

# CRISIS DECISION MAKING IN CORONARY CARE: A REPLICATION STUDY

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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 probabilistic 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 nursing 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						
	Number	% <sup>a</sup>	1	2	3	4	5	6	>6
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<sup>a</sup>  
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 présentation 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.