be asked to handle follow-up issues?
- Who will work with legal counsel to minimize the legal pitfalls of OR "QA" monitoring?

From a legal perspective, caution should be exercised if the intent is to transform nurses into quality assurance "watchdogs" in the operating room. Not only can nursing care suffer, the additional role can impose upon nurses unwanted liability exposure. The key is to follow average, reasonable, prudent measures and not to place too much emphasis on nursing QA as an oversight function of medical practice in the operating room.

Reference

(1) See, Public Hospital Act, Regulation 518/88, s.27, 1988, as amended.

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Investigators warn that sun-screen agents may be actually promoting, not preventing skin cancer

The bad news is that most sun-blocking agents or sun-screens may offer no protection what-so-ever from melanoma or skin cancer. Even worse news is that the use of sun-screens may actually be contributing to the alarming increase in melanoma rates.

These are the conclusions of investigators from the University of California, San Diego (UCSD) which were reported at the recent meeting of the International Epidemiological Association (IEA) meeting in Los Angeles recently.

According to Dr. Cedric Garland, director of the cancer centre epidemiology program at UCSD, most sun-screens block a very narrow band of ultraviolet (UV) radiation. Nearly 95% of UV light is unaffected by sun-screen agents, and some of these rays may be much more damaging than originally thought.

To add insult to injury is the belief that sun-screens seriously limit the one thing that seems to inhibit melanoma growth - vitamin D.

Following an extensive review of the world literature on melanoma and conducting a long series of studies, the UCSD investigators concluded that the current generation of sun-screen agents simply do not offer protection from the deadliest form of skin cancer.

Melanocytes

While sun-screens effectively block sunburn-producing ultraviolet B (UVB) radiation, ultraviolet A (UVA) rays are left largely unopposed to penetrate deep into the melanocytes of the skin.

While UVA carries less energy per photon than UVB, Dr. Garland said that prolonged exposure to UVA appears to be equally damaging. The effect is likely to be related to the fact that UVA, with its longer wavelength, penetrates deeper into the dermis than UVB.

"UVA is the form of light that reaches the melanocytes in the highest concentrations," said Dr. Garland. "...It is the degeneration of the genetic material within the melanocytes that is associated with melanoma."

Studies have also shown that high-dose UVA inhibits the DNA repair process that usually follows UVB damage and the two UV wavelengths appear to work synergistically; that is, they co-operate in the development of melanoma.

False security

All things considered, Dr. Garland fears sun-screens provide users "with a false sense of security" and actually encourage more sun exposure. "...People slather on sun screen and spend their entire vacation outdoors," he said.

The other dark side to sun screen agents is that the data strongly suggests that these agents do additional damage by inhibiting vitamin D production. It was pointed out that a study by Boston University investigators last winter found that chronic users of sun screens have only half the level of 25-hydroxyvitamin D that is found in controls not using sunscreens.

Studies at UCSD also indicated that vitamin D inhibits replication of malignant melanoma cells in tissue cultures and appears to inhibit melanoma development in previously initiated sites.

"We've come to the paradoxical conclusion that sunlight both promotes and inhibits melanoma," said Dr. Garland. "On the one hand, sunlight initiates it, but it also causes the production of vitamin D, which inhibits melanoma." ■

Snorers have greater risk for myocardial infarctions

People who snore every night appear to be at increased risk of myocardial infarction, according to a case-controlled study in Italy.

Dr. R.D. D'Alessandro from the University of Bologna, Bologna, Italy, said snoring had been identified as a risk factor for cardiovascular disease, but no study had focused on its relationship to myocardial infarction.

Dr. D'Alessandro and his co-researchers studied 50 patients admitted to a coronary-care unit with their first myocardial infarction. Details of their snoring were obtained by questionnaires.

Dr. D'Alessandro reported in the *British Medical Journal* that those who snored every night were at greater risk of myocardial infarction and that multiple regression analysis showed this association was independent of other factors.

He suggested that as people who snored were commonly affected by sleep apnea, this might put chronic stress on the cardiovascular system, explaining the increased risk of myocardial infarction they ran. In addition, snoring itself might cause cardiovascular stress. ■

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A study of glove tears in an orthopaedic OR

By Johanne Touchette, R.N.
and
Alan Giachino, M.D., F.R.C.S.(C).

Introduction

In 1889, William Stuart Halstead introduced the rubber glove to protect the hands of his nurse, the future Mrs. Halstead, from caustic solutions which were used to sterilize instruments.[1]

The rationale for the use of surgical gloves over the past 100 years has come full circle. In the beginning, gloves were used to protect health care workers from noxious substances in the operating room. Emphasis then swung to protection of patients from infection.

More recently, attention has been paid to the importance of protection of operating room personnel from the acquisition of diseases from patients during surgical procedures. The risk to health care workers has been identified, but the precise incidence of infection has yet to be determined. As a result, the mechanism and incidence of glove tears must be evaluated in order to be avoided.

In an attempt to determine the precise incidence of glove tears in an orthopaedic operating room, we prospectively documented the incidence over a 12-month period at the Ottawa General Hospital.

Method

From March, 1988 to March 1989, 671 orthopaedic cases were studied. These included 177 total joint arthroplasties, 164 other major orthopaedic cases, and 330 minor orthopaedic procedures.

If a glove tear was suspected during surgery, gloves were examined visually, and in all cases were inspected at the end of the procedure. When possible, the location and mechanism of tear was identified.

Control group

To determine the incidence of pre-existing glove perforation, a control group of 100 gloves were tested by the following technique: a gloved hand was immersed in a blue dye solution for one minute and rubbed vigorously.

The glove was then removed and the hand inspected for the blue dye.

This proved to be a more reliable method than filling the glove with water, twisting the cuff and applying pressure.[2,3] With this technique, when a glove was intentionally perforated with a needle, a leak was rarely demonstrated.

Results

In the control group, the incidence of perforation was 2%. In the overall study group, 93 glove tears were identified for an incidence of 13%.

Total joint arthroplasties produced an incidence of 28% of tears; other major procedures 21%, and minor orthopaedic procedures, 2%.

A glove tear involved the scrub nurse in 26% of tears, the attending physician 56%, and the assistant, 18%.

86% of tears involved the fingers and thumbs; 45% involved the index finger, and 29% involved the thumb. 62% affected the non-dominant hand.

In instances where a double gloving technique was practiced, the inner pair was protected 72% of the time. A break in the skin of the person involved occurred in 4% of perforations.

When the cause of tear could be identified, needles were responsible in 97%, instruments in 63%, and bony fragments in 28% of tears.

A subjective evaluation of the action involved in producing tears suggested that poor surgical technique such as finger dissection, and using fingers or hands as retractors were responsible for 21% of tears, improper handling of instruments 36%, and 24% were incidental findings. Other factors of particular interest to O.R. nurses were responsible for 19% of tears.

Other factors included defective or poorly designed instruments such as double-ended instruments with sharp tines, and instrument containers with sharp corners and projecting hinges.

Discussion

The incidence of glove tears in the literature varies from 10% to 70%, depending on the methods of detection of glove tears used.[1-6] There are no reported studies on exclusively orthopaedic procedures. The incidence of 13% in this study should be considered conservative at best as the method for detection of glove tears was completely subjective and involved gross visual inspection for evidence of a glove defect.

However, the incidence in this study should be considered significant as the tears were macroscopic and hence more likely to be associated with significant blood contamination. Although traditionally the emphasis in the operating room has been on protection of patients from infection, it has now shifted to protection of O.R. personnel from diseases that have been prevalent in our society.

Surprisingly, studies have shown that the incidence of wound infection is not related to glove perforation.[7] Conversely, the exact risk to health care workers from acquisition of infection from contaminated blood has not yet been proven. The obvious concerns are hepatitis and HIV infection.

Although patients harbouring these diseases are often identified prior to elective surgery, the risk increases greatly in emergency situations where the patient status is usually unknown. Universal precautions are, therefore, absolutely necessary.

Recommendations

Double gloves are essential requirements for all major orthopaedic procedures. The nature of orthopaedic surgery is such that it is more likely to be associated with injury to O.R. personnel than might be expected in other surgical specialties. The cause of tears in this study indicates that there are many areas where the incidence can be minimized. Firstly, let's examine the education of O.R. personnel.

The surgical team should be strongly discouraged from transferring sharp instruments, such as loaded needle holders and scalpels back to the scrub nurse in a casual fashion.

Procedures might be modified to encourage direct return of sharp instruments to a mayo stand rather than directly to the scrub nurse.

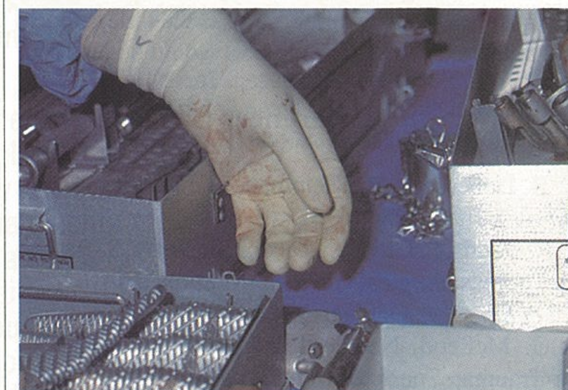
Also, when handing instruments to the surgical team, the scrub nurse should be more conscious of the possibility of personal injury, and staff training should reflect this attitude.

Surgeons should be encouraged to use instruments rather than finger dissection which places them at increased risk.

Residents should be discouraged from retracting with their fingers or hands. Time should be taken to repair or discard faulty or broken instruments such as a defective towel clip. Also, double-ended instruments, such as a miller-sen retractor, have an obvious tendency to produce tears and injury. Their use should be discontinued completely.

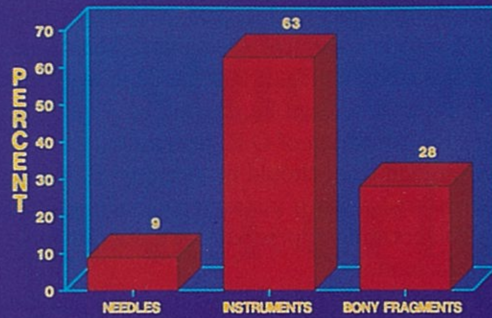
Instrument manufacturers should consider nursing consultants when designing instruments and instrument containers such as those used in total joint arthroplasty. Many of the locking mechanisms presently used are accidents looking for a place to happen.

Finally, glove manufacturers should research the

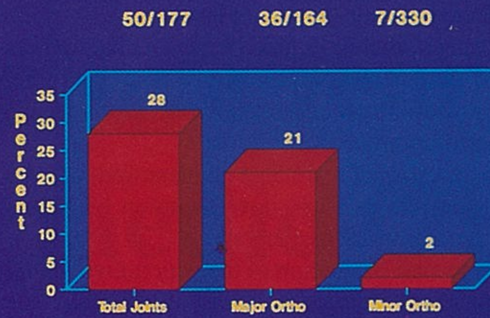


Recommendation: Increase the strength of surgical gloves without reducing tactile sensitivity.

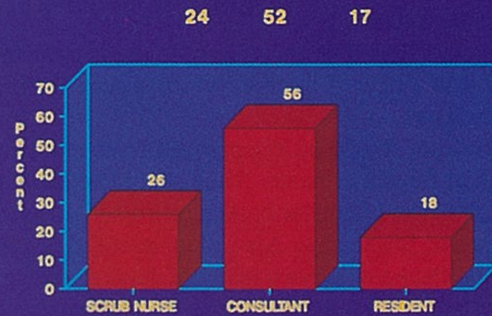
MECHANISM OF TEARS



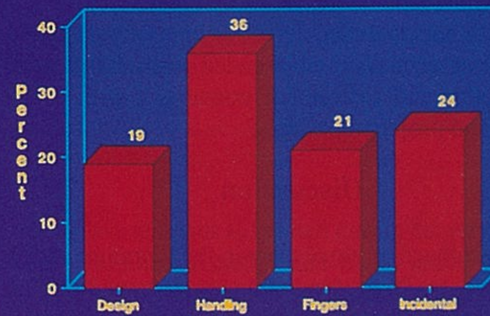
INCIDENCE OF TEARS



Personnel Involved



TEAR PRODUCTION



Column figures showing how glove tears occurred (needles, instruments, bone fragments), the personnel wearing the gloves when tears occurred, the type of surgery when the tears occurred (total joint surgery, major orthopaedic and minor orthopaedic surgery), and where the tears occurred (in the glove design, while handling gloves, in the finger areas, and incidental tear production).

possibility of increasing the strength of surgical gloves without reducing tactile sensitivity at sites where they are most likely to perforate, such as the index fingers and thumbs. Any increase in cost would be justified.

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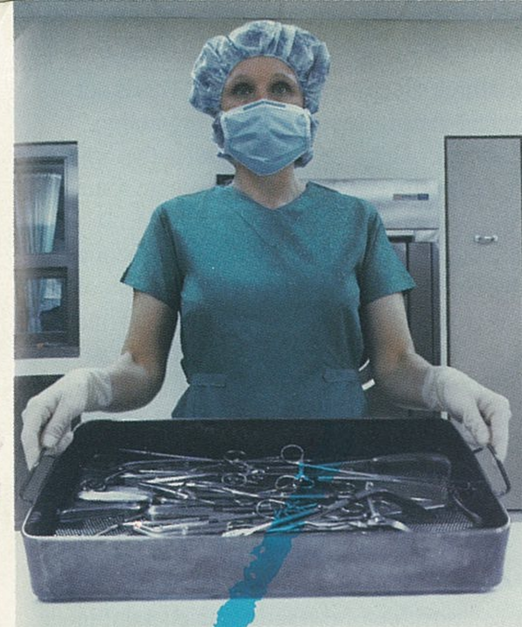

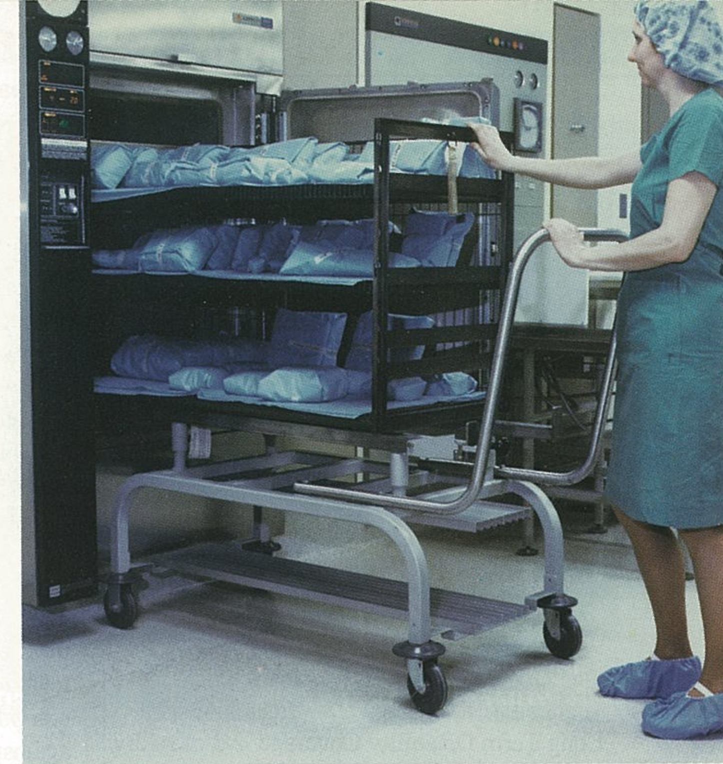

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New latex surgical glove provides greater protection from tears and infection

An antiviral and antibacterial surgical glove has been developed by a French manufacturing company. The 250 micron-thick latex glove will be produced by a company called Hutchinson, which developed the glove in collaboration with the research facilities and pharmaceutical laboratories of universities and hospitals in France, Germany, Switzerland and the United States.

Encapsulated antiseptic

Incorporated into the glove interior is a cocktail of micro-encapsulated antiseptic agents, about 30 microns deep.

Fear of contamination from the HIV-virus has lead surgeons, medical doctors, nurses, dentists, laboratory technicians, paramedics and animal caretakers to wear two or three superimposed gloves. "This is not only impractical but it doesn't ensure protection," says Dr. M. Barbier, head of the exotic pathology branch of the University Hospital of Paris, where some of the laboratory trials on the glove were made.

Engineers at Hutchinson found that antiseptic could be incorporated into the latex without loss of potency or dexterity. They actually found that the buoyant volume of antiseptic micro-capsules minimalized friction between the skin and the inside glove surface. By adding dehydrant and hypo-allergenic agents, perspiration could be reduced, resulting in increased comfort.

Clinical tests

The exact composition of the antiseptic cocktail in the glove has not been released, but it includes special tensio-active surfactants and quaternary ammonium compounds. Laboratory tests show they are effective against the AIDS and herpes viruses, and against bacteria.

The glove will be manufactured on an industrial scale by the end of 1991. Wide-scale clinical tests are to be conducted next year in Asia and Africa using hepatitis as a marker. ■

Too much litter found in operating rooms Canadian anaesthetists say

Irritated by the accumulation of garbage in the average operating room even during routine procedures, a staff anaesthetist at Orillia Soldiers' Memorial Hospital in Orillia, Ontario took her case to the annual meeting of the Canadian Anaesthetists' Association meeting in Vancouver recently.

Dr. Nancy Ironside blames over-packaging of anaesthetic agents and disposable items for the paper and plastic waste that ends up littering the OR.

Prior to the annual business meeting of the society, Dr. Ironside admitted to having a personal debate as to whether she should even introduce her motion.

"I had no idea what the majority of members thought," said Dr. Ironside, "but I felt the situation was getting worse and that the society should take a stand."

As it turned out, her motion received enthusiastic support, with no dissenting votes. The annual meeting's call for a reduction in packaging waste now goes to the society's executive meeting which will have to work out a way to implement the resolution. ■

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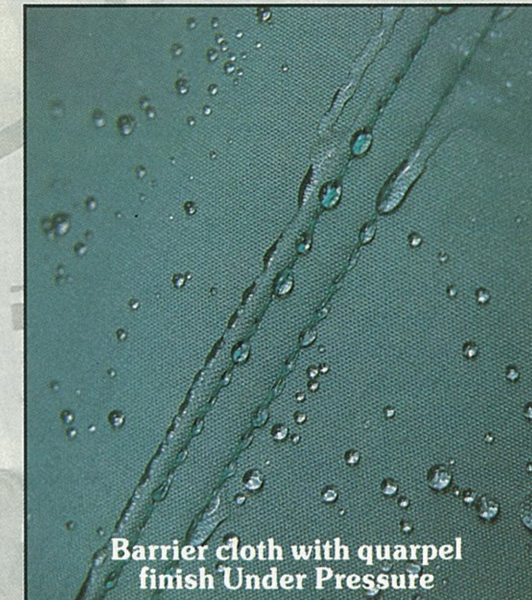

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Calendar of Events

October 18 - 20, Gander, Nfld: 11th Annual Conference, Newfoundland & Labrador O.R. Nurses Association, Hotel Gander. (Exhibitors contact Henry Norris, James Paton Memorial Hospital, 125 Trans Canada Highway, Gander, Nfld. A1V 1P7).

October 24-27, Edmonton, Alberta: Annual Conference, Operating Room Nurses Association of Alberta, Edmonton Inn, Edmonton, AB. (Contact Lorraine Hanson, 10324 46A Street, Edmonton, AB T6A 1Z4).

November 2 - 3, Haliburton, Ontario: Annual Fall Seminar, Operating Room Nurses Association of South Central Ontario, Pinestone Inn. (Contact Hilda Gatchell, 208 Oshawa Blvd., N., Oshawa, Ont. L1G 5S9 (416) 434-6585 or work no. 576-8711 Ext. 3238).

February 19 - 23, 1991, Banff: Basic Colposcopy and Update in Colposcopy and Lower Genital Neoplasia, Banff Rocky Mountain Resort. (Contact Biomedical Communications, P.O. Box 224, Komoka, Ont. N0L 1R0 (519) 471-0300).

April 26-27, 1991, Edmundston, N.B.: The 17th Spring Institute, New Brunswick Operating Room Nurses Group, Howard Johnson Edmundston. (Exhibitors contact Noeline LeBel, Edmundston Regional Hospital, 54 - 21st Ave., Edmundston, N.B. E3V 2C1 (506) 735-3361).

April 29 - May 1, 1991, San Diego, Calif.: 10th Anniversary Meeting, American Society for Laser Medicine and Surgery. (Contact American Society for Laser Medicine & Surgery, Inc., 2404 Stewart Sq., Wausau, WI 54401 USA. (715) 845-9283).

May 12 - 17, 1991, Banff, Alberta: 12th National Conference, Operating Room Nurses Association of Canada (ORNAC). Theme: "Moving Mountains." See page 13 of this issue for more details.

September 2 - 6, 1991, Vancouver, B.C.: VII World Conference of Operating Room Nurses, Pan Pacific Hotel and Vancouver Trade and Convention Centre.

Spring, 1993, Province of Quebec: 13th Annual Conference, OR Nurses Association of Canada. Location to be announced.

Spring, 1995, Vancouver: 14th Annual Conference, Operating Room Nurses Association of Canada.

CDC says Muppets creator, Jim Henson died from an exotic form of bacteria

Famed puppeteer, Jim Henson, contrary to spurious rumour, was killed by a bacteria that seems to be getting stronger and more prevalent, according to officials at the Atlanta Centers for Disease Control.

Dr. Benjamin Schwartz, an epidemiologist with the respiratory diseases branch at the CDC, said group A streptococcus caused the pneumonia that killed Henson this past May.

This bacteria, he said, is also responsible for a spectrum of other diseases ranging from a relatively mild skin infection like impetigo to potentially lethal diseases such as rheumatic fever, bacteremia, scarlet fever and toxic streptococcal syndrome.

Dr. Schwartz and other researchers believe the more serious types of group A streptococcal infections are increasing. At the same time, the bacteria causing the infections may be becoming more lethal.

It is the mounting potency of the infectious agent that explains why Henson died so quickly of pneumonia, which was shown to be an uncommon type of infection that comprises 1% of all pneumonias. ■

Olive oil not only reduces cholesterol but other unwanted levels as well

The use of olive oil and other mono-unsaturated fats not only helps reduce cholesterol, but it also reduces systolic blood pressure and blood glucose levels, says an article in the *Journal of the American Medical Association* (Feb. 2, 1990).

Over 4900 Italian men and women were studied. The results indicate that olive oil consumption decreases blood glucose, blood pressure, and cholesterol levels. Butter and margarine consumption increase blood glucose levels.

From figures extrapolated from U.S. studies, it is estimated that more than 20% of Canadians' daily energy intake is composed of saturated fatty acids. High intakes of saturated fatty acids are said to increase plasma cholesterol levels. ■

Bikinis double the risk of melanoma

If the news item about the relationship between sun screens and melanoma on page 23 doesn't get your attention, maybe this item will.

Studies by investigators at the Dermato-Epidemiology Unit at Brown University in Boston suggest that women who wear bikinis are twice as likely to develop melanoma on their trunk as women who wear one-piecers. ■

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