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EDITORIAL

There is an undisputed need for a Canadian scientific journal -- like **Nursing Papers** -- that publishes research reports and well-researched articles in the nursing sciences. Readers of **Nursing Papers** appreciate the efforts that the editorial and review committees and some university nursing schools have made, not just to improve the journal's quality, but also to ensure its survival.

In the Fall, 1985 editorial, Dr. Mary Ellen Jeans presented three possible ways of helping **Nursing Papers** out of its current financial crisis. The most promising option suggested depends heavily on the support of the entire university community to increase subscriptions and make the journal known to a wider public. It seems that this solution has already been tried and has brought disappointing results. But might it not be possible (and more fruitful) to use the university community as a base for closer association between the journal and the Canadian Association of University Schools of Nursing (CAUSN)?

One of the goals of CAUSN is to promote the free flow of information about nursing among its members. Another of its goals is to make the public more aware that education in nursing at the university level can contribute to the development of health care in Canada. In nursing schools throughout Canada, research activities and publications are on the increase. Canada's nursing profession has its own specific characteristics, and its development is also taking a particular orientation. More than ever before, there is a need for exchange of information on the major issues confronting the university schools -- issues concerning education, research, development of teaching faculties, university organization, etc.

As education in nursing moves to the university level, CAUSN is being called upon to broaden the scope of its role, responsibilities, and activities. The CAUSN quarterly bulletin just barely manages to give adequate coverage of the information needed by members of the profession. The Association needs to become more visible. Could publication of an official journal help CAUSN attain its goals? By the same token, could a joint effort CAUSN-**Nursing Papers** give new life to this publication. Why not give this fourth option the serious consideration it deserves?

Marie-France Thibaudeau

ÉDITORIAL

Personne ne remet en cause la nécessité de la publication d'une revue scientifique en sciences infirmières au Canada. Les lecteurs de **Perspectives en nursing/Nursing Papers** sentent les efforts que les membres du Conseil de rédaction, le Comité de lecture et certaines écoles universitaires ont faits, non seulement pour élever le calibre de la revue consacrée à la publication de rapports de recherche et d'articles de fond en sciences infirmières mais aussi pour l'aider à survivre.

Dans l'éditorial de l'automne 1985, Dr. Mary Ellen Jeans présentait trois options possibles pour sortir la revue **Perspectives en nursing** de l'impasse financière qui la menace. L'option qui semble la plus acceptable dépend, dans une large mesure, de toute la communauté universitaire: celle de supporter la revue par un plus grand nombre d'abonnements, de la faire connaître et de la faire vendre au plus grand nombre à l'extérieur de cette communauté. Il semble que l'on ait déjà essayé cette solution mais qu'elle ne rapporte jamais tous les résultats escomptés. Partant de ce point d'ancrage qu'est la communauté universitaire est-il possible d'associer plus étroitement la revue à l'Association canadienne des écoles universitaires de nursing (Canadian Association of University Schools of Nursing)?

Un des buts de l'ACEUN est de favoriser les échanges des connaissances en nursing entre les membres de l'Association. Un autre but est de sensibiliser le public à l'idée que l'enseignement du nursing au niveau universitaire peut contribuer au développement des services de santé du Canada. On observe que les activités de recherche et les publications dans toutes les écoles augmentent. La discipline infirmière a, au Canada, des caractéristiques qui lui sont particulières et son développement prend aussi une orientation qui lui est propre. Plus que jamais, des échanges sont nécessaires sur les grandes questions auxquelles les écoles universitaires font face, les questions d'éducation, de recherche, de développement du corps professoral, d'organisation universitaire, etc.

À cause du mouvement de l'enseignement infirmier vers la formation universitaire, l'ACEUN est appelée à voir son rôle, ses responsabilités et ses activités prendre de l'ampleur. Le Bulletin trimestriel de l'ACEUN suffit à peine maintenant à inclure les renseignements pertinents au corps professoral. L'Association doit augmenter sa visibilité. Une revue officielle peut-elle contribuer à atteindre, du moins en partie, les buts de l'ACEUN? En retour, l'association ACEUN-**Perspectives en nursing** peut-elle permettre à la revue de prendre un essor nouveau? Pourquoi ne pas étudier sérieusement cette quatrième option?

Marie-France Thibaudeau

CRISIS DECISION MAKING IN CORONARY CARE: A REPLICATION STUDY

Frances Fothergill Bourbonnais . Andrea Baumann

Do nurses in critical care environments make rapid decisions in crisis situations? A replication study of 24 coronary care nurses, based on an original study of 50 intensive care nurses, indicates that many nursing decisions are made for critically ill patients. An examination of these decisions can assist in the development of nursing prescriptions for patients with specific problems. This information can foster development of nursing knowledge with regard to patient situations.

This study replicated a study that explored nursing decision making in critical care areas (Baumann & Bourbonnais, 1981). The convenience sample consisted of 24 registered nurses in one coronary care unit. The study was exploratory in design, and utilized a semistructured interview to analyze the nurses' decision making. The two major components of the interview were the examination of a cardiac patient case study, and the identification of individual patient care situations in which a crisis was prominent and rapid nursing decision making was required. A demographic data questionnaire examined age, critical care and other nursing experience, and the formal and continuing education of the subjects.

The purpose, objectives, assumptions, and limitations of the original study (Study I, Baumann & Bourbonnais, 1981) and this one (Study II) were the same, except that the setting of the original study was general intensive care units, not a highly specialized coronary care unit. The authors decided to replicate the study in order to determine the similarities and differences in the decision making by nurses working in a specialized coronary care unit, versus in a general intensive care setting.

The Purpose

The purpose of this study was to explore the rapid decision making of coronary care nurses in crisis situations.

Objectives of the study

1. To identify the factors that coronary care nurses consider relevant in making rapid patient care decisions.

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2. To explore the decision making in relation to a specific case study.
3. To identify critical patient care situations in which nurses are making rapid decisions.

Assumptions

1. Decision making is an important function of nursing practice.
2. Coronary care nurses make decisions under crisis.
3. Decision making is a skill that can be learned.
4. Decision making can be studied by the case study method.

Limitations

1. The findings are limited to subjects in one coronary care unit of a large metropolitan hospital.
2. It is recognized that aspects found in the real life situation, such as time factors and individual emotional reaction to the situation, are not easily replicated using a case study.

Review of the Literature

The nursing literature confirms that nurses are increasingly accountable and responsible for the decisions they make (Bailey & Claus, 1975; Ford, Trygstad-Durland & Nelms, 1979). The nurses assisting at an emergency are called upon not only to make immediate and accurate decisions, but also to determine the priority of decisions in several emergency situations (Vreeland & Ellis, 1969).

Some studies have been conducted on the decision making role of the nurse (Aspinall, 1979; Broderick & Ammentorp, 1979; Kelly, 1964). Broderick and Ammentorp's (1979) study demonstrated how expert and novice nurses process information for patient care decisions. A simulated case was presented to 23 "expert" and 37 "novice" nurses. The results indicated that the experts addressed more problems and asked for more data items than were provided, thus suggesting that ways of handling information are learned on the job. Kelly's (1964) study examined the nurses' cue learning behaviour in making decisions. Some tentative findings of this study were: that the nurses' working environment is probablistic and uncertain; that textbooks provide signs and symptoms but do not teach the nurse to utilize the cues appropriately; and that nurses can make decisions even when data about the patient are incomplete.

The literature documents several factors that play a role in long-term decision making: knowledge, experience, stress, role modelling, and values.

Ford, Trygstad-Durland, and Nelms (1979) emphasize that "knowledge base is a major variable affecting the type of information utilized, and how data is interpreted" (p.59). Experience is also vital to effective decision making. Experience helps the nursing practitioner to set priorities, to identify what typical events to expect in a given situation, to adjust the approach required in response to these events, and to develop an holistic understanding of the situation so that important cues are recognized (Benner, 1982).

Stress has been identified by authors as an influencing factor in decision making (Cleland, 1967; Grout, Steffan, & Bailey, 1981; Holsti, 1978; Lippincott, 1979). Stress can exert a positive influence, causing the nurse to be more alert and to focus on the situation. However, it can also have a negative effect. For example, Cleland (1967) indicates that the quality of the nurse's thinking deteriorates as the quantity of environmental stressors increase. As a result, specific cues that pertain to the patient situation can be missed. Lochoff, Cane, Buchanan, and Cox (1977) conducted a study examining the stressors in intensive care nursing and found that emergency decision making, often without assistance, was ranked as a high stressor by the nursing staff.

The nurse new to critical care areas has the additional stress of possibly making a mistake because of lack of knowledge and experience. The consequences of an inaccurate decision in this type of environment can be lethal. High stress can reduce the efficiency and decision-making capacity of the nurse, and can be a major factor in contributing to additional errors (Hay & Oken, 1972).

Role modelling can be a factor; the expert clinician can demonstrate to a beginning practitioner her or his own decision making process in a crisis situation (Gregory & Lang, 1977).

Mahon and Fowler (1979) state that personal variables, such as values and beliefs, are receiving increased attention with regard to their role in clinical decision making in nursing. "One may hold certain personal ethical principles but an ethical duty is based on role status or position" (Smith & Davis, 1980, p.1463). For example, moral-ethical dilemmas arising from advanced technology and aggressive medical therapy, could make the decision making role of the nurse very difficult in situations in which she or he must uphold the decision made.

The authors wanted to explore the influence of the above factors on the nurses' decision making in crisis situations. A replication of a decision making study can examine through the findings, decisions appropriate for specific patient situations. The results can facilitate the development of nursing prescriptions for patients with patterns of illness. Specific nursing prescriptions direct the nurses' role in patient situations and allow the new practitioner to benefit from the knowledge and experience of clinicians.

Method

Study I and II utilized an exploratory design, with a cardiac case study and semistructured interview.

The sample (Study II)

A convenience sample of 24 nurses was selected from one coronary care unit in a metropolitan hospital which provided care to patients with cardiac problems that were medically treated. All nurses who met the following criteria were included in the sample: they were (1) willing to participate in the study, and (2) currently a staff nurse in the selected coronary care unit.

Instrumentation

Demographic data questionnaire: By means of a demographic data questionnaire, the investigators identified the age groups, experience range, and the formal education and continuing education level of the subjects.

Semistructured interview: A semistructured interview which allowed for dialogue between the interviewer and the subject was used. The investigators believed that more in-depth exploration of the nurses' decision making process could be obtained with this method than with a questionnaire format. The first section of the interview guide was composed of questions relating to a cardiac case study. This case study represented a crisis situation in which a stable 34 year old cardiac patient suddenly was pale, breathing shallowly, perspiring, grasping his chest, and moaning. This case study and the semistructured interview were identical to those given in the Study I. The questions in the interview were devised to meet the objectives of the study. Prior to pretesting in Study I, the instrument was reviewed by an expert clinician for both feasibility and substantive content. A statistician knowledgeable in questionnaire construction assisted in the initial development of the questionnaire. The interviews of the subjects were taped and later transcribed to allow for coding. To provide for confidentiality, each subject was assigned a code number and was also assured that the tapes from the interviews would be destroyed once transcribed. A research assistant was trained to conduct the interviews in the replication study in order to ensure constancy of communication. The researchers conducted the interviews in the original study. When the subjects were asked to identify their decisions for the patient in the cardiac case study, they were provided a period of one minute duration in order to simulate the real-life situation.

Procedure for coding data

An inductive approach (Glaser & Strauss, 1967) was warranted for the coding of the data because of the qualitative nature of the data. Open ended responses were transformed, by the authors, into categories of common responses by the subjects. These categories contained the nursing decisions by the subjects, their rationale for the decisions, and the ranking of their decisions. There were also categories to indicate the factors influencing decision making. The case studies identified by the subjects as crisis situations were grouped into clinical entity categories such as cardiac arrest.

Procedure for data collection

The research protocol was approved by the research ethics committee of the selected institution. A similar process was utilized in Study I. The purpose of Study II was explained to the nursing staff and those interested in participating were interviewed. The pilot test of Study I had determined that each interview would be approximately 30 minutes.

Description and Analysis of Sample (Study II)

The results of the demographic data questionnaire were as follows:

1) 96% of the subjects were between 20 and 40 years old;

2) 50% of the subjects had five years or less experience, and the remaining 50% had five to eleven years of critical care experience; 17% had less than one year of experience;

3) 92% of the subjects were graduates of diploma schools of nursing, while 8% had a baccalaureate degree;

4) 79% of the subjects had taken one or more continuing education courses. The nurses in both studies utilized the community college as the primary resource for meeting their continuing education needs.

These findings are very similar to Study I except that in the latter, 28% of the subjects had less than one year of critical care experience.

All subjects but one had experience with a cardiac patient within the last six months. Twenty-four percent of subjects in Study I had seldom or never cared for such a patient.

Prioritizing of nursing decisions

The subjects were asked to list, in priority, the nursing decisions that they would make for the patient in the cardiac case study. In Study I, the six most frequent decisions cited by the nurses were: seek medical help; take vital signs; give oxygen; assess

monitor pattern; have patient describe pain; and give nitroglycerin then morphine. There were other decisions made by the nurses but they occurred very infrequently. In Study II, there were seven decisions that were frequently cited. These were: seek medical help; assess vital signs; give oxygen; assess monitor pattern; have patient describe pain; give nitroglycerin then morphine; and take a 12 lead EKG.

In Table 1, it can be seen that, although seeking medical help was a decision made by the vast majority of nurses (23), it was not consistently the first decision. There were several other nursings decisions, such as assessment of vital signs and the administration of oxygen made prior to this decision. This finding was consistent with Study I.

Table 1

Nursing Decisions by Priority in Cardiac Case Study - Study II

Decision	Total		Priority						
			1	2	3	4	5	6	>6
	Number	%[a]	%						
Seek Medical Help	23	96	0	0	17	22	26	13	22
Assess Vital Signs	22	92	36	18	41	5	0	0	0
Give Oxygen	20	83	25	40	15	0	15	0	5
Take ECG	13	54	0	8	0	23	69	31	23
Give Nitroglycerin, then Morphine	12	50	0	0	17	42	25	8	8
Describe Pain	11	46	42	36	9	0	0	9	0
Assess Monitor Pattern	11	46	42	36	9	9	0	0	0

Percentage points have been rounded off to the nearest whole number.

Identified factors influencing decision making

The factors influencing decision making were found to be similar in both studies. The cardiac nurses identified knowledge, experience, stress, role modelling, and values as influencing their decision making. Knowledge and experience were identified by 91% and 100% of the subjects, respectively, as the most important factors influencing decision making. This finding is similar to that of Study I where 98% of the nurses recognized knowledge and experience as the most influencing factor. Fifty-eight percent of the subjects in both studies ranked stress as an influencing factor in their decision making.

The subjects in Study II identified role modelling and values as having a less significant effect on their rapid decision making than knowledge and experience (role modelling - 67%; values - 49%). However, they were ranked higher than by the nurses in the

general intensive care units in Study I (role modelling - 48%; values - 34%).

Rationale for nursing decisions

The subjects were asked why they chose the nursing decisions that they made. The authors categorized these data under the term rationale, which was defined as "the reason(s) cited by the nurses for their nursing decision(s)." The subjects were divided into those who provided rationales for each decision and those who did not. The quality of the rationales was examined. However, further analysis was not feasible because of the small sample size. Table 2 indicates the percentage of nurses who provide a rationale in Study I and Study II.

Table 3 provides examples of the most common rationales cited for the seven most frequent nursing decisions in Study II.

Table 2

Nursing Decisions by Presence or Absence of a Rationale[a] in Cardiac Case Study in Study II and I

Decision	Rationale			
	Yes		No	
	Percent Study II	Percent Study I	Percent Study II	Percent Study I
Seek medical help	74	65	26	35
Assess vital signs	91	80	9	20
Give oxygen	65	55	35	45
Assess monitor pattern	100	74	0	26
Describe pain	91	81	9	19
Give nitroglycerine, then morphine	100	91	0	9
Take EKG	92	-	8	-

Table 3

Examples of Rationales for the Seven Most Frequently Cited Nursing Decisions in Study II

SEEK MEDICAL HELP

- to inform physician of situation
- patient is at high risk due to his young age

GIVE OXYGEN

- to increase blood and myocardial oxygenation
- to assist patient's breathing

ASSESS MONITOR PATTERN

- to check the rhythm
- to check for changes in rhythm, i.e. PVC's, blocks, etc.

DESCRIBE PAIN

- to find out type and location of pain
- to ascertain that it is chest pain

ASSESS VITAL SIGNS

- to have baseline to check for hemodynamic instability
- to take blood pressure before and after giving nitroglycerin because it lowers blood pressure

GIVE NITROGLYCERIN, THEN MORPHINE SULPHATE

Nitroglycerin:
- dilatory effect on coronary arteries
- to relieve chest pain

Morphine Sulphate:
- if nitroglycerin ineffective
- to give fast pain relief to prevent further heart damage (especially in view of patient's age and history of M.I.)

TAKE EKG

- to check for changes while patient is having pain

Discussion

Nursing decisions

There was a higher percentage of subjects familiar with the cardiac patient situation in Study II than in Study I. This may be the result of working in a highly specialized cardiac unit where patients similar to the one presented in the case study are a very common occurrence.

The nursing decisions made by the subjects were based on the problems presented, not on a medical diagnosis regarding the sudden change in status of the patient. Therefore, appropriate nursing decisions were made without a complete data base. In crisis situations, decisions may have to be made with incomplete data because of the limited time factor and the complexity of the patient situation.

There were seven decisions for the patient in the cardiac case study cited by the subjects in Study II. Once the study was completed and responses categorized, two expert clinicians independently judged the appropriateness of the decisions made by the subjects.

The findings also indicated that many decisions were made prior to seeking physician assistance. For example, the decision to seek medical help was chosen by all but one of the subjects. However, none of the nurses ranked it as their first or second decision. Four nurses (17% ranked this decision third, and five (22%) ranked it as their fourth decision. The remaining 14 nurses (61%) ranked it even lower on their priority list. In contrast, twenty-two of the nurses identified assessment of vital signs as a decision to be made for the cardiac patient. Eight (36%) ranked it as their first choice, four (18%) as their second choice, and nine (41%) as their third decision. This distribution is similar to that of Study I.

The decision to give oxygen was a high priority with 80% of the 20 subjects placing it within the first three decisions they would make. These results were similar in Study I. Findings from both studies indicated that the nurses were making many rapid decisions prior to seeking medical help. The findings indicated that some flexibility for different rapid decisions is allowed within a very restricted time frame. For example, the nurse might administer oxygen before taking vital signs, or vice versa. The subjects in Study II made an additional decision to take a 12 lead electrocardiogram. However, this decision, made by 54% of the subjects, was not ranked as one of the first three decisions they would make. The additional decision to take an EKG may have occurred because subjects were working in a coronary care unit where this may be part of the unit's protocol or expected nursing practice.

The findings from Study II indicated that the majority of the

subjects provided a rationale for the decisions they made. The results provided examples of the rationales given and there was a wide divergence in the quality of the responses. Some of the subjects were able to articulate theoretical rationales, such as giving morphine to prevent further heart damage (especially in view of patient's age and history of M.I.). It would appear that these subjects are familiar with cardiac pathology and treatment, and are able to provide adequate rationales for their decisions. The number of subjects providing rationales and the number of those that had a theoretical basis for the statements was greater in Study II. Some possible explanation for this may lie in the inservice programs provided in the selected institution, or in the more selective focus of knowledge required in caring for cardiac patients in contrast to the expanse of knowledge required to care for the wide variety of patient problems in a general intensive care unit. In addition, 96% of subjects in Study II were familiar with this patient situation, compared to 76% in Study I.

However, some nurses were unable to substantiate their decisions with a rationale. This lack of response could be a result of wording or intent in the semistructured interview. Another possible explanation is that it is not a practice in nursing to support verbally the rationale for decisions in providing patient care. The converse is true in medicine, where continued articulation and clarification of rationales for decisions is required, for example in medical rounds. Polyanyi (1962) describes the ability to demonstrate but not explain knowledge as the "ineffable knowledge" of the clinician. However, this issue needs to be explored more fully.

Knowledge and experience were the two most important factors influencing decision making in both studies. The importance of knowledge to the subjects is also reflected in the large percentage who took continuing education courses. Subjects in both studies rated stress equally. In the interview, some subjects believed that stress had a positive influence that mobilized them into action. However, many viewed its more limiting effects in terms of decision making.

From the findings it can be seen that in Study II, role modelling was a more influential factor. The subjects' comments regarding role modelling centered around learning by observing how experienced nurses effectively handled particular patient crises. The authors believed that the emphasis on role modelling could vary from institution to institution, depending on the type of in-service program, the use of preceptorship programs, and the ratio of experienced to novice staff. From both studies it would appear that values play a small part in decision making in a crisis situation. Values may be a factor considered in a deliberative analysis before or after the event.

Analysis of Individual Case Histories

The subjects were asked to identify patient situations in which a crisis was prominent and in which rapid decision making on the part of the nurses was required. Table 5 indicates that 92% of the situations identified were cardiovascular in nature. In study I 66% of the cases were cardiovascular.

Cardiac arrest

Eleven of the 24 subjects (46%) identified cardiac arrest as a crisis situation where rapid decision making was required. This compared with 42% in Study I. Because of the large number of cardiac arrest situations, they were divided into those involving expected events and those involving unexpected events. For purposes of the study, a cardiac arrest with unexpected events was defined as "one in which the cardiac arrest was made more complex because of unusual circumstances." One example of these situations with unexpected events was: the patient progressed from several premature ventricular contractions per minute to ventricular tachycardia and fibrillation in the isotope laboratory away from the coronary care unit. No physician or arrest team was immediately at hand, except for the nurse who had accompanied the patient to the laboratory. Similar results existed in Study I. For example, of the twenty-one cases identified involving cardiac arrest, 10 situations involved unexpected events. An example of these situations is: cardiac arrest in a busy corridor, or physician refusing to come to the arrest situation.

In the cardiac arrests with or without unexpected events the performance of the nurse involved a similar pattern of decisions in Study I and II (see Table 4). Again, there is room for some flexibility in the ordering of these decisions.

Table 5 identifies the remaining crisis situations identified by the subjects in Study II.

Individual case studies

The subjects were asked to rank the factors that influenced their rapid decision making in the individual case studies. Knowledge and experience were still ranked the most influential factors (knowledge 96%; experience 91%). This finding compares with 92% and 86% respectively in Study I. Stress had a more prominent role in the individual case studies; 80% versus 58% in given cardiac case. This compared with 70% versus 58% in Study I. Role modelling was again ranked higher in Study II than Study I for the individual case studies (62% versus 38%). Values was the lowest ranked factor. However, its influence as a factor was greater in Study II than Study I (50% versus 38%).

The 24 individual case studies indicated that many rapid nursing decisions were made for critically ill patients. For example, a patient developed chest pain in the night. The nurse took an EKG and assessed ST segment elevation as indicating further ischemia. She gave the patient sublingual nitroglycerin followed by morphine, and called the physician. The patient was then prepared by the nurse to go to the catheterization laboratory. To assist nurses in becoming more proficient decision makers, it is important to present them with situations that are unique as well as with the textbook picture. Kelly's (1964) research into cue acquisition indicated that text book patterns of describing signs and symptoms were not sufficient for decision making.

Table 5

Grouping of Individual Case Studies in Study II

Category	Total	
	Number	Per Cent
Cardiovascular Problems	22	91.7
- cardiac arrest	11	45.8
- ventricular tachycardia	4	16.7
- sudden drop in blood pressure	2	8.3
- pacemaker problems	2	8.3
- sudden drop in heart rate	1	4.2
- myocardial infarction	1	4.2
- myocardial infarction progressing to cardiac arrest	1	4.2
Respiratory Obstruction and Elevated Heart Rate	1	4.2
Confusion Post Cardiac Surgery	1	4.2

Table 4

Summary of Nursing Decisions in Cardiac Arrest Situations for Expected and Unexpected Events in Studies I and II

Assess lethal arrhythmia
Get emergency cart
Commence CPR including defibrillation
Call for nursing or medical help
Give cardiac arrest drugs such as sodium bicarbonate, xylocaine

Although knowledge and experience were still ranked as the most influencing factors in decision making, the increased role of stress, role modelling, and values indicates their importance to these coronary nurses in personal accounts of crisis situations. The researchers did not determine whether stress was a positive or negative influence. However, comments indicated that for many it had a negative effect.

All these situations identified the nurses' crucial involvement in initial assessment and initiation of interventions that either led to calling for physician assistance or handling the situation entirely alone.

Additional Findings

The role of anticipation

In the course of conducting the interview in Study I the subjects repeatedly mentioned the anticipation of events as being important to rapid decision making. Therefore, the subjects in Study II were asked to comment on the role of anticipation. An example of comments made is: "I always try to be prepared - having equipment available, making sure where things are." This is similar to those of Study I. Twenty-three (96%) of the subjects in Study II reported anticipation, and of these, twenty-two found it helpful. Calkin and Gulbrandsen (1978) designed a course to improve student skills at setting priorities to prepare for emergency care. Expert nurses were consulted and they described how they "fantasized" or "anticipated" emergencies that might occur. This preplanning strategy needs to be more fully explored, but is currently widely utilized in the nursing process when the nurse considers potential problems that may occur for the patient.

The role of intuition

The role of intuition became evident in study I. Therefore, the subjects in Study II were asked to comment on it. Seventy-five percent said that they believed in intuition, and, of these, 72% found it helpful. Examples of comments made are: "Intuition is probably experience," or, "sometimes you have a funny feeling that things are not going right." Similar statements were made in Study I. "Scientific knowledge about the human's ability to make inductive inferences intuitively has appeared only in the last 20 years" (Hammond, 1966, p.28). Further investigation is needed into the effect of intuition on rapid decision making.

Implications for Nursing

Results of the study indicate that knowledge and experience are the two most important factors influencing rapid decision making. The importance of knowledge was reinforced by the high percentage of subjects taking continuing education courses. Experience is vital to effective decision making. Clinicians have a much better understanding of patient problems because of prior experience with similar situations.

Through nursing research into decision making, specific nursing decisions can be studied with respect to patient problems. The original study by the authors, determined that specific decisions, deemed as appropriate by expert clinicians, were made for a case study of a cardiac patient who was breathing shallowly, perspiring, pale, and grasping his chest and moaning. The replication of this research helps to verify these findings.

Replication of practice-based research is necessary for the development of specific nursing interventions. Decision making research helps to develop the relationship between nursing interventions and patient outcomes. It is of benefit to the profession and the practitioners.

Development of the individual case studies cited by the subjects into decision making exercises, such as computer simulations, provides more realistic examples of critical care decision making, not merely textbook description of signs and symptoms. The practitioner is helped to learn to identify those cues essential for effective decision making.

Nurses need to be able to articulate the scientific basis for their decisions in order to further the development of the profession. This will also increase recognition by other health professionals and the public that decision making is a crucial aspect of the nurse's role.

The roles of anticipation and intuition in decision making need to be studied further. One of the goals of critical care nursing is the prevention of life-threatening situations. The anticipation of potential problems, and development of decisions to prevent them, can aid in limiting further crises for the patient.

In conclusion, the development of specific nursing prescriptions for patient situations can be fostered through practice-based research, and its replication, that will further the development of nursing knowledge for patient care.

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RÉSUMÉ

Prise de décision en soins coronariens - prescriptions infirmières en matière de soins dispensés aux malades: Reproduction d'une étude réalisée antérieurement

Le personnel infirmier prend-il rapidement des décisions lorsque des situations de crise surviennent en milieu de soins essentiels? Une étude portant sur 24 membres du personnel infirmier des services de soins coronariens et reproduisant une étude originale qui touchait 50 infirmiers et infirmières d'unités de soins intensifs indique que de nombreuses décisions sont prises par le personnel infirmier pour les malades dont l'état est critique. Un examen de ces décisions peut contribuer à l'élaboration de prescriptions relatives aux malades présentant des problèmes particuliers. Ces renseignements peuvent favoriser, chez les infirmiers, une meilleure compréhension des situations particulières des malades.

La reproduction d'une étude réalisée antérieurement a été entreprise afin d'examiner les décisions du personnel infirmier des secteurs des soins coronariens (Baumann et Bourbonnais, 1981). L'échantillon sur lequel portait l'étude comprenait 24 infirmiers ou infirmières diplômé(e)s travaillant dans une unité de soins coronariens. L'étude était de conception exploratoire et utilisait une entrevue semi-structurée visant l'analyse des décisions prises par le personnel infirmier. Les deux principaux éléments de l'entrevue étaient l'examen d'une étude de cas d'un malade cardiaque et l'identification de situations particulières de presentation de soins caractérisée par une crise et dans laquelle le personnel infirmier devait prendre rapidement une décision. Un questionnaire de renseignements démographiques portait sur l'âge, l'expérience en matière de soins critiques et autres soins, ainsi que le niveau de scolarité et de perfectionnement des sujets.

Le but, les objectifs, les hypothèses et les restrictions de l'étude originale (Baumann et Bourbonnais, 1981) et de la présente de l'étude étaient les mêmes sauf que l'étude originale avait été réalisée dans les unités de soins intensifs généraux et non pas dans une unité de soins coronariens hautement spécialisés.

Les auteurs ont choisi de reproduire l'étude afin de déterminer les similitudes et les différences observées au niveau de la prise de décision du personnel infirmier travaillant dans une unité de soins coronariens spécialisés par rapport à celles que l'on observe dans les unités de soins intensifs généraux.

QUALITY OF NURSING CARE: HOW IT IS AFFECTED BY PUBLIC HEALTH CARE DELIVERY SYSTEMS

Geraldine Cradduck

As a result of the increased emphasis placed upon the responsibility of nursing professionals for their practice, or professional nursing accountability, the need to monitor the quality of nursing care has become an issue of importance.

According to Hegyvary and Haussmann (1976), while there has been investigation into the influence of a number of variables upon work performance, very little research has been undertaken into factors that specifically affect the quality of nursing care. These two authors studied 33 different variables that could affect the quality of nursing care. The unit organizational structure, or the system used to deliver nursing care, showed the greatest significance for influencing the quality of nursing care.

The methods of organizing nursing care delivery within institutional or hospital settings have been well documented over the past twenty or thirty years. This is particularly evident in articles pertaining to the two main methods of organization; namely, team and primary nursing (Kron, 1976; Manthey, Ciske, Robertson, & Harris, 1970; Marram, Barrett, & Bevis, 1979; Williams, 1964).

Literature Review

The organization of nursing care delivery in public health agencies has not been well documented. In fact, in comparison to the hospital setting, there is a definite paucity of research articles on this topic. A review of the pertinent literature revealed only five articles pertaining to the delivery of public health nursing service (Beardmore & Cunningham, 1971; Bergman, 1964; Grimm, 1965; Parramore, 1968; Phillips, 1965). Of these five articles, only the study by Beardmore and Cunningham (1971) focused on Canadian public health nursing and Ontario in particular.

Because of this lack of documentation regarding the methods for delivery of public health nursing care, it was necessary, first, to identify the various nursing care delivery systems, and then to describe the characteristics of the systems in general use at the present time. The research was confined to the investigation of Ontario Public Health Agencies.

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The study by Beardmore and Cunningham (1971) used the quantity and quality of nursing care as the measure of the effectiveness of the introduction of the team approach to public health nursing service. However, since no measure of "quality of nursing care" existed at the time of the study, the investigators devised their own (p.541).

The Audit Tool

Since the time of the research by Beardmore and Cunningham (1971), a nursing audit tool has been developed by Craig (1978) for use with discharged public health nursing records. The audit instrument is based on the **Standards of Practice for Registered Nurses and Registered Nursing Assistants of Ontario** and uses the standards that are relevant to the appraisal of the nursing process (College of Nurses of Ontario, 1982, pp.7-9). The audit tool measures the care provided through appraisal of the four phases of the nursing process: assessment, planning, implementation, and evaluation. The audit tool makes the assumption that the nursing care provided has been documented, and that the tool is able to discriminate between levels of nursing care, from poor to excellent.

The audit tool appraises the documented nursing care on the discharged record as being excellent, good, fair, deficient, or poor, with a corresponding numerical score to provide a five point ordinal scale, where excellent=4 and poor=0. The numerical score can be tallied for each phase of the nursing process and an overall percentage score determined for each record.

Craig tested the audit tool for content validity and between-rater reliability. The conclusion reached, after some revision of the tool, was that it was both valid and reliable (Craig, 1978, p.57). Because the scoring of the nursing record using the Craig Audit Tool is liable to a degree of subjectivity, the inter-rater reliability is not well established. To overcome this problem, the researcher personally audited all the records, to maintain a standard level of scoring.

Appraisal of the Craig Audit Tool led to the conclusion that the tool was able to provide a measure of the quality of nursing care, within the limitations imposed by this study.

The Study

The research study was undertaken to investigate factors affecting the quality of nursing care in public health agencies in Ontario (Cradduck, 1984). Specifically, the research investigated the effect of the nursing care delivery system on the quality of the nursing care provided by the agency as a whole. The quality of the nursing care provided was measured by means of a retrospective nursing audit, using the Craig Audit Tool (Craig, 1978).

Hypothesis

Official Public Health Agencies in Ontario will demonstrate no significant difference in the quality of nursing care, as measured by the Craig Audit Tool, regardless of the organizational system for nursing care delivery and the size of the agency.

Since the size of the agencies varied markedly, from those serving populations of 41,000 to those serving 629,000, with from 13 to 154 staff members, it was felt necessary to control for the size factor. Agencies were categorized according to the population served: small - 99,999 or less; medium - 100,000 to 199,000; or large - 200,000 or more.

Definition of terms

Nursing audit: the nursing audit is a method for evaluating quality of care through appraisal of the nursing process as it is reflected in the patient care records for discharged patients (Phaneuf, 1976, p.31).

Quality of care: the assessment of the components of nursing care with respect to optimum rather than minimum standards. Using the Craig Audit Tool, the care is rated excellent to poor when the nursing care is assessed according to specific components related to each phase of the nursing process (Craig, 1978, p.4).

Task/Functional nursing: tasks are assigned to the individual staff member according to the complexity of the task and the educational preparation of the staff member.

Team/Group nursing: a group of nurses working together co-operatively towards a common goal of providing client-centred care.

Individual/District nursing: an individual nurse is given responsibility for assessing, planning, implementing, and evaluating the nursing care of a specific number of clients or a geographic area.

Methods

The investigation was conducted in two phases. First, the systems by which nursing care is delivered within Official Public Health Agencies in Ontario were identified. Secondly, by the use of a nursing audit tool, the quality of nursing care provided by a sample of Official Public Health Agencies was measured in order to study the relationship between the system of nursing care delivery and the quality of the care provided.

In the first phase of the research a 31 item questionnaire was sent to Directors of Nursing of all 43 Official Public Health

Agencies in Ontario. There was an 84% response rate. From the questionnaire responses, the major organizational systems for nursing care delivery and the main characteristics of these systems were identified. The two major nursing care delivery systems identified were: "Team/Group" and "Individual/District". From these data a sample of seven agencies, categorized as small, medium, or large, according to the total population of the area they served, with either a "Team/Group" or an "Individual/District" nursing care delivery system was selected for the second phase of the study.

For the second phase of the study the seven agencies forming the sample were requested to retain the records of discharged clients for one month, in order to allow the researcher to select a random sample of twenty records for audit purposes. In consultation with Miss Craig, the originator of the audit tool, 20 records was deemed an adequate sample to provide a measure of the quality of care provided by each agency as a whole. On completion of the audit, a score was calculated for each phase of the nursing process, and an overall percentage score determined for each record. From the 20 overall percentage scores obtained, a range and mean score was calculated for all seven agencies.

Results

The results of the first phase of the research identified the systems of nursing care delivery in use in Ontario Official Public Health Agencies and described the characteristics of those systems.

Table 1 displays the distribution of the responding agencies by the systems of nursing care delivery and by the size of the agency. The total number of responding agencies in each cateogry of nursing care delivery is also shown.

As can be seen, no agency responded positively to the "Functional/Task-oriented" system of nursing care delivery, although several respondents commented that some aspects of their nursing care delivery could be categorized in this way. They gave the immunization, vision, and hearing screening programs of the agency as examples.

Of the 24 agencies which used "Team/Group" as the system of nursing care delivery, 96% reported that the staff had an independent case load. In approximately half of the agencies staff also had an independent work area, while the remaining 39% shared an area. Only one agency reported that the staff in a "Team/Group" also shared a caseload.

The major differences in the organizational characteristics of agencies were found among the "Team/Group" respondents. Although a majority of these agencies had similar attributes, there were wide variations in utilization of the concepts of team nursing.

Table 1

Nursing Care Delivery System by Size of Agency and Total Percentage of Agencies in Each Category of Nursing Care Delivery.

	Nursing Care Delivery System			
Size	Functional/ Task-Oriented n=0	Team/ Group n=24	Individual/ District n=9	Other n=2
Small	0%	8%	89%	50%
Medium	0%	46%	11%	50%
Large	0%	46%	0%	0%
Total Respondents n=35	0%	68%	26%	6%

All the agencies utilizing an "Individual/District" nursing care delivery system stated that their staff had an independent caseload and area, and worked independently. However, 88% reported that there were small group organizations within the agency for nursing staff. These small groups were reported to have similar functions to those identified for Teams/Groups. Since 89% of agencies responding positively to the "Individual/District" category were also categorized as small agencies, it was possible that the total staff of these agencies functioned in a similar manner to a single "Team/Group".

The research hypothesis stated that there would be no difference between the seven agencies sampled, regardless of the system for nursing care delivery or the size of the agency. Table 2 summarized the means and standard deviations, using the Craig Audit Tool, for the sample of audited records from each of the agencies making up the sample. As can be seen from Table 2, there are differences among the means. In order to ascertain whether or not these observed differences were significant, a statistical analysis was undertaken.

Table 2

The Mean and Standard Deviation of the Audit Scores for All the Agencies Sampled.

GROUPS	SAMPLE SIZE	MEAN SCORE	STD. DEV.
1 - Large (LT) Team	20	58.05	7.94
2 - Medium (MT) Team	20	52.85	14.29
3 - Medium (MT) Team	20	40.60	13.22
4 - Small (ST) Team	20	37.95	14.36
5 - Medium (MI) Individual	20	33.30	8.69
6 - Medium (MT) Team	20	56.25	12.62
7 - Small (SI) Individual	20	49.10	15.23
TOTAL	140	46.87	15.25

A one-way analysis of variance demonstrated that there was a significant difference among the mean audit scores from all seven agencies sampled at the p= .00001 level. While this analysis of variance demonstrated that a difference existed among the means of the agencies sampled, and therefore that the hypothesis should be rejected, it did not pin-point where the difference actually existed.

Further multiple comparison tests were performed to determine which means were different from each other. Tukey's Honestly Significant Difference procedure showed which groups were different, but did not demonstrate which of the two factors examined, nursing care delivery and/or size, affected the observed differences. To examine the interaction of these factors a two-way analysis of variance procedure was carried out. However, rather than use all seven groups, only those of interest were examined. Thus, Group 1 (LT) was discarded as there was no other large group for comparison. Group 6 (MT) was not used as this

agency answered positively to "Individual/District", but in fact used the "Team/Group" system for nursing care delivery. The two small groups, 4 (ST) and 7 (SI), where retained as well as Group 5 (MI) which was different from most other groups. It then became necessary to choose between Group 2 (MT) and 3 (MT). Group 3 (MT) was selected because it most closely matched Group 5 (MI) in size, geographical characteristics, lack of sub-offices, education, experience of staff, and lack of administrative changes.

The two-way analysis of variance for the factors size by nursing delivery system showed a significant interaction for these two factors at the F=.002 level of significance. By graphically plotting the means of these four groups it was possible to understand the interaction. For medium sized agencies the nursing care system of "Team/Group" showed a higher quality of nursing care score while with small agencies the relationship was reversed. Therefore it was not possible to discuss the effect of the nursing care delivery system on the quality of care without taking into account the size of the agency. This seems to indicate that as the size, and therefore complexity, of an agency increases the system of nursing care delivery used by the agency becomes an important factor.

Limitations

Many variables impinge on the quality of nursing care provided by a public health agency. Those factors not selected for examination or controlled by the research protocol present limitations to the research findings. While the following is not an exhaustive list, they are the main influential variables: supervisory methods, leadership and/or management styles, staff development and inservice programs, the job satisfaction of staff and supervisors, and the clinical role expectations of staff (Hegyvary & Haussmann, 1976).

The subjective nature of the audit process and the arbitrary categorization of the agencies by size may be considered limitations. The sampling techniques used in the second phase of the study also limited the generalization of the research findings and the conclusions reached.

Conclusions

The research study specifically set out to investigate the effect of the nursing care delivery system on the quality of nursing care provided in Official Ontario Public Health Agencies. Partially because of the small size of the sample used, no conclusive results could be demonstrated. However, some interesting points were identified and differences were apparent in the quality of the nursing care provided by the seven agencies sampled.

It was not possible to prove that any one system of nursing care delivery produced a significantly higher quality of nursing care, although the statistical analysis showed a trend in the direction of the "Team/Group" category.

It would appear that there is not a great deal of difference in the two main systems of nursing care delivery, given that staff in the small agencies are part of small group organizations. Nurses in the "Team/Group" system also tend to function independently and the "Team/Group" acts for support and administrative functions. This similarity of action between the small agencies categorized as "Individual/District" and as "Team/Group", regardless of size, may account in part for the inconclusiveness of the statistical analysis.

Given the above observation, it would appear that the type of system of nursing care delivery is not a major factor affecting the quality of nursing care. However, since the measurement of quality of nursing care differed among the seven agencies sampled, it would seem that other variables may have stronger influence. Further research is required to examine the effects of some of the variables, identified in the limitations, on the quality of nursing care provided in public health agencies.

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RÉSUMÉ

Soins infirmiers: Influence du système de prestation des soins infirmiers en santé publique

L'élaboration et la mise en place de programmes d'assurance de la qualité a fait couler beaucoup d'encre, mais n'a suscité que très peu de recherche visant à identifier ces variables susceptibles d'affecter spécifiquement la qualité des soins infirmiers.

La première phase de la présente étude a été d'identifier les principaux systèmes de prestation de soins infirmiers dans les organismes officiels de santé publique de l'Ontario.

La deuxième phase de l'étude a utilisé une vérification rétrospective des soins infirmiers dans le but de mesurer la qualité des soins offerts par un échantillon d'organismes de différentes tailles faisant appel à deux principaux systèmes de prestation de soins infirmiers identifiés dans la première phase de l'étude. Étant donné la petite taille de l'échantillon, on n'a pu faire apparaître de résultats concluants. Toutefois, l'analyse des données a démontré que la prestation de soins infirmiers par équipe tendait à produire des soins de meilleure qualité.

Il faudra pousser les recherches pour étudier l'effet d'autres variables sur la qualité des soins infirmiers dans les organismes de santé publique.

INTERPERSONAL ATTRACTION AND NURSING NEEDS

Ruth Gallop

Interpersonal attraction is an important factor in the development and maintenance of all relationships. As a clinician, the author observed that individual nurses appeared to have, in their care, patients that they liked and sought out and patients that they appeared to avoid. These observations led the author to speculate on the role of interpersonal attraction in the nurse-patient relationship. Hall (1977) has also identified interpersonal attraction as a relevant area for nursing research. In an earlier descriptive study Hall (1976) observed that patients who were disliked appeared to be neglected by staff in both number of staff contacts and in frequency of mention in reports. Doherty (1971), reviewing studies on interpersonal attraction in psychiatry, suggested that if a patient is liked by the staff he will receive more therapeutic attention.

The major variables associated with interpersonal attraction are similarity, social desirability, reciprocity of liking, and proximity (Hall, 1977). This study examines similarity of perceived and actual nursing needs, and the relationship of this variable to the degree of interpersonal attraction in the nurse-patient relationship. Both perceived and actual similarity have been used to explain interpersonal attraction (Newcomb, 1961). According to Wills (1978), "Similarity of attitude, interest, and value is a basic determinant of interpersonal attraction."

Related Research

Interpersonal attraction has been the focus of a large body of research in psychology and sociology. The most frequently tested variable has been similarity. The "similarity leads to liking" hypothesis is the most general statement occurring in the literature about perceived cognition and feelings (Huston & Levinger, 1978). While much of the basic research has been done in laboratory settings, some important field research has been done. In 1961, Newcomb published his seminal study of the acquaintance process, utilizing a conceptual framework of cognitive balance that will be discussed later in this paper. He did a longitudinal study of interpersonal attraction in a college dormitory where same-sex strangers were brought together to live. He found that high perceived agreement with respect to values was balanced with high attraction. These findings were replicated at a later date (Curry & Emerson, 1970).

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The research on interpersonal attraction in nursing, however, is quite sparse. Studies of the social context of the ward by Shader, Kellam, and Durrell (1967) indicate that initial liking of the patient by nurses appeared to be related to favourable outcomes. Blaylock (1972), and Rickleman (1972) focused on characteristics nurses like or dislike in specific patient populations. Their findings suggest that nurses like conforming, compliant, appreciative, and respectful patients. A small pilot study (n-17dyads) by Mitsunaga and Hall (1979) examined the relationship between interpersonal attraction and perceived quality of medical-surgical care. Their study, the first examining responses of both the nurse and the client, attempted to isolate certain variables. None of the hypotheses linking interpersonal attraction and perceived quality of care was supported. Compliance appeared to be the variable that was most closely associated with the perceived quality of the essential care.

A recent pilot study by Gallop and Wynn (1985) on the phenomenology of the "difficult" patient in the psychiatric setting indicates that interpersonal attraction may be a factor in determining who is perceived as difficult.

Conceptual framework: Newcomb's Theory of Interpersonal Balance

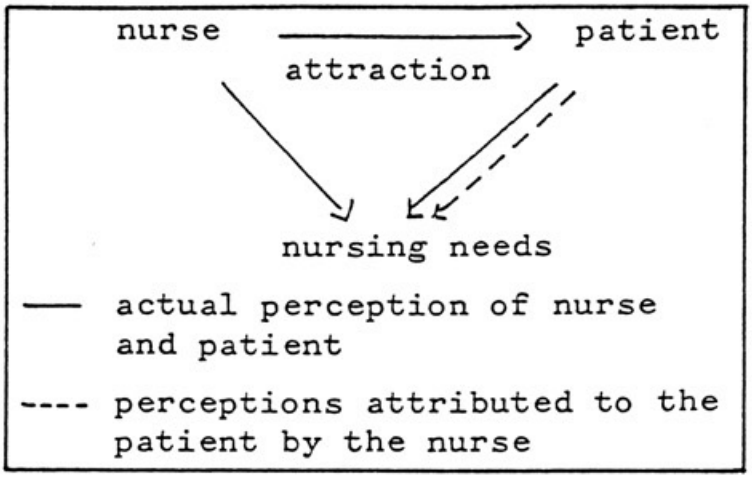
Newcomb's theory of interpersonal balance (1961) as selected as a conceptual framework for this study. Interpersonal balance theory is concerned with the patterns of cognitions that exist in the interpersonal system. Certain patterns are perceived as psychologically more pleasing than other patterns.

According to this theory, when strangers come together, interpersonal attraction appears to be determined by the perceived shared similarity of important attitudes and values. A positive balance occurs when a person perceives the object (person) of interest as sharing the same opinion or attitude about a matter of importance. When a person perceives someone of interest as holding opposing opinions on matters of importance (imbalance), she or he can either try to shift the other person to his or her view (balance), or decide not to like the individual (non-balance). The investigator chose to examine the relationship of the actual and perceived nursing needs of the patient to interpersonal attraction, since nursing needs, it was assumed, would be of importance to the nurse and the patient.

The nurse, in the process of planning care, develops a personal perception of nursing needs. She also attributes a set of perceptions to the patient. According to the theory of interpersonal balance, if these two perceptions are deemed, by the nurse, to be in agreement, interpersonal attraction will be strengthened. Newcomb suggests that, over time, actual similarity of interest may also influence interpersonal attraction. A patient will have his own perception of nursing needs. Agreement between the nurse's perception of needs and the patient's perception of needs may also lead to an increase in interpersonal attraction.

Figure 1

System of Interpersonal Attraction



From this framework, two hypotheses emerged:

1. Interpersonal attraction will vary positively with increased agreement between the nurse's perception of nursing needs and the nurse's perception of what the patient thinks his nursing needs are.

2. Interpersonal attraction will vary positively with increased agreement between the nurse's perception of nursing needs and the patient's perception of nursing needs.

Method

The study was conducted on a general psychiatric unit in a university affiliated psychiatric hospital, using a convenience sample. The portion reported in this paper involved five nurses and 30 patients. Patients were clustered in groups of six around each nurse. Each nurse was required to have worked at least four shifts, day or evening, as primary nurse for the patient. Patients were between the first and third week of admission. All nurses were female, and had a mean age of 40.3. Patients ranged from 18 to 64 years old, with a mean age of 35.6. The patient sample was evenly divided between males and females. Approximately half the sample were experiencing a first admission to this specific unit (51%). As perceived by the nurse, clients fell into three main diagnostic categories: affective disorders (51%); personality disorder (19.7%); and schizophrenia (29.7%). (The total is greater than 100% since five patients were identified in two categories.)

Four measures were required to test the hypotheses:

1. The nurses' perception of nursing needs;
2. The patients' perception of nursing needs;
3. The nurses' perception of what the patient thinks his nursing needs are;

4. Interpersonal attraction of the nurse for the patient.

The Patient Request Form

The Patient Request Form (PRF), as developed by Lazare and Eisenthal (1977), was modified for use in obtaining the first three measures (see Table 1). This instrument was developed to identify requests for help from patients in a psychiatric walk-in clinic.

The original PRF taps fourteen categories of concern. These categories are: confession; succorance; ventilation; psychodynamic insight; control; administrative requests; advice; medical or psychological expertise; reality contact, social intervention, community triage; clarification; and nothing.

Reliability co-efficients for the fourteen categories ranged from .716 to .916. Construct and content validity of the PRF was confirmed by replicated factor analysis (Lazare and Eisenthal, 1977).

Table 1

Examples of Modifications to PRF

Original: (category: succorance)	I want to feel that somebody cares about me.
Modified:	He needs to feel that a nurse cares about him (nurse perspective)
Modified:	I would like to feel that a nurse cares about me (patient perspective)
Original: (category: community triage)	I would like you to tell me who can help me in my community
Modified:	He needs a nurse to tell him who can help him in his community (nurse perspective)
Modified:	I would like a nurse to tell me who can help me in my community (patient perspective)

The original PRF was reduced from eighty-four to sixty-three statements that were modified to reflect nursing needs for the different measures. The original PRF was considered too long for in-patient use. Statements that were eliminated were considered the least relevant reflections of in-patient nursing needs. The

category of "nothing" was eliminated, since the statements did not reflect nursing needs. No statement was eliminated from the categories of succorance, ventilation, or control. One or two statements were eliminated from each of the remaining categories. Reliability for the modified PRF was established by "split-half" reliability techniques. The alpha co-efficients for the three perspectives of the PRF ranged from .96 to .98. Content of the modified PRF was approved by nursing experts who were familiar with the target population. Subjects responded to each statement with a measure of agreement: 1 - not at all; 2 - somewhat; 3 - exactly. The nurse completed two questionnaires: Nurse's Persception of Nursing Needs; and Nurse's Perception of What the Patient Thinks His Needs Are. The patient completed one modified PRF. Measures of agreement were obtained for two sets. One set compared the two measures completed by the nurse (nurse perception/nurse perception of patient). The second set compared the nurses' perception of needs and the patients' perception of needs (nurse perception/patient perception). For each set, statement by statement comparison yielded a numerical measure of agreement between the two PRFs. These were summed to provide a measure of agreement for the set. The smaller the number, the higher the agreement.

The liking scale

Nurses completed a liking scale for each of the patients. The scale consisted of two parts. The first part involved a simple linear analogue (Scale): 1 representing "Dislike" to 7 representing "Like very much". The second part required nurses to signify agreement with statements reflecting levels of like and dislike for the patient (Rank): 1 stated "One of the most likeable", 5 stated "One of the least likeable".

Reliability of the liking scale was established by calculating a reliability co-efficient between the two forms of the scale for each nurse and her group of patients (range of .82 to .95).

Results

The data were analyzed within groups. data for each nurse and her six patients were considered independently from data for other nurses and patients. Measures of agreement and interpersonal attraction (Scale and Rank) for each nurse and her patients are shown in Table 2. The measures of agreement from each set of perceptions were correlated with the Scale and Rank scores of interpersonal attraction (Tables 3 and 4).

Table 2

Measures of Agreement and Interpersonal Attraction

	Measures of Agreement		Interpersonal Attraction	
Nurse	Set I*	Set II**	Scale	Rank
1.	29+	36+	6.2	1
	23	41	6	2
	18	57	7	1
	56	40	4	3
	16	26	6.1	1
	25	79	6	1
2.	58	45	2	5
	23	23	6	2
	30	70	6	1
	20	57	5	2
	68	92	5	3
	50	59	4	3
3.	58	35	5.5	2
	31	83	6	2
	23	41	5	3
	40	112	5	3
	13	48	4.5	3
	31	69	6.7	1
4.	10	29	4	3
	33	87	6	1
	11	46	3	4
	11	73	6	2
	8	44	4	3
	29	72	6	1
5.	25	41	6.6	1
	39	38	3.5	4
	11	137	6	2
	17	42	6	2
	37	67	2.8	4
	52	55	4	3

*Set I: Nurse perception/nurse perception of what patient thinks his/her needs are.

**Set II: Nurse persception/actual patient perception

+ the smaller the number, the greater the agreement

Table 3

Correlational Co-efficients (Spearman RHO) For Nurse Perception/Nurse Perception Patient and Interpersonal Attraction

Nurse Group	Scale	Rank
1	.52	.50
2	.50	.70
3	.44	.39
4	.76*	.85*
5	.81*	.79*

*$p \leq .05$

Table 4

Correlational Co-efficients for Nurse Perception/Patient Perception and Interpersonal Attraction

Nurse Group	Scale	Rank
1	.17	.03
2	.05	.03
3	.14	.08
4	.74	.79*
5	.00	.08

*$p \leq .05$

Comparison of Tables 2 and 3 show that, overall, the co-efficients for actual similarity (nurse perception/patient perception) are much lower than perceived similarity (nurse perception/nurse perception patient) with the exception of Group 4. The measures of agreement (Table 2) obtained from the PRF scores in the two sets of perception were compared. In 85% of all cases there was less agreement about nursing needs as perceived by the nurse and by the patient (actual similarity) than about nursing needs as perceived by the nurse and the nurse's perception of what the patient thinks his needs are (perceived similarity).

Age, sex, number of admissions, and psychiatric disorder, did not demonstrate any statistical relationship to interpersonal attraction.

Discussion

The major thrust of Newcomb's theory of interpersonal attraction suggests that individuals are attracted to others who are perceived to share similar attitudes or values (Hypothesis 1). While the findings for Hypothesis 1 are significant for only two out of five

findings for Hypothesis 1 are significant for only two out of five groups, they suggest that a nurse may show increased liking for a patient she perceives to share similar beliefs about his or her nursing needs.

Hypothesis 2 is not supported. Length of stay may have been a factor in its rejection. Findings by Newcomb (1961) and Curry and Emerson (1970) suggest that actual agreement may be a factor in liking over time. Both studies involved measures taken after several months. Patients in the study reported here were in hospital for a maximum of three weeks.

Nursing authorities have long recognized the need for agreement about nursing needs between the nurse and the patient. Without specific reference to interpersonal attraction, Orlando (1961) stressed the need for the nurse to validate her perceptions of the patient's needs with the patient. King (1981) states, "If role expectation and role performance as perceived by nurse and client are congruent, transaction will occur..." and, "if role conflict is experienced by nurse or client or both, stress in nurse-client interaction will occur" (p.149). Successful application of King's theory of goal attainment requires that the nurse work with her patients to arrive at mutually agreed upon nursing goals.

The difference between the measures of agreement of the two sets may be explained, to some extent, by techniques of data collection, particularly the interval between completion of questionnaires by the nurse. However, the findings do show a lack of validation of the nurse's behaviour by the patient. As a consequence, nurses and their patients did not appear to come to an agreement about the patients' needs. In turn, this could be a factor influencing compliance with nursing interventions, which has previously been identified as a variable in interpersonal attraction.

Nurses profess a concern for the uniqueness of the individual and "recognizes that man's choice of priorities may differ from those of the health team" (University of Toronto, 1981). The limited findings of this study suggest that nurses prefer psychiatric patients who are perceived to want the same care as the nurse thinks they should have. This is not inconsistent with the findings of the nursing researchers mentioned earlier in this paper. All these findings seem to suggest that the priority in the relationship is the preservation of the good feelings of the nurse, rather than the uniqueness or actual needs of the patient.

This study does not attempt to explain why nurses appeared not to be concerned with the validity of the patient's perception. However, this may be any important area for further investigation. Given the emphasis within nursing education on helping patients to identify their health needs and to participate in care planning, why this appeared not to occur is unclear. Perhaps being a psychiatric patient in the early stages of hospitalization is, itself, a factor in participation in health care. Perhaps the nurses felt they had

inquired into the needs of their patients, but had not determined mutually acceptable goals. The nursing history format utilized at this agency asks the question, "What do you want to gain from the hospitalization?" Does information obtained in histories translate into ongoing practice behaviour? Whether or not the need to validate perceptions with patients is internalized by nurses requires investigation.

Clearly, this study suggests that nurses in practice settings should inquire more actively into the nursing needs of their patients. If nurses are to be truly responsive to the needs and choices of their patients, then they must talk to their patients about their own persception of needs, and listen to and appreciate the client's perception of need. By collaboration, nurses and their patients may identify common goals. This fact, in turn, may increase the interpersonal attraction between the nurse and the patient.

The support, albeit limited, for the hypothesis that nurses prefer patients whom they perceive to hold views similar to their own, suggests the need for further investigation of interpersonal attraction. Hall and Mitsunaga (1979) have begun to identify its implications for nursing education. Further research into consequences of interpersonal attraction on nursing care will strengthen the case for its consideration in the education and practice of nurses.

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RÉSUMÉ

Rapport entre la sympathie et les besoins de soins infirmiers

La présente étude corrélative vis à mieux comprendre les effets de l'attirance mutuelle sur les rapports infirmier-malade dans une unité de soins psychiatriques généraux. Dans le cadre conceptuel d'une théorie de l'équilibre inter-personnel, l'étude vise l'examen des rapports entre les besoins perçus et les besoins réels en matière de soins infirmiers et la sympathie. L'hypothèse voulait qu'un rapport existe entre le fait qu'un infirmier éprouve de la sympathie pour un malade et la similitude entre les besoins perçus et réels en matière de soins infirmiers. L'étude rapporte les réponses de 5 infirmiers et 30 malades.

D'après les résultats de l'étude, il semble que la similitude des besoins du malade en matière de soins telle que perçue par l'infirmiere serait un facteur influençant l'estime que porte l'infirmier aux malades. L'étude semble indiquer que les besoins du malade en matière de soins infirmiers ne sont validés ni par l'infirmier, ni par le malade.

ETHICS IN NURSING: THEORY TO PRACTICE

Ruth M. Lamb

Implicit in the **Code of Ethics for Nursing** (Canadian Nurses Association, 1983) and in the **International Council of Nurses Code for Nurses** emphasis on "respect for life, dignity and the rights of man" (Canadian Nurses Association, 1980), is the idea that there is a bond between nursing and society. This bond serves to encourage a relationship of trust and confidence between society and the nurse; moreover, within the profession, it serves as a statement of role morality (Curtin & Flaherty, 1982). While the ethical codes supply the profession with rules, these rules should be understood in the context of underlying ethical theories and principles. This paper deals with the relationship between two ethical theories and nursing practice. The discussion will be focused around a specific hypothetical example.

Normative Ethical Theories

Two ethical theories that are pertinent to nursing require elaboration. They are the teleological theory originated by Jeremy Bentham (1748-1832) and John Stuart Mill (1806-1873), and the deontological theory originally propounded by Immanuel Kant (1724-1804). Reinforcing each theory are principles of ethics, and it is to these principles that nurses must appeal when considering and justifying nursing action.

Teleological theory

Teleological ethical theory, sometimes termed utilitarian theory, is based on the principle of utility that was originally defined by Mill (1972) as the seeking of pleasure and freedom from pain. The original concept of "pleasure" referred to the intrinsic superiority of pleasure that springs from, and contributes to, the dignity of humans of "higher consciousness" (Mill, 1972, p.9). Over time the word pleasure came to have a more colloquial meaning, and Mill's principle drew much criticism. Recently, Beauchamp and Childress (1979) have interpreted "utility" to mean that one ought, in all circumstances, to produce the greatest possible balance for society of value over disvalue, so that cost and suffering is minimized; or benefit is maximized.

Teleological theory can be described as being based on **acts** whereby the consequence of each act is assessed individually, or based on **rules** whereby the end sought is based on maintaining

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social integrity. This latter basis was important to Mill, who always looked to the interest of the whole, and it has become, in general, the more accepted teleological approach.

Problems arise with this theory when efforts are made to characterize the pleasure, value, or benefit of the outcome, whether act or rule teleology is used. This problem becomes critical when long term consequences are being calculated.

Deontological theory

Conversely, deontological theory, sometimes termed formalist theory, is concerned with universal self-consistent values, obligations, and commitments. To Kant (1956), who first stated this theory, an action has moral value when it is rationally willed; is done for the sake of duty; considers persons as ends; and has, at its base, a principle that is acceptable as a fundamental moral law by all rational beings. Here the concept of duty is primary, and is quite independent of the concept of pleasure: the motives for "acceptable" actions are paramount, although outcomes can be taken into consideration.

Rational explanations in deontological theory, unlike teleological theory with its one principle of utility, are based on several fundamental ethical principles. The succeeding ethical principles can be used to defend a position that is critical to the well-being of an individual in the health care system: these are, justice, beneficence, nonmaleficence, autonomy, and veracity.

The principle of justice is based on the idea of human reciprocity and fairness (Rawls, 1978). Two aspects of justice can be considered in relation to the health care system: justice is said to be comparative when the claims made by different individuals compete for ligitimacy, and noncomparative when independent standards are set (Beauchamp & Childress, 1979). The principle of beneficence refers to the duty to take positive steps to enhance the welfare of others (Fagothey, 1963). Beauchamp and Childress (1979) distinguish between aspects of this principle: the conferring of benefits and prevention of harm versus the apportioning of good to provide for the greatest possible overall good. On the other hand, the principle of nonmaleficence is concerned with the moral obligation to consider risks and to weigh them against potential benefits (Beauchamp & Childress, 1979). This is accompanied by the duty to prevent harm. By the principle of autonomy, Kant meant will plus self-legislation in accordance with what would be valid for everyone; in other words, it encompasses the right to act on one's own values, according to one's own beliefs, with a need for the least possible interference from anyone, but, with the stipulation that one would agree that it is acceptable, in general, for others to act in the same or a similar manner (Aune, 1979). Today it is interpreted to mean personal liberty of action when accompanied by the ability to plan and select from socially

acceptable alternate behaviours (Beauchamp & Childress, 1979). The final principle is that of veractiy. It relates to the duty to tell the truth that is part of the respect we owe other persons (Beauchamp & Childress, 1979). Ramsey (1979) goes so far as placing this principle in the realm of fidelity, as it pertains to the bond between "consenting man and consenting man" (p.5). This relationship leads to partnership, and partnership can only be possible when it is based on veracity (Ramsey, 1979). According to Veatch (1976) individual patients have a right and obligation to have the truth. He notes that, "Rarely is withholding information potentially useful or meaningful to the patient to be condoned" (p.248). With the deontological theory, determining which principles to use and which deserve priority can be a challenge requiring considerable analytic thought.

Ethical Principles in Nursing Practice

For both theories, there are limits to what is considered ethically relevant. Ethical relevance is conceptually connected with the situations that require justification for actions. Principles imply rules and it is, in general, these rules that constitute the ICN and CNA codes of ethics and help the nurse to establish his or her duties and obligations. Hence, when adhering to the directive pertaining to respect for life, dignity, and the rights of man, it is necessary for the nurse to know how to apply this rule. Since this rule functions to encourage relations of trust and confidence between society and the professional, the nurse ought to know on what principles decisions are based, and, concomitantly, be aware of the ethical theory he or she is drawing from. Then pertinent facts can be articulated, decisions defended, and actions justified. Often a well substantiated point of view can be arrived at through interdisciplinary dialogue whereby uncoerced agreement on a mode of action is collaboratively decided upon. In these instances, the nurse, in defining nursing's role, has not only to establish his or her duties and obligations and be accountable for all actions, but he or she must also answer to diverse and often conflicting demands from the institution, the administration, the physician(s), the individual involved, and, perhaps, the family.

In seeking answers to ethical questions and then in supporting a nursing position, the nurse uses the nursing process in a broader and more comprehensive manner. Special awareness of the ethical dimension must be maintained as data are collected, analyzed, and interpreted in accordance with the selected conceptual model for nursing. The following outline (see Model 1 in the appendix) suggests a way in which the nursing process can include the ethical dimension of nursing practice. The nursing model would serve to direct the definition of the client, the role of the nurse, the intervention focus and modes, and the anticipated consequences. A hypothetical clinical example provides background for a discussion on theoretical application. This discussion is followed by a more abstract review of nursing responsibility.

Clinical Example

Mrs. K is a 35 year old woman with a history of occasional depressive episodes. She has been at home caring for her two children, aged one and three years. Prior to her first child, she had successfully managed a clothing store. Her husband is a busy executive, working for a computer company.

At present Mrs. K is a voluntary patient in a psychiatric facility and is experiencing her second depressive episode in three years. She has been on medications but now her physician tells her he is going to order a series of ECT treatments. Prior to withdrawing even more, Mrs. K refuses the treatments and asks if something else could be done for her. Meanwhile, her husband, frustrated by the conflicting demands of caring for a depressed wife, two young children, and a demanding job, insists she have the ECT.

Application of Theory

Within the context of this example, a nurse who is cognizant of the rules inherent in the codes of ethics, and who desires to structure nursing practice so that promoting patient rights and supporting patient dignity remain a priority, must formulate a solid rationale for his or her own decisions. Thus the nurse is motivated to add to the concepts, ideals and behaviours that constitute a value system and provide meaning to personal and professional life. This can be done when ethical theories and their respective principles are used effectively. What must the nurse know to develop such an argument? To some extent this is well defined: the nursing process must be used in a systematic and scientific manner. A nursing model is vital because it provides direction for the nursing process; theoretical and technical nursing skills are imperative, and of course, knowledge pertaining to legal requirements and professional standards remains essential; furthermore, all care must be grounded within an ethical ideal such as that espoused by the nursing codes. Then, once ethical theories are learned, promotion of the nursing perspective can be grounded in theory and articulated with support from appropriately selected principles. In short, the situation is examined from an explicitly ethical viewpoint.

With Mrs. K, as relevant data are gathered, it becomes evident that Mrs. K's rights are at risk. The preference she holds - the request for more information and the denial of ECT - is not respected. As data are analyzed it becomes apparent that an ethical conflict exists. Without adequate information and support directed toward increasing Mrs. K's self-determination, it is impossible to maintain a respectful relationship. Her dignity is compromised. The nurse, directed first by one of several nursing models, which, in general, state that the goal of action is to promote optimal functioning, optimal adaption, or independence for the patient, and secondly, by the code for nurses, identifies the

ethical principle perceived to be most at risk. Then, an examination of the interrelationship between the principle(s) and the conflict is undertaken. The nurse must now turn to an analytic comparison of theory and principle as he or she seeks to shift the focus of power and responsibility back to Mrs. K.

Deontological analysis

The concept of respect as addressed by the Code, leads the nurse to consider ethical principles which lead to affirmation of Mrs. K's personhood. At this point the nurse will consider the principle of nonmaleficence and perhaps even beneficence. The questions are: Will nursing interventions be geared toward promoting a positive good (i.e., supporting Mrs. K's request for more information, and then ascertaining what Mrs. K really is willing to have done); or, will nursinsg interventions, at the very least, be directed toward causing no harm (i.e., acquiescing with the medical order, and permitting or promoting it if it is believed no harm is likely to befall Mrs. K)?

On the other hand, the nurse may choose to consider the principle of autonomy: Mrs. K is considered a many faceted being with varying needs and goals, the disease process being but a symptom of lack of need fulfilment. Since nursing models direct the nurse toward considering wellness for the whole person, once again ways of promoting Mrs. K's ability to voice her own perspective - to rule her own being - must be found. Mrs. K's request, its lack of immediate acknowledgement and her subsequent deepening of depression, may suggest that she senses an even greater loss of self control.

Another principle that deserves consideration is the principle of justice. There is no mention of scarce resources, so justice will be considered on the noncomparative basis. What is fair for individuals in this or similar situations? A most difficult question. How do nursing duties and the subsequent need for accountable action relate to nursing motives when this question is answered? While the medical decision may have been based on the physician's concern for the family and its need of a functional mother, and on a belief in the effectiveness of ECT, it nevertheless remains that Mrs. K does not wish ECT and did explicitly request that other treatments be considered. Furthermore, since she did ask if there was not another approach, she does have the legal right to more information. This leads to consideration of the principle of veracity - especially as it pertains to informed concent. Given that truth telling and the providing of information demonstrate respect for the dignity and legal rights of Mrs. K, given that Mrs. K is a voluntary patient and thereby maintains her freedom of choice, and given the fact that she is adverse to having ECT, what does this mean in terms of accountable nursing action? The nurse has the necessary knowledge and legal sanction to disclose a reasonable amount of information. But, is the right to disclose

such information considered to be within the scope of the nursing role?

Application of the deontological theory supports an explicit conceptual basis for justifying a rationale, grounded in the concept of duty as interpreted through various of the aforementioned principles. However, how can a position be stated that fulfils an obligation to Mrs. K, remains professionally accountable (which includes independent, dependent, and interdependent nursing functions), and incorporates full participation as a member of the health care team? Another difficult question. To answer all of these questions it is necessary to determine clearly the relationship between factual data pertinent to the conflict, such as the involvement and perspective of all pertinent others and institutional policies, and the principle selected as being the most important for nursing to uphold. A critical awareness of this relationship leads to formulation of a well articulated statement that promotes the kind of action chosen and gives full professional scope to the nursing role.

Example: Assume that the nurse chooses to base the nursing perspective on the principle of justice. As the nurse completes the assessment phase (see Model 1), the belief that before Mrs. K can become an active participant in her own care and, concomitantly, garner self-respect and that of others, she must know what realistic options are available, and then must be encouraged to explore the potential outcome of each alternative. This rationale leads to a problem statement: Increased withdrawal behaviour consequent to refusing ECT treatments, and a request for more information on treatment alternatives. The planning phase is then initiated, and a request is made for a team conference.

Effective communication is vital at this point. In this instance, the nurse knows that, for nursing, the desired outcome for Mrs. K involves her active participation in the setting of short- and long-term objectives that will assist her in resolving issues that have led to her withdrawn state. Therefore, the nursing perspective is derived from the relationship among justice and fairness and Mrs. K's withdrawn behaviour. In conference, the nurse states the problem, outlines several possible outcomes, and explains the rationale with reference to, for example: the **Patient Bill of Rights**; the legal stipulation that a reasonable amount of information, based on what a reasonable person would consider adequate, is necessary before consent to treatment is considered informed; and the right of the nurse to document patient problems responsibly, as the nursing process and model for nursing dictate.

As team members respond to these points and bring up others, creative alternatives for care can evolve. Once a unified approach is agreed upon, the nurse develops a care plan, which is based on the best possible alternatives, making certain that the plan and the documentation that supports it remain as congruent as possible with the selected principle. (In the event that the treatment option is

not modified, the nurse has voiced a concern, documented a perspective, and thereby stood up for an ethical standard of nursing care.) As the plan of care is implemented, ethical awareness never wavers - the degree to which the selected ethical principle is upheld requires continual reassessment. As the plan is evaluated, the nurse checks for ethical conflict and shifts in conflict, refining the care plan as necessary. What is more, the result of the evaluation can be used to help identify and plan more effective ways of coping with future conflict situations.

Teleological analysis

If, on the other hand, the nurse chooses to substantiate a perspective backed by the teleological theory, with its focus on instrumental value in terms of benefit to society as a whole, the principle of utility is applicable. This principle, as previously addressed, refers to the calculation of greatest value, or benefit. the nurse is required to assess the immediate and long term consequences of the proposed medical decision, versus Mrs. K's specific request. For the nurse to establish a well supported position, alternate interventions, as they relate to the best possible outcome (as far as nursing is concerned), require justification. Moreover, while Mrs. K is to benefit directly the decision should, to remain consistent with rule teleology, be generalizable so that it reflects a general benefit for others in similar situations.

Application of theory here requires that the motive for action be based not on the most expedient action, but on the action felt to be the most beneficial for the consumer in general. A societal sanctioning is required. Hence, the nurse must reflect on limits and ask: How much should Mrs. K, or others in a similar situation, be told? What are the long term consequences of treating others in the same way that Mrs. K is about to be treated? If an exception is made in the case of Mrs. K (i.e., a specific decision regarding this one case, such as in act teleology), then a solid rationale is still necessary and it should be based on limitations previously defined in the institution's policy.

Example: The principle of utility becomes primary and, although the problem statement remains the same, the structure of the argument that supports patient outcomes differs. Instead of the duty oriented premise based on justice and fairness, the nurse now turns to pragmatic arguments that build on what is the most efficient and effective outcome for Mrs. K (i.e., what will maximize benefit and minimize risk). Again, in conference, the nurse cites the problem statement, the potential outcomes, and then substantiates the nursing view by making reference to, for example: those who will most likely suffer if Mrs. K is treated in a way that makes her feel even more dependent and powerless; the fact that Mrs. K has previously been a competent, independent decision-maker in business and needs to recapture these decision-making skills if her young children are to benefit; and the

notion that, if the philosophy and policies of the institution maintain the right of the patient to participate in decision making - or the need to promote self-responsibility in patients - then failure to follow this philosophy can result in a general disregard of policy, which in the end, will have negative effects on consumers and health care professionals alike. In essence, the nurse is pointing out the risks involved if Mrs. K is not encouraged to be autonomous, while indicating that there are risks involved, on an attitudinal level, for the health care team if standards set by the institution are not upheld. Following the conference, a care plan is developed and implemented. Reasoning that supports the focus of the plan is documented on the chart. Again, as in the previous example, a dualistic view of evaluation is taken as decisions regarding the quality of the resolution are made, while, at the same time, content that will promote further learning is sought.

In summary, it should be noted that, although the basis for decision-making may be different (the principle of justice versus the principle of utility), the problem statement and patient outcomes may be the same or similar. The difference lies in the structure of the reasoning. However, it is the quality of the reasoning and the competent way it is presented that will give greater responsibility to the nursing role by broadening the professional nature of nursing practice.

Nursing Responsibility

When a nurse uses the nursing process and nursing model in conjunction with ethical principles, scientifically based humanitarian care is offered. This type of care requires accountable nursing action based on nursing's independent function. Concretely, when our Code directs us to be responsible primarily "to those people who require nursing care," and to "promote an environment in which values, customs, and spiritual beliefs of the individual are respected," we cannot ignore the very deontologic framework evident in the statement, "Inherent in nursing is respect for life, dignity and the rights of man" (Canadian Nurses Association, 1980). We, in the Kantian sense, have a duty - a duty that incorporates accountability to the individual we care for. In this case we are directed to consider universal and self-consistent values that promote dignity and respect for patient rights. Conjointly, consequences viewed via the teleological perspective warrant consideration. Nurses must believe that interventions, while providing benefit for the patient, are good for society in general.

If nurses are to stand firmly as independent practitioners, especially when faced with conflicts attributed to new technology and to the array of invasive therapies available today in health care, we must feel confident of our knowledge in the above areas. We need to concentrate on grounding the Code in daily practice by gaining knowledge of ethical theories and by developing an

We need to concentrate on grounding the Code in daily practice by gaining knowledge of ethical theories and by developing an awareness of the application of their respective principles to the nursing process, and subsequently to nursing care. Once ethical principles are linked to the Code, and are referred to in decisions and justifications for nursing care, we can state an independent nursing judgment with pride and confidence.

However, nurses are not the only members of the health care team; indeed, expertise is shared. When we define the scope and nature of the nursing role, the interdependent or collaborative function becomes important; however, when conferences are held on conflicting issues in patient care, nurses should clearly state their independent viewpoints. This means that the nurse, using analytic abilities and communication skills, can present Nursing's position with as much force as other disciplines present their views. Then, in cooperation, it becomes possible for complex human problems to be resolved in a manner whereby all members of the health care team listen to and assist competent patients as they participate in designing their own care plan.

Thus, the nursing role evolves, and as nurses become more sure of themselves, and of the right of the nursing profession to develop the independent and interdependent dimensions of its role, the profession will grow as will the nurses.

Conclusion

Many nurses are caught in a dilemma. Arsokar and Veatch (1977) and, Curtin and Flaherty (1982) note that nurses often revert solely to their dependent role, making few significant contributions in times of conflict. It follows, then, that there are times when nurses permit, or even promote, a medically devised plan of action when they either feel unconvinced professionally of its benefit or value, or when they realize that the individual they are caring for has not been adequately consulted.

This paper refers to the duties promulgated in codes of ethics for nurses (Canadian Nurses Association, 1980 & 1983), and deepens the grounding for the rules within the codes by using the nursing process to outline how two ethical theories and their respective principles can relate to a concrete case.

Since there is a difference in the character of the theories, one may suit the temperament of certain nurses more than the other, or suit one situation better than another. Nevertheless, each theory, when used with the nursing process as recommended, can lead to principled reasoning that reinforces the independent function of the nurse's role. Moreover, a well substantiated viewpoint provides the basis from which to begin interdependent decision-making.

In conclusion, all nursing codes speak to the moral quality of nursing acts and outline certain standards for ethical behaviour. In fact, the new CNA **Code of Ethics for Nursing** (Canadian Nurses Association, 1983), in stating, "It is the obligation of nurses to communicate the conditions essential to nursing practice to other disciplines and to society," requires that nurses know how to formulate a well thought out nursing position. Hence, knowledge of ethical theories and principles used in conjunction with the Code and linked to an explicit nursing framework, while admittedly a complex undertaking, is a feat most necessary to modern day humanitarian and caring professional nursing practice.

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Model 1

The Nursing Process: An ethical expansion

Assessment

Objective: Collection and analysis of relevant data

1. Gather relevant data

   (a) Elicit pertinent background information re past and present (the nursing model directs you to do this)
   (b) Ascertain the client's perspective
   (c) Identify the meaningful others
   (d) Gain their perspective on the situation
   (e) Acknowledge institutional philosophy and policies pertaining to this issue.

2. Analyze relevant data

   (a) Specify nature of ethical conflict
   (b) Identify ethical theory
   (c) Identify pertinent ethical principle(s)
   (d) Determine the interrelationship between the conflict and the principle(s)
   (e) Identify priority ethical principle(s)
   (f) Develop problem statement(s) based on ethical principle(s).

Planning

Objective: Identification of real and/or potential problems accompanied by a goal statement

1. Utilize resource personnel

   (a) Involve nursing administrators, family, pastoral services and other members of health care team as necessary
   (b) Call team conferences as appropriate
   (c) Identify alternatives for care based on the selected principle(s).

2. Develop care plan

   (a) Plan nursing care based on the best possible alternative
   (b) Document reasoning justifying nursing action(s) as directed by ethical principle(s).

Implementation

Objective: Activation of nursing care plan

1. Validate care plan
   (a) Validate plan with client and appropriate family members as well as with pertinent members of the health care team.

2. Assess care plan

   (a) Identify effect of nursing care
   (b) Clarify degree to which selected ethical principle(s) are upheld
   (c) Assess the continuing complexity of the conflict.

3. Augment the care plan

   (a) Provide additional necessary nursing input
   (b) Support the client and the family
   (c) Update appropriate members of the health care team.

Evaluation

Objective: Critical review of outcomes and pertinent refinement

1. Focus on problem resolution

   (a) Compare outcome(s) to goal(s)
   (b) Ask, does ethical conflict persist? or, has the focus shifted?
   (c) Refine care plan as necessary.

2. Consider ethical dimension

   (a) Clarify degree to which ethical principles were upheld
   (b) Summarize principles which were overruled
   (c) Discern degree to which conflict resolution met the standards espoused by the code of ethics
   (d) Share outcome of comparison with health care team
   (e) Accept feedback
   (f) Plan more effective ways of coping with future conflict situations.

RÉSUMÉ

Soins infirmiers et déontologie: De la théorie à la pratique

Les codes de déontologie ont été mis au point pour offrir des lignes directrices aux infirmiers. Cependant, quand des situations conflictuelles apparaissent en milieu clinique, il arrive souvent que les infirmiers ne savant pas comment utiliser ces directives pour proposer des justifications fondées de leurs interventions infirmières. Le présent article fait état de deux théories morales qui s'appuient sur des codes de déontologie; on démontre également comment ces préceptes et ces principes contribuent à leurs théories respectives et offrent un exemple de la façon dont l'analyse théorique peut avoir des applications pratiques en soins infirmiers.

LES PRINCIPAUX FACTEURS DÉCISIONNELS RELATIFS À L'UTILISATION CONTRACEPTIVE CHEZ DES ADOLESCENTES

Denise Moreau

Chaque année, de plus en plus d'adolescentes sont actives sexuellement et ce, à un âge de plus en plus précoce. Cependant, il semble que la décision d'avoir des relations sexuelles ne soit pas nécessairement liée à l'utilisation contraceptive. En effet, malgré l'information fournie et la disponibilité des méthodes contraceptives, plusieurs adolescentes ont des relations sexuelles sans protection contraceptive.

Divers facteurs peuvent influencer la décision contraceptive et plusieurs chercheurs s'y sont intéressés. Ces facteurs se regroupent autour des aspects psycho-socio-cognitifs, de l'estime de soi et du foyer de contrôle. La présente étude souhaite mettre en évidence les facteurs les plus significatifs dans cette prise de décision à partir du modèle adapté de prise de décision de Miller (1978).

Revue de la littérature

Les problèmes reliés à la sexualité et à la contraception chez les adolescentes

La fréquence des rapports sexuels chez les adolescentes a augmenté considérablement. Selon Needle (1977), 42 pour cent des jeunes américaines de 15 à 19 ans sont actives sexuellement. Les données québécoises rejoignent l'estimation américaine puisqu'environ la moitié de l'ensemble des adolescents québécois de 13 à 18 ans ont une vie sexuelle active (Fédération du Québec pour le planning des naissances, 1979). Les adolescentes sont jeunes lorsqu'elles deviennent sexuellement actives, soit vers quinze ou seize ans. Leur maturité physiologique est atteinte plus rapidement qu'auparavant. En effet, la moyenne d'âge des ménarches a décliné d'un an en l'espace de trente ans passant ainsi de treize ans et demi à douze ans et demi (Cutright, 1971). Selon Hubinont (1982), le rajeunissement séculaire de l'âge de la puberté et de l'apparition des caractéristiques de la fertilité vont de pair avec une possibilité anatomique de rapprochement sexuel, tant chez le garçon que chez la fille. De plus, notre société moderne par le cinéma, la télévision, etc... a suscité l'intérêt des adolescentes en valorisant le plaisir entourant la sexualité, pouvant les inciter à être plus actives sexuellement.

Ainsi, la question de la contraception se pose tôt dans la vie des adolescentes, et souvent de façon urgente. Mais, la décision

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de choisir et d'utiliser une méthode ne semble pas se faire si facilement, puisqu'on dénombre encore plusieurs grossesses. En effet, au Québec, de 1973 à 1977, on notait un nombre total de grossesses et d'avortements variant entre 7,000 et plus de 10,000 chez les 12-19 ans (Statistique Canada, 1976). L'Association canadienne pour le planning des naissances estime à 85 pour cent le nombre d'adolescentes qui ont une première relation sexuelle non protégée et que 16 pour cent d'entre elles sont devenues enceintes au premier coït (Carson, 1980). Il s'écoulerait parfois de 6 mois à 1 an avant que les jeunes sexuellement actifs s'informent et utilisent la contraception (Apkom, Apkom, & Davis, 1976; Zelnik & Kantner, 1977).

Au début de sa vie sexuelle l'adolescente s'exprime spontanément et sa première relation est rarement planifiée. Elle se sent plutôt mal à l'aise dans sa sexualité et l'intègre difficilement dans sa vie. L'adolescente vit sa sexualité dans l'ambivalence et la culpabilité, en ce qu'elle ne se reconnaît pas comme une personne sexuellement active pour diverses raisons comme le fait d'avoir des relations sexuelles peu fréquentes et épisodiques ou par peur de ce que vont penser ses parents. Cette reconnaissance semble pourtant très importante. Plusieurs recherches dans le domaine de la contraception ont démontré que l'acceptation de sa propre sexualité pour l'adolescente est le facteur le plus intimement relié à l'utilisation contraceptive, encore plus que les connaissances acquises en matière de sexualité et de contraception (Cvetkovich, Grote, & Bjorseth, 1975; Gabrielson, & Gabrielson, 1972).

Le processus de prise de décision

Il n'existe pas de théorie pouvant nous permettre d'expliquer le comportement des personnes en matière de contraception (Cvetkovich et al., 1975). Cependant, Miller (1978) s'est penché sur le processus de prise de décision des femmes devant subir une contraception chirurgicale. Selon cet auteur, le processus de décision comporte trois phases principales: (1) la pré-décision, (2) la décision proprement dite et (3) la phase qui suit l'intervention ou post-intervention. Chaque phase implique au moins une démarche intellectuelle influencée par certains facteurs de l'environnement et certaines dimensions psychologiques pertinentes à la prise de décision. Le modèle de prise de décision de Miller constitue le cadre de référence de cette étude et est adapté selon les buts poursuivis, à savoir, la connaissance des facteurs décisionnels qui entraîne, à l'adolescence, l'utilisation de la contraception.

Seulement les deux premières phases sont adaptées pour cette étude. Il s'agit de la pré-décision et de la décision proprement dite. Chaque phase est influencée par certains facteurs psychologiques, sociologiques et cognitifs.

La phase pré-décisionnelle est l'étape où la jeune fille a

commencé ou prévoit commencer à avoir une vie sexuelle active. Sa perception de la sexualité, de la grossesse et de la contraception, les connaissances qu'elle possède quant à son corps et à la contraception et le fait qu'elle soit sexuellement active sont des facteurs qui influencent son passage à la phase décisionnelle.

À partir du moment où l'adolescente accepte et reconnaît sa sexualité, qu'elle reconnaisse ou non la possibilité d'une grossesse, elle entre dans l'étape de la décision. C'est souvent à la suite d'un événement particulier de sa vie tels que la grossesse ou l'avortement d'une amie, un retard dans ses menstruations, le copain qui ne veut pas prendre de chance, qu'elle prend conscience de la nécessité d'utiliser une méthode contraceptive. Cette prise de décision amène l'adolescente à réfléchir sur les différentes méthodes contraceptives existantes. Elle commence à chercher de l'information. Elle en discute avec ses amies, son partenaire, sa mère, puis décide de consulter une personne-ressource comme l'infirmière du collège, le médecin, un sexologue ou autres.

La période de réflexion terminée, la jeune fille est maintenant en mesure de prendre une décision à partir des connaissances qu'elle possède quant à son corps et aux différentes méthodes contraceptives, c'est la période de l'engagement par laquelle l'adolescente décide d'utiliser ou non une méthode. Si elle décide d'en utiliser une, elle fait son choix et passe à l'action, soit à la dernière étape de la prise de décision. La façon de passer à l'action ou d'appliquer la décision sont toutes deux influencées par la disponibilité des ressources communautaires et leur accessibilité ainsi que par le niveau d'initiative de l'adolescente.

Les facteurs sous-jacents au choix d'une méthode contraceptive

Les aspects psycho-socio-cognitifs: Les aspects psycho-socio-cognitifs s'avèrent importants étant reliés à la sexualité, à la grossesse et à la contraception. Parmi les facteurs psychologiques, il faut mentionner que l'adolescente de par sa nature n'est pas encline à se protéger. Elle ne pense pas à la grossesse et ne croit pas que ça puisse lui arriver. Elkind (1967) déclare que beaucoup de jeunes filles deviennent enceintes en partie parce que leur fabulation les convainc que la grossesse est un événement qui ne peut leur arriver et qu'aucune précaution n'est alors nécessaire. Plus encore, la pensée magique, typique à l'adolescence, lui fera penser que tout s'arrangera par miracle. L'adolescente peut aussi refuser la contraception parce que certaines méthodes interfèrent dans la spontanéité, la beauté, la sincérité de l'acte sexuel, ou encore soucieuses de leur corps, elles craignent les effets secondaires de ces méthodes (Rey-Stocker, 1977). Le manque de motivation à utiliser une méthode contraceptive de façon efficace et continue serait un autre facteur important à considérer (Gaspard, 1980; Zelnik, & Kantner, 1977). Les adolescentes sexuellement actives ne sont pas motivées à

utiliser la contraception pour différentes raisons; elles croient que leur jeune âge les protège de devenir enceintes; leurs relations sexuelles sont peu fréquentes et épisodiques; elles ont des relations sexuelles à un moment du mois qu'elles ne considèrent pas dangereux (Goldsmith et al., 1972; Kantner, & Zelnik, 1973; Shah, Zelnik, & Kantner, 1975). Toutefois, il semble que le facteur psychologique le plus important relié à l'utilisation efficace et continue d'une méthode contraceptive soit pour l'adolescente l'acceptation de sa propre sexualité (Goldsmith, et al., 1972).

Au niveau social, l'inquiétude de l'opinion anticipée des tiers peut influencer la décision contraceptive de l'adolescente. En effet, l'ensemble des réactions de la famille et de la société vis-à-vis les actions de l'adolescente constitue une forme de jugement de valeurs et l'anticipation de ces opinions serait un élément important de leur égocentrisme. L'adolescente fait face à un dilemme, d'une part elle est envahie par une société saturée de sexe et subit l'influence de ses amies qui racontent leurs expériences, d'autre part à la maison les parents ne parlent pas ou parlent très peu de sexe et n'acceptent généralement pas le fait que leurs adolescents aient une vie sexuelle active (Grenon-Plante, 1982).

Au point de vue cognitif, le facteur le plus important semble provenir d'une mauvaise ou d'un manque de connaissance sur la sexualité et la contraception (Gaspard, 1980; Needle, 1977). De plus, comme le dit si bien Gaspard (1980), en plus d'être souvent insuffisante et malaisée d'accès, l'information est en retard sur la pratique sexuelle spontanée des adolescentes ou ne répond pas à leurs besoins réels. Enfin la disponibilité et l'accessibilité à la contraception sont des aspects non négligeables.

L'estime de soi: L'estime de soi se définit par les perceptions que l'individu a de sa propre valeur. Ce sentiment de valeur dépend des opinions et des réactions qu'ont des personnes significatives envers lui. Plusieurs données de recherche se rapportant à l'estime de soi et à la contraception se sont révélées consistantes. L'étude de Kantner et Zelnik (1973) rapporte une association entre l'utilisation contraceptive et la perception de soi. Dans cette étude, plus les jeunes filles se pensaient hautement susceptibles de concevoir, plus elles utilisaient la contraception. D'autres recherches confirment celle de Kantner et Zelnik (1973), quant à une utilisation contraceptive efficace directement associée à un degré élevé de la perception de sa compétence et/ou à une évaluation positive de soi (Fox, 1975; Lundy, 1972; MacDonald, 1970).

Une image de soi positive et un mode de vie sain sont les résultats de l'acceptation de sa sexualité et seraient des facteurs critiques pouvant influencer les jeunes sexuellement actifs à recourir à la contraception (Kantner, & Zelnik, 1973; Needle, 1977). Les filles ayant une haute estime d'elles-mêmes manifesteraient des attitudes positives envers l'utilisation des

contraceptifs oraux, seraient moins embarassées d'obtenir de l'information à propos de la contraception et seraient plus efficaces et consistantes dans son utilisation (Herold, Goodwin, & Lero, 1979).

Le foyer de contrôle: Le foyer de contrôle est le degré de maîtrise qu'une personne croit avoir sur son état de santé, par ses comportements. Il peut être d'origine interne ou externe. L'individu qui croit que son état de santé relève de son comportement se perçoit comme ayant un foyer de contrôle interne. A l'opposé, celui qui croit que des facteurs tels que le hasard, la chance ou des personnes plus puissantes que lui déterminent son état de santé, se perçoit comme ayant un foyer de contrôle externe et ou de chance. (Segal, & Ducette, 1973; Wallston, Wallston, & DeVellis, 1978).

Certains auteurs ont rapporté l'existence d'un lien entre l'usage de contraceptifs et les dimensions du foyer de contrôle (Fox, 1975; Lundy, 1972). En effet, certaines études indiquent que parmi les adolescentes qui sont actives sexuellement, celles qui ont un foyer de contrôle interne utilisent davantage la contraception comparativement aux adolescentes ayant un foyer de contrôle externe (Fox, 1975; Lieberman, 1981; Lundy, 1972; MacDonald, 1970).

Il faut cependant noter que dans ces études, les chercheurs ont utilisé différents instruments pour mesurer le foyer de contrôle et toutes ces échelles se rapportaient à des attentes générales et non à des comportements spécifiques en matière de santé. Les récentes études de Wallston et al. (1978) ont démontré qu'il était plus utile de se servir d'une échelle de foyer de contrôle spécifique au domaine que l'on veut étudier pour mieux prédire les comportements qui y sont reliés. Ayant été influencés par les travaux de Rotter (1966) et de Levenson (1973), Wallston et al. (1978) ont élaboré leur propre échelle visant à mesurer le foyer de contrôle d'une personne afin d'augmenter la compréhension des comportements de santé.

Méthode

But de cette étude

Le but de cette étude consistait à identifier les principaux facteurs décisionnels relatifs à l'utilisation contraceptive chez des adolescentes de niveau collégial.

La revue de la littérature portant sur les principaux facteurs pouvant influencer l'utilisation contraceptive des adolescentes a permis de soulever les questions de recherche suivantes:

La décision de l'adolescente d'utiliser ou non une méthode contraceptive est-elle influencée par des facteurs psychologiques

tels que: les perceptions de sexualité, de grossesse et de contraception?

La décision de l'adolescente d'utiliser ou non une méthode contraceptive est-elle influencée par des facteurs sociologiques tels que: son histoire sexuelle, les personnes et les événements qui lui sont significatifs?

La décision de l'adolescente d'utiliser ou non une méthode contraceptive est-elle influencée par son niveau de connaissances quant à son corps et à la contraception?

La décision d'utiliser ou non une méthode contraceptive chez l'adolescente est-elle associée à son niveau d'estime de soi?

La décision d'utiliser ou non une méthode contraceptive chez l'adolescente est-elle associée à l'origine de son foyer de contrôle?

Définition opérationnelle des variables

Variables dépendantes

A) Utilisation d'une méthode contraceptive: Dans le cadre de cette recherche, cette variable réfère à une infécondité volontaire, obtenue par des moyens mécaniques comme le stérilet et le condom et par des moyens naturels tels que la méthode ogino-knauss, le retrait prématuré (onanisme).

Variables indépendantes

A) Perceptions de sexualité: Façon de concevoir la grossesse.
B) Perceptions de contraception: Façons de concevoir et d'expériencer la contraception.
C) Histoire sexuelle: Evénements qui caractérisent l'évolution de la vie sexuelle active de l'adolescente.
D) Niveau de connaissances quant à la contraception: Qualité et quantité de notions que possède l'adolescente se rapportant à chacune des méthodes contraceptives relativement à la nature, l'utilisation, l'efficacité et les effets secondaires.
E) Estime de soi: Evaluation affective que l'individu fait de sa propre valeur.
F) Foyer de contrôle: Le degré de maîtrise, qu'une personne croit avoir sur son état de santé, et qui est manifesté par ses comportements.

Caractéristiques du milieu et formation de l'échantillon

L'étude a été effectuée dans un collège de la région de l'Estrie au Québec. Pour constituer l'échantillon, douze (12) classes de cours ont été choisies au hasard parmi toutes les disciplines du collège à partir des horaires de cours. Parmi les 131 adolescentes qui ont accepté de participer à l'étude, 9 d'entre elles ont été éliminées pour les raisons suivantes: 5 sujets étaient âgées de 21 ans et plus, et 4 autres sujets avaient répondu de façon incomplète au questionnaire. L'échantillon final comprenait 122 adolescentes répondant aux critères de sélection suivants: être âgée de 16 à 18 ans, être inscrite à plein temps au programme général ou professionnel du collège, accepter de participer volontairement à l'étude et de répondre à un questionnaire écrit, puis comprendre et communiquer en français.

Afin de favoriser l'analyse des données à partir de l'échantillon, trois cohortes ont été formées en considérant: l'activité sexuelle conjointement avec l'utilisation contraceptive (groupe AC); l'activité sexuelle sans utilisation de la contraception (groupe A); et l'inactivité sexuelle et contraceptive (groupe NA).

Les adolescentes contactées étaient libres d'accepter ou de refuser de participer à l'étude. Des informations furent données quant à la nature de leur participation et la confidentialité des données recueillies. Ces informations étaient d'abord fournies de façon verbale, soit dès le début de la rencontre de chacun des groupes, puis répétée de façon écrite dans une lettre qui apparaissait au tout début de chaque questionnaire.

Instruments de mesure

Questionnaire-décision sur le choix d'un contraceptif

Ce questionnaire de type semi-structuré était composé de 60 questions. Il avait pour but de recueillir les données relatives aux aspects psycho-socio-cognitifs pertinents au cheminement de l'adolescente lors de la pré-décision et de la décision sous-jacentes au choix d'une methode contraceptive.

Son contenu a été élaboré à la suite d'une revue extensive des écrits portant sur divers aspects de la contraception. L'adolescente répondait elle-même au questionnaire selon quatre modalités: en faisant un choix à l'aide d'une échelle de type Likert formée en quatre points: en répondant par "vrai" ou "faux" à une liste d'énoncés; en répondant de façon ouverte et en faisant un choix de réponses parmi des choix multiples. Un pré-test a été effectué auprès de quatre adolescentes ne faisant pas partie de l'échantillon. À la suite du pré-test, quelques questions ont été reformulées plus clairement et deux questions ouvertes ont été transformées en questions à choix multiples. Le temps requis pour compléter le questionnaire variait entre 30 et 40 minutes.

Échelle estime de soi de Rosenberg

La version originale du "Rosenberg Self esteem Scale" (RSES, 1965) a été traduite en français par l'Écuyer en 1978. Cette échelle d'estime de soi se présente sous la forme d'un questionnaire très bref composé de dix questions auxquelles il est possible de répondre en deux ou trois minutes. Le sujet répond lui-même au questionnaire en faisant un choix à l'aide d'une échelle formée de quatre points allant de "tout à fait en désaccord" à "tout à fait en accord". Les réponses permettent de classer les gens sur un même continuum allant d'une très haute estime de soi à une très faible. Cette échelle vise à mesurer minutieusement l'aspect d'acceptation de soi inhérent à l'estime de soi. Le coefficient de reproductivité, quand on utilise l'échelle de Guttman, est de 0,92 et la valeur scalaire est de 72 pour cent (Robinson, & Shaver, 1973). Silber et Tippet (1965) ont trouvé une fidélité **test-retest** de 0,85 (N=28) après une période de deux semaines. Toutefois, cet instrument peut être utilisé sans le groupement des items que nécessite la méthode Guttman (Robinson, & Shaver, 1973). Aussi, pour les besoins de cette étude une échelle additive de type Likert a été utilisée.

Échelle foyer de contrôle de Wallston et al.

L'échelle de foyer de contrôle de Wallston (1978) comprend 18 énoncés formulés de deux façons différentes et qui couvrent les trois dimensions du foyer de contrôle. L'échelle de foyer de contrôle utilisée dans cette étude est une traduction française de la version A, du **Multi-dimensional Health Locus of Control (MHLC)** de Wallston et collaborateurs (1978). Des épreuves de validité et de fidélité ont été effectuées sur la version originale. Les résultats permettent d'attribuer à l'outil une valeur de prédiction de l'état de santé de la personne. Un foyer de contrôle interne est relié à une perception positive de l'état de santé ($r=.403$; $p < .001$) alors que l'élément chance est relié de façon négative à l'état de santé ($r=-.275$; $p < .01$) et qu'il n'y a pas de lien entre les plus puissants que soi et la perception de son état de santé ($r=-.005$).

Déroulement de la collecte et l'analyse des données

Les données ont été recueillies les 9, 10, 11 et 14 mars 1983. Auprès des groupes chaque rencontre a duré environ une heure et a été faite à l'heure et au local où chacun de ces cours est habituellement donné. Avant la distribution des questionnaires les garçons étaient invités à se retirer, ainsi que les adolescentes non désireuses de participer. Les questionnaires étaient finalement recueillis au fur et à mesure qu'ils étaient complétés.

L'analyse des données a été faite autour des trois cohortes préalablement formées selon les critères décrits précédemment.

La comparaison entre les groupes a permis d'identifier les facteurs les plus susceptibles d'influencer la décision de l'adolescente quant au choix d'utiliser ou non une méthode contraceptive. Des statistiques descriptives ont d'abord servi à caractériser l'échantillon et à visualiser l'ensemble des variables dépendantes et indépendantes. Des analyses inférencielles tels que: l'analyse de variance multivariée et l'analyse discriminante ont été effectuées en vue de répondre aux questions de recherche. L'analyse de variance multivariée de type Manova a été utilisée afin de mesurer statistiquement s'il y avait une différence entre les groupes au niveau de l'effet dynamique de l'ensemble des perceptions de sexualité, de grossesse et de contraception et de l'ensemble des connaissances quant à son corps et à la contraception. L'analyse discriminante a fait suite à une réponse positive de l'analyse multivariée, et avait pour but de déterminer par ordre d'importance les variables responsables de cette distinction des groupes. Le seuil d'acceptation des résultats pour être statistiquement significatif a été fixé à $p < 0,05$. Entre la signification de $p > 0,05$ et $p < 0,10$ le terme tendance a été utilisé dans l'interprétation.

Présentation des résultats

Les tableaux 1,2,3,4,5 présentent les résultats de l'analyse de variance multivariée pour les perceptions de sexualité, de grossesse et de contraception et pour les connaissances de l'adolescente quant à son corps et à la contraception.

L'analyse multivariée des perceptions de sexualité n'a pas permis de différencier les groupes de façon significative mais une tendance statistique peut certainement être admise avec un $p < 0,10$ (Tableau 1).

Tableau 1

Analyse de variance multivariée* selon les perceptions de sexualité entre les groupes

Source de variations	Wilks Lambda	Valeur "F"	p
Groupes	0,78588	1,52217	0,084

* d.l.: 18,214

A l'analyse discriminante deux perceptions ont été retenues comme étant particulièrement significatives, il s'agit de: "je n'aurai pas de relations sexuelles avant plusieurs années, je n'ai

donc pas besoin de planifier une méthode contraceptive" avec un "r" = 0,72 et "je pense que c'est une bonne idée de "coucher avec son ami" avant le mariage" avec un "r" = 0,72.

Au niveau des perceptions de grossesse, les résultats de l'analyse multivariée montrent une différence significative entre les groupes: $p < 0,001$ (Tableau 2).

Tableau 2

Analyse de variance multivariée* sur les perceptions de grossesse entre les groupes

Source de variations	Wilks Lambda	Valeur "F"	p
Groupes	0,80147	4,52424	.001

* d.l.: 6,232

Dans l'analyse de la composition des fonctions canoniques pour les perceptions de grossesse, toutes les perceptions à l'étude sont à considérer dans la différence entre les groupes. Cependant, la perception suivante apparaît la plus importante: "Au fond de moi-même ça se pourrait que j'aie envie de devenir enceinte maintenant" avec un r = 0,95. L'analyse multivariée révèle une différence significative entre les groupes pour les perceptions de contraception avec un $p < 0,001$ (Tableau 3).

Tableau 3

Analyse de variance multivariée* sur les perceptions de contraception entre les groupes

Source de variations	Wilks Lambda	Valeur "F"	p
Groupes	0,59275	3,65278	.001

* d.l.: 18,220

À l'analyse de la composition des fonctions canoniques, ce sont les perceptions suivantes qui, par ordre d'importance, se sont avérées les plus discriminantes: "Si j'ai des relations sexuelles occasionnelles, je n'ai pas besoin d'utiliser une méthode

contraceptive" r = 0,73), "C'est gênant de demander au garçon de se retirer ou d'utiliser un condom" (r = 0,71), "Il n'y a pas de méthode fiable, une fille peut devenir enceinte de toute façon si elle "couche" (r = 0,55).

L'analyse multivariée quant aux connaissances des adolescentes face à leur corps démontrent une tendance vers une différence statistique entre les groupes avec un $p < 0,10$ (Tableau 4).

Tableau 4

Analyse de variance multivariée* sur l'ensemble des connaissances quant à son corps entre les groupes

Source de variations	Wilks Lambda	Valeur "F"	p
Groupes	0,78986	1,48833	0,096

* d.l.: 18,214

Les résultats de l'analyse multivariée démontrent qu'il n'y a pas de différence ($p > 0,10$) entre les groupes quant à leur niveau de connaissances (Tableau 5).

Tableau 5

Analyse de variance multivariée* sur l'ensemble des connaissances quant à la contraception entre les groupes

Source de variations	Wilks Lambda	Valeur "F"	p
Groupes	0,62027	0,93280	0,601

* d.l: 48,166

Histoire sexuelle: personnes et événements significatifs

En raison du caractère multidimensionnel des facteurs sociologiques à l'étude, seules des analyses descriptives ont pu être effectuées en vue de répondre à la deuxième question de recherche. Les résultats de ces analyses descriptives ont permis de tracer le profil sociologique des adolescentes des groupes A et AC. Leur profil est différent. Les caractéristiques qui les

différencient sont les suivantes: les adolescentes du groupe AC ont une vie sexuelle plus active et plus organisée. Les parents de ces adolescentes sont plus informés et semblent davantage en accord avec l'activité sexuelle de leurs filles. C'est d'abord avec une amie plutôt qu'avec la famille que ces adolescentes discutent de sexualité et de contraception. Enfin, le premier critère considéré dans le choix d'une méthode contraceptive pour le groupe AC est de ne pas avoir à planifier ses relations sexuelles, contrairement au groupe A qui souhaite d'abord une méthode facile à utiliser.

Au tableau 6, les résultats du test de signification de l'estime de soi utilisant la somme des carrés par séquence permettent de conclure que dans cette étude, l'estime de soi n'est pas un critère de différenciation entre les groupes.

Tableau 6

Test de signification de l'estime de soi utilisant la somme des carrés par séquence

Source de variations	X	d.l.	(X)	F	Sig. de. F
Groupes	34,227	2	17,113	.373	.689

L'analyse de variance multivariée indique qu'il n'existe pas de différence statistique significative ($p > 0,10$) entre les groupes quant à l'origine de leur foyer de contrôle (Tableau 7).

Tableau 7

Analyse de variance multivariée* sur l'origine du foyer de contrôle entre les groupes

Source de variations	Wilks Lambda	Valeur "F"	p
Groupes	0,95601	0,887	.505

* d.l.: 6,234

Interprétation des résultats

Les analyses descriptives et inférencielles ont permis de répondre aux questions de recherche. En réponse à la première question nous pouvons conclure que pour les trois cohortes de l'étude, les perceptions de sexualité, de grossesse et de contraception sont légèrement associées à la décision d'utiliser ou non une méthode contraceptive (Tableaux 1-2-3).

En réponse à la deuxième question, nous pouvons conclure que le profil sociologique étant différent, les facteurs sociologiques ont probablement un effet sur la décision d'utiliser ou non une méthode contraceptive chez des adolescentes sexuellement actives.

À la troisième question de recherche, le résultat des différentes analyses statistiques permet de répondre que le niveau de connaissances de l'adolescente quant à son corps et à la contraception n'a pas d'effet sur la décision d'utiliser ou non une méthode contraceptive.

Le niveau d'estime de soi n'étant pas un critère de différenciation entre les groupes, non pouvons répondre à la quatrième question de recherche, qu'il s'avère peu probable que la décision d'utiliser ou non une méthode contraceptive soit associée au niveau d'estime de soi de l'adolescente.

Pour répondre à la dernière question, il semble, d'après les analyses effectuées, que l'origine du foyer de contrôle ne soit probablement pas associée à la décision contraceptive. Il n'y a pas de différence entre les groupes, c'est un foyer de contrôle d'origine interne qui prédomine pour l'ensemble des adolescentes de cette étude.

Conclusion

Le but de la présente étude consistait à identifier les principaux facteurs décisionnels affectant la décision d'utiliser ou non une méthode contraceptive chez des adolescentes de niveau collégial.

La discussion des résultats a permis d'arriver à quelques conclusions pertinentes pouvant être utiles aux infirmières qui travaillent en milieu scolaire et communautaire. D'abord les perceptions de sexualité, de grossesse et de contraception ont un effet sur la décision contraceptive. Il serait intéressant dans une étude ultérieure, d'explorer davantage les perceptions et surtout les perceptions de grossesse et de contraception. De plus, le profil sociologique des adolescentes sexuellement actives est différent selon qu'elles utilisent ou non une méthode contraceptive. Mais dans le cadre de cette étude, les aspects cognitifs, le niveau d'estime de soi et l'origine du foyer de contrôle n'ont pas d'influence sur la décision contraceptive et ne présente aucune différence entre les groupes d'adolescentes.

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ABSTRACT

Factors influencing adolescents' decision to use contraceptives

Adolescents are becoming sexually active an an increasingly young age. Many of them engage in sexual relations without contraception, despite the availability of information and contraceptive methods. The decision, whether or not to use a contraceptive, is influenced by numerous factors. The purpose of this study was to identify some of these main decision-making factors associated with the use of contraceptives among CEGEP adolescents. Following a literature review, a questionnaire was formulated, adpated from Miller's (1978) decision-making model. The questionnaire collected data on the psycho-socio-cognative factors influencing the adolescent's decision-making process. A French translation of the "Rosenberg Self-Esteem Scale" (R.SES. 1965) measured the level of the adolescent's self-esteem. A translation of Version A of the "Multidimensional Health Locus of Control (MHLC) (Wallston, et al, 1978) was used to determine the origin of the adolescent's locus of control. Of 131 adolescents who volunteered for the study, 9 were disqualified for various reasons. The final sample included 122 adolescents. Three cohorts were formed on the basis of the following criteria: sexual activity and the use of contraceptives. The dependent variable was the use of contraceptives and the independent variables were: perception of sex, pregnancy and contraception; sexual history; knowledge of the body and of contraception; self-esteem; and the origin of the locus of control. The results indicate that perception of sex, pregnancy and contraception have the greatest influence on the decision concerning contraception. The sexual history of sexually active adolescents varies with the use of contraceptives. But within the framework of this study, cognitive aspects - the level of self-esteem and the origin of the locus of control - do not influence the decision and were not different among the adolescent groups. These results demonstrate that adolescents have sufficient knowledge of sexuality and contraception and that the level of their knowledge has little effect on their decision. Nurses should maintain and even improve the information provided. But to really help adolescents decide whether to use contraceptives, their perception of sexuality, pregnancy and contraception must be influenced. Thus, the nurse should take an educational rather than informative approach. She must relate to the sexual life of adolescents.

PROGRAM EVALUATION: A STRATEGY FOR EFFECTIVE PROMOTION OF COMMUNITY HEALTH

Sheila Zerr

Community health programs may benefit from program evaluation of their effectiveness. Established community health programs which use program evaluation can improve their marketing strategies, and can draw assistance from voluntary agencies with greater success. This project demonstrates the successful results when three agencies, interested in better health programs in the community, worked together to promote quality child care.

St. John Ambulance Health Care Programs

For many decades, St. John Ambulance, Canada has collaborated with community professionals and volunteers to develop and promote their first aid and health care programs. Health practitioners and educators are consulted to help develop programs, health research specialists are consulted to evaluate them, and a large body of volunteers are used to promote and teach them in the community.

St. John Ambulance offers three home health care programs: child care, family health care, and health care for seniors. They give the lay public sufficient knowledge and skills to provide safe care in the home. Growth of health care is a high priority issue for St. John Ambulance in the 1980s. It will be necessary to document the effectiveness of the health care programs in order to convince the St. John membership of the organization's effectiveness, and to win public support.

The St. John Ambulance "Child Care in the Home" program has been in existence for many years. The content of and teaching methods for this program were revised in 1979. The course helps parents, child care workers, and babysitters. It covers preparation for parenthood, growth and development, health needs, illness, accident, infectious disease, medications, and the responsibilities of the child care worker. The program is unique among other parenting and child care programs offered in the community in that it involves a skill component and an opportunity to practise and be evaluated on child care skills.

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Health program evaluation

It was evident from a review of the literature that the evaluation of community health programs is a complex process. It may range from strict research models to studies of program efficacy or cost effectiveness. Attkisson and Hargraves (1977) demonstrate conceptual models for program evaluation; Weiss and Rein (1970) demonstrate alternatives to experimental designs, and Sinclair, et al. (1981) demonstrate cost effectiveness through program effectiveness. The Canadian Government has developed a unique approach to program evaluation, outlined in the **Guide on Program Evaluation Function (1981).** Here, program evaluation is viewed as an aid to decision making and management; that is, as a source of information for resource allocation, program improvement, and accountability in government.

Evaluation of the St. John Ambulance home health care programs was first undertaken in 1972 in an examination of the effect of the first aid program on the community (St. John Ambulance, 1972). No systematic evaluation of the effectiveness of these courses had been carried out until Williams, Baker, Wanklin, and Hayes (1981a) evaluated various teaching strategies used in the home nursing program. The Williams, Baker, Wanklin, and Hayes (1981b) study used an experimental design to evaluate various teaching strategies, making the assumption that if participants acquired the knowledge, attitude, and skills for home nursing, they would use them when they were required. The Williams team left the testing of this assumption to future research projects.

The Project

The evaluation of the "Child Care in the Home" program developed over a period of four years. It began with the revision and publication of the **Child Care in the Home** text in 1979. The teaching protocols were treated with a modular approach with a unit-by-unit presentation of the content and skills. Evaluation of this revised program was initiated in the spring of 1981, in collaboration with the University of Ottawa. Research proposals were developed. Funding was confirmed in February, 1983, and the evaluation was underway.

The design and research strategy

The design and research strategy for the study were planned to meet the program evaluation research objectives. The general objective was to determine whether or not the "Child Care in the Home" program met its basic goals. More specifically, the evaluative research design, using the Solomon four-group design, was intended to determine the effects of the course on the participants knowledge of, attitude to, and skills in child care. A further analysis (to aid marketing) was done to determine the effects of the course on different age levels of participants.

Reliable measures of the three dependent variables (knowledge, attitude, and skills) were developed and pilot tested for application in the main study. Knowledge was measured by a thirty-six item objective test; attitudes were measured by self-perceptions of the ease or difficulty with which the participant could perform eleven child care skills; and skills were measured by rating performance in the eleven child care skills taught in the course. The outcome measures on the dependent variables resulted in seventeen scores; one score for knowledge, eleven scores for attitude (ratings from ease or difficulty skill performance scales) and five scores for skill (ratings from the four testing stations).

The instruments and their application were adapted for the "Child Care in the Home" program evaluation from the Williams, et al. (1980) study. The instruments consisted of a background questionnaire for socio-demographic information, the knowledge questionnaire, and the measures of attitudes and skills. The Solomon four-group design (1949) was applied to the main study. Analysis of the main study results followed Campbell and Stanley's (1963) recommendations for statistical tests. Each of the three outcome measures (knowledge, attitude, and skills), post-test scores were analyzed for variance and covariance.

It was concluded that the teenage babysitter population would be the best target population for this study. St. John Ambulance has found, from courses previously given in the Ottawa area, that the teenage population has displayed a keen interest in taking the child care course. The criteria for inclusion in the study were established as: ages thirteen to nineteen inclusive, male or female, and a minimum education level of grade six. Subjects could not have taken the St. John Ambulance "Child Care in the Home" course previously. Participants not meeting these criteria were rejected as research subjects, but were admitted to the course.

Pilot study

A pilot study to test and revise the instruments was carried out. A total of twenty-nine subjects participated in the pilot study, fourteen from a Toronto St. John Brigade unit and fifteen from Elmwood School in Ottawa. The pilot study prompted revision of the instruments and improvement in the testing protocols.

Eight prospective baccalaureate student nurses were recruited and introduced to the course materials and research protocols. Interrater reliability sessions were set up, and an interrater reliability coefficient of +.85 was obtained. Once the project was implemented and courses were planned with the St. John Ambulance Health Care Committee, Federal District, it became evident that more personnel would be needed to teach the courses and carry out the research. Application for a Canada Summer Student Employment Program grant was successful, and funding was received for students to serve as teachers and research assistants

for the project. The infusion of the energy and expertise of the summer students contributed enormously to the strength and success of the project.

Program promotion and publicity

The promotion and publicity to draw participants to take the course and to participate in the research project was a great challenge. A flyer was developed for distribution. The flyer described the project and contained a participation consent form.

School and community agencies were contacted by telephone to set up appointments, agencies were visited for the distribution of flyers, posters, pamphlets, and consent forms. Whenever possible, arrangements were made to explain the course and project directly to classes or participants.

Implementation

The research design and testing were applied on a week-to-week basis. The recruitment campaign resulted in a series of five weekly courses, three in Ottawa, one in Glen Cairn, and one in Smith Falls.

Subjects were randomly assigned to one of the four groups of the Solomon four-group design, and this resulted in a very high "no show" for the study. When subjects did not receive the assignment they desired, or if they were not assigned to the same group as friends, they simply did not show up for the course. Very few subjects (1.4%) left once they had started the course. Subjects often arrived at incorrect times and had to be rejected as research subjects, but they were still allowed to take the course.

A total of 216 participants registered for the program. Of this number, eighty-four (38.8%) did not show up for their assigned course, three (1.4%) left the course, 29 (13.4%) were eliminated as research subjects. The final number of research subjects was 102 (Table 1).

Research Results

Analysis of the background questionnaire revealed that most participants were similar in background, education, and age. A typical participant was female, between ages thirteen and fifteen, belonging to a family of two adults with two children under sixteen years (including the participant). She would be attending school, and have completed Grades Six or Seven. She would feel that a St. John Ambulance certificate for completion of the course would be important in obtaining employment as a babysitter. Target marketing at individuals, such as with this profile, may attract other age groups in the future.

Table 1

Summary of Registrants

	Registered	Participants	No Show	Did Not Complete Course
Group I	52	31	21	0
Group II	48	26	22	1
Group III	56	29	27	0
Group IV	60	45	15	2
Total	216	131	85	3

The research, using the "Solomon four-group analysis, resulted in sound evidence that the course does meet its goals. The participant scores were set up for analysis as demonstrated in Table 2.

Table 2

Analysis of Post-test Scores for each of the Three Outcome Measures (Knowledge, Attitudes, Skills)

	Pre-and Post-tested	Post-tested Only	
Experimental	Group No. I	Group No. III	Main Effect of
Control	Group No. II	Group No. IV	Experimental-Control

Main Effect of Pre-test

From the row means, one estimates the main effect of the course, from the column means, the main effect of pre-testing, and from the cell means, the interaction of pretesting with the course.

The main effect of the course was significant on all seventeen scores; the experimental group demonstrating a greater knowledge, more positive attitudes, and superior skills, as compared to the control group. Results of this analysis (for total scores) are presented in Table 3.

Table 3

Summary of Two-way Analysis of Variance

	Source of Variance	SS	df	MS	F
Knowledge: (score from 36 item questionnaire)	Experimental-Control	1153.390	1	1153.390	55.799*
Attitude Ratings: (total of scores for 11 skills)	Experimental-Control	3567.396	1	3567.399	31.734*
Skill Ratings: (total of scores for 4 skill testing situations)	Experimental-Control	49467.176	1	49467.176	786.572*

* $p < .001$

Studies conducted to control for the participant's knowledge, attitude, and skills before entering the course virtually replicated the experimental-control differences for the main effect of the course. Results of this analysis (for total scores) are presented in Table 4.

Table 4

Summary of One-Way Analysis of Covariance on Post-test Scores, Using Pre-test Scores as Covariate

	Source of Variance	SS	df	MS	F
Knowledge: (score from 36 item questionnaire)	Experimental-Control	651.444	1	651.444	29.054*
Attitude Ratings: (total of scores for 11 skills)	Experimental-Control	1029.389	1	1029.389	31.475*
Skill Ratings: (total of scores for 4 skill testing stations)	Experimental-Control	856.195	1	856.195	327.860*

* $p < .001$

Further analysis, to determine the effect of the course on the participants at different age levels, resulted in confirmation that the effects of the course are as consistent for the younger participant in Grades Six or Seven as for those above Grade Seven. Results of this analysis (for total scores) are presented in Table 5.

Table 5

Summary of Two-way Analysis of Covariance on Post-test Scores using Pre-test Scores as the Covariate to Compare Level of Education

	Source of Variance	SS	df	MS	F
Knowledge: (score from 36 item questionnaire)	Experimental-Control	685.218	1	685.218	31.671*
Attitude Ratings: (total of scores for 11 skills)	Experimental-Control	1029.413	1	1029.406	29.959*
Skill Ratings: (total of scores for 4 skill testing stations)	Experimental-Control	878.602	1	878.602	436.935*

* $p < .001$

St. John Ambulance may promote the "Child Care in the Home" program in the community with the knowledge that the course is successful in teaching child care knowledge and skills. The course can be promoted to the younger participant in Grades Six and Seven. Results of this study confirm that the course materials are managed successfully by this age group.

The Future

An important step in promoting the child care program has been taken. Results of this study are being used to direct implementation of the "Child Care in the Home" program, and to assist in its acceptance and use by the public. Community action groups have been encouraged by the results of the study, and they see the course as a reliable means of influencing quality child care in the community. The Junior Service League of Ottawa is presently giving the course in schools and in community centres as part of their service to the Ottawa community. The time and effort invested in program evaluation is being rewarded by effective promotion of the course in the community.

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RÉSUMÉ

Evaluation de programme stratégie du développement efficace de la santé communautaire

La méthodologie et le plan de recherche de l'étude ont été mis au point dans le but d'évaluer les objectifs à court et à long terme du programme de soin de l'enfant offert par l'Ambulance Saint-Jean. Le concept expérimental basé sur la répartition en quatre groupes de Solomon devait permettre de déterminer les effets du cours sur les connaissances, les attitudes et les aptitudes des participants quant aux soins apportés aux enfants. L'échantillon comprenait 102 sujets de 12 à 19 ans inclusivement, de sexe mâle ou femelle, ayant au minimum 6 ans de scolarité. Les sujets ont été répartis au hasard dans quatre groupes suivant la méthode de Solomon. Deux groupes ont suivi le cours sur le soin de l'enfant (groupes expérimentaux), les deux autres non (témoins). La mesure avant-test n'a été appliquée qu'à un des deux groupes de chaque catégorie, cependant les quatre groupes ont subi la mesure après-test. Les cotes finales pour chacun des trois éléments (Connaissances, attitudes et aptitudes) ont été examinées par une analyse de variance 2 x 2 de manière à déterminer l'effet principal du programme. De plus, une analyse de covariance a été utilissée, chez les échantillons ayant subi les mesures avant-test, afin d'évaluer l'influence des tests initiaux de connaissances, d'attitudes et d'aptitudes. Les résultats des deux analyses indiquent une différence significative entre les groupes expérimentaux et témoins pour les trois éléments et confirment l'efficacité du programme pour apprendre les soins aux enfants dans la communauté. Les résultats de cette recherche sont utilisés pour orienter les stratégies de marketing et promouvoir les programmes.

This study was supported by Project Grant No. 6606-2238-35 National Health Research and Development Program Health and Welfare Canada.

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The Transcultural Nursing Society is sponsoring its Twelfth National Conference, "Transcultural Nursing: Knowledge Synthesis and Application." Conference to be held October 8-10, 1986 in Chicago, ILL. For more information contact:

Beverly Horn, Ph.D.
School of Nursing, SM-24
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ERRATUM

In the last issue of **Nursing Papers** (Volume 17, No. 3) the titles of the articles by Joyce Carver and Deborah Tamlyn (p.7) and by Tamara Zujewskyj and Louise Davis (p.75) were inadvertently reversed. They appear correctly in the Table of Contents. We regret any inconvenience that this may have caused for the authors and for our readers.

AUTHOR INDEX:

INFORMATION FOR AUTHORS

Nursing Papers/Perspectives en nursing welcomes research and scholarly manuscripts of relevance to nursing and health care. Please send manuscripts to *The Editor, Nursing Papers/Perspectives en nursing*, School of Nursing, McGill University, 3506 University Street, Montreal, PQ H3A 2A7.

Procedure

Please submit three double-spaced copies of the manuscript on 216mm × 279mm paper, using generous margins. Include a covering letter giving the name, address, present affiliation of the author(s). It is understood that articles submitted for consideration have not been simultaneously submitted to any other publication. Please include with your article a statement of ownership and assignment of copyright in the form as follows: "I hereby declare that I am the sole proprietor of all rights to my original article entitled '_____' and that I assign all rights to copyright to the School of Nursing, McGill University, for publication in *Nursing Papers/Perspectives en nursing*. Date ___ Signature_____."

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Acceptable length of a manuscript is between 10 and 15 pages. The article may be written in English or French, and must be accompanied by a 100-200 word abstract (if possible, in the other language). Please submit original diagrams, drawn in India ink and camera-ready. Prospective authors are asked to place references to their own work on a separate sheet and to follow the style and content requirements detailed in the Publication Manual of the American Psychological Association (3rd. ed.), Washington, D.C.: APA, 1983.

Manuscript Review

Manuscripts submitted to *Nursing Papers/Perspectives en nursing* are assessed anonymously by two members of a Review Board, using the following criteria:

Assessing content

Internal validity — relatedness: Is the problem the paper deals with identified? Is the design of the research or the structure of the essay appropriate to the question asked? Are the statistical, research and logical methods appropriate? Can the findings be justified by the data presented? Are the implications based on the findings?

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Are the ideas developed logically? Are they expressed clearly? Is the length appropriate to the subject? Does the number of references or tables exceed what is needed?

Publication Information

On receipt of the original manuscript, the author is advised that the editorial board's response will be forwarded within six weeks. When a manuscript is returned to the author for revision, three copies of the revised manuscript (dated and marked 'revised') should be returned to the editor within four weeks. The complete procedure of review, revision, copy editing, typesetting, proofreading and printing may result in a six to eight month lapse between submission and publication.

RENSEIGNEMENTS À L'INTENTION DES AUTEURS

La revue *Nursing Papers/Perspectives en nursing* accueille avec plaisir des articles de recherche ayant trait aux sciences infirmières et aux soins de la santé. Veuillez adresser vos manuscrits à la rédactrice en chef, *Nursing Papers/Perspectives en nursing*, Ecole des sciences infirmières, Université McGill, 3506 rue University, Montréal, P.Q., H3A 2A7.

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Veuillez envoyer trois exemplaires de votre article dactylographié à double interligne sur des feuilles de papier de 216mm × 279mm en respectant des marges généreuses, accompagné d'une lettre qui indiquera le nom, l'adresse et l'affiliation de l'auteur ou des auteurs. Il est entendu que les articles soumis n'ont pas été simultanément présentés à d'autres revues. Veuillez inclure avec votre article une déclaration de propriété et de cession de droit d'auteur conformément à la formule suivante: "Je déclare par la présente que je suis le seul propriétaire de tous droits relatifs à mon article intitulé ' ' et je cède mon droit d'auteur à l'École des sciences infirmières de l'Université McGill, pour fins de publication dans *Nursing Papers/Perspectives en nursing*. Date _____ signature_____."

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Validité externe: Le problème soulevé présente-t-il un intérêt véritable? Ce problème est-il d'actualité? Existe-t-il des problèmes de divulgation ou de déontologie? Les conclusions de la recherche ou de l'article sont-elles importantes? Ces conclusions ou résultats peuvent-ils s'appliquer à d'autres situations? Est-ce que l'article contribue à l'avancement du savoir dans le domaine des sciences infirmières? De quelle façon?

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L'auteur développe-t-il ses idées de manière logique? Les exprime-t-il clairement? La longueur de son article est-elle appropriée au sujet abordé? Est-ce que le nombre de notes ou de tableaux dépasse le strict nécessaire?

Renseignements relatifs à la publication

A la réception du manuscrit original, l'auteur est avisé que le Comité de rédaction prendra une décision au sujet de la publication de son article dans les six semaines. Lorsqu'un manuscrit est renvoyé à son auteur pour qu'il le remanie, trois exemplaires dudit manuscrit remanié (daté et portant l'inscription "revu et corrigé") doivent être renvoyés à la rédactrice en chef dans les quatre semaines. Les modalités complètes de lecture, de remaniement, d'édition, de composition et d'imprimerie expliquent qu'il s'écoule souvent de six à huit mois avant qu'un article soumis soit publié.

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