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Telephone Inquiries, Types of Calls : Are Emergency Service Nurses Qualified to Give Answers?

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TELEPHONE INQUIRIES, TYPES OF CALLS: ARE EMERGENCY SERVICE NURSES QUALIFIED TO GIVE ANSWERS?

by

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The person whose signature appears below certifies that this Nonthesis Project in her opinion is adequate, in scope and quality, as a project for the degree Master of Science in Nursing.

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CHAPTER ONE

The Problem

Introduction to the Problem

Throughout the United States, Emergency Departments maintain some mechanism through which consumers can receive information by telephone. Communities perceive the hospital in their area to be a resource where authoritative health information can be obtained (Nicklin, 1981, p. 10). The caller has the privilege of speaking directly to a physician in very few instances. In some hospital Emergency Departments it is a clerk who answers the calls and attempts to provide information. Many other Emergency Departments, however, utilize nurses to handle these telephone calls.

Observations of this situation indicate that there should be real concern for and study of the practice of nurses shouldering such responsibility. Initially one must obtain documentation of the types of telephone inquiries which are directed to the community emergency department. Secondly, a review of the Nurse Practice Act--as it relates to the types of phoned inquiries--should provide clear-cut directives to the nurse, and therefore, if followed by the nurse, would protect him from being accused of practicing medicine.

Reality suggests that consumers expect to get advice. Sometimes they want simple information such as how to call an ambulance or how to get to the hospital. But frequently the questions are much more specific

and are related to signs and symptoms of disease. Also, the caller often expects to receive advice telling him how to manage health problems such as colds, "flu," fever, vomiting and diarrhea.

The questions that come to mind need to be answered. As the nurse recognizes the types of advice calls which come to the Emergency Department, understands the scope of professional practice and can apply it to daily practice, he/she will be better prepared to respond appropriately.

Statement of the Problem

There are no current data available which define the problems that nurses encounter when handling telephone requests for advice. Therefore, existing guidelines may not be adequate for preparing the nurse to function in this role. Without an organized body of knowledge based on literature and research studies, it is not possible to develop a framework in which the nurse can engage in professional practice as defined by the Nurse Practice Act in the state of California.

Background and Need of the Problem

It is recognized by this investigator that telephone medical advice calls might pose a problem for nurses in Emergency Departments. A recent call to the Emergency Department Nurses Association (EDN) in Chicago revealed that the EDN professional organization was not aware of any literature or research studies related to this issue and requested that if any studies were done, results would be shared with the Emergency Department nurse specialty leadership body.

A recent informal activity study, through manual logging of advice

calls, was carried out in the Emergency Department of a large university teaching hospital in the Southwest for the purpose of obtaining some very basic information related to the types of incoming calls in the Emergency Department. Also, additional observation provided clues to how nurses generally respond to certain types of questions. The survey suggests that there are several categories or types of telephone calls made to Emergency Departments. Table 1 shows how calls in this small informal study were categorized.

Table 1

Categorization of Calls Made to Emergency Department

Categories	% Frequency
1. Requests for educational information	17
2. Request for help in making decisions about need for medical care, and advice about what to do for specific signs and symptoms	58
3. Requests for general information (i.e., lab results, how to make appointments, how to get to the hospital, etc.)	25

(Triage Survey, 1983)

Analysis of this survey suggests that the second category may provide the most difficulty for the nurse responder. There are perhaps three responses which would be appropriate for the nurse:

1. Transfer call directly to a physician;

2. Advise caller to seek treatment from a physician; and/or

3. Instruct caller on how to access the medical care system because the problem may be life-threatening.

It appears that it would be relatively simple for the nurse to differentiate between the three responses; however, difficulty arises in the fact that nurses feel qualified to provide certain levels of medical treatment. This implies that the nurse diagnoses the patient problem and then gives nursing and medical advice to the patient over the telephone. The Nurse Practice Act does not provide for the rendering of medical advice unless it is in accordance with a standardized procedure developed for the purpose of coping with such situations (Anderson, 1980, p. 41).

Another informal survey carried out by the same investigator in Emergency Departments located in various locations of southern and central California revealed data which confirmed the investigator's concern as to nursing practice related to telephone inquiries for advice.

In this telephone survey, Emergency Department Nursing Administrators were asked two questions by telephone. First, the Administrators were asked if there were guidelines or criteria to guide nurses in responding to telephone inquiries, and second, if they had a mechanism by which they could monitor the nurse's response (see Table 2).

A question was also asked of nurses who regularly responded to telephone inquiries in the same setting. Care was taken to not ask a question which would imply the need for immediate medical intervention.

It is recognized that certain categories of potential life-threatening conditions would require such an answer and that it is not outside the nurse's scope of practice to respond in such a way. Secondly, questions regarding basic health care knowledge were avoided since it is not an issue that nurses should not give any information at all. Therefore, asked strictly from a patient's perspective, the question asked could easily involve making a medical decision and providing specific medical care instructions or allow the nurse to simply say that she could not give an answer. Table 2, column three, represents how this particular group of nurses responded to this question.

Table 2

Nurse Responses to Questions Re:
Telephone Practice

Hospital #	Guidelines	Monitoring	Nurse Prescribed
1	No	Yes	No
2	No	No	Yes
3	Yes	Yes	Yes
4	No	No	No
5	Yes	No	No
6	No	No	Yes
7	No	No	No

The survey conclusions can be summarized by saying that the majority of hospital Emergency Departments did not have any criteria or guidelines by which nurses were guided in making their responses over the telephone.

Therefore, a great deal of variance could occur, depending on the aggressiveness of the nurse or on how much experience she might have which could give her a false sense of security in handling such questions. Also, when the staff nurse was given a hypothetical question, the response often included components of medical instructions. This supports the perceived need for investigation into the types of calls nurses are being asked to respond to, and their responses.

It is possible that much of this practice of nurses being expected to "handle and take care of" incoming calls has evolved rather subtly over time, and has only in the past decade or two become a problem. This practice could be related to changes in standards of care and the lack of awareness on the part of the public as to the legalities involved when a nurse practices outside of the license limitations.

It can be concluded then that this topic should be analyzed and investigated for the following reasons which have an impact on emergency nursing:

1. The medico-legal implications suggest that, without protocols or guidelines, the nurse runs a real risk of functioning outside the scope of nursing practice.

2. The types of calls need to be identified in order to develop protocols to guide nursing actions.

3. Hospitals bear a significant liability for the actions of personnel.

The second reason may well be the key element; without having a clear understanding of the nature of the calls, it is difficult to recognize

the problem confronting the nurse and to logically develop a system whereby the nurse is guided in practice, the consumer is assured of accurate advice, and the hospital's liability for the nurse practicing within the scope of his license is minimized.

Research Question

When people call the Emergency Department for advice, what types of information do they request and are nurses qualified, within the framework of the Nurse Practice Act, to provide such advice?

Conceptual Framework

Systems Theory

A theoretical framework can enhance understanding of how the nurse functions or fits into the role as an Emergency Department nurse responding to the needs of the community. A systems theory approach would place the focus on man; every individual in the community functions primarily through interpersonal relationships. In the use of systems theory, we see man as attempting to maintain health, either in responding to a crisis, or in attempting to prevent deterioration in his/her environment by prevention through the seeking of educational information.

The thrust of this investigational study also suggests that in systems theory, the nurse fills a vital role. The nurse can assess when necessary, take opportunity to educate man, and otherwise give input into man's system which will give man support as he attempts to preserve self.

As a goal, man seeks to maintain good health. The nurse also has the same goal, but does not enter man's smaller system until man shows

that there is some problem affecting his system and interrelates with the nurse. The process begins when the phone call occurs, and the nurse, a part of another open system--health care--begins to develop a relationship with the caller. A transaction then occurs between two systems. Both systems are open and one meets the needs of the other.

The nurse's goal is to provide appropriate information to adapt appropriately to whatever is impacting on man's health environment. The nurse communicates with the caller and is limited to the information given. The change that must occur is dependent on both the nurse and the client; the nurse is limited by not being able to see the patient, and by being able to only respond to what is being stated. The patient, on the other hand, must describe enough so that the nurse can respond appropriately; this is sometimes affected by the great stress which affects the patient/client at that time (Daubenmire and King, 1973, p. 513). Figure 1 attempts to show the relationships that occur between the open systems which the nurse represents and the open system which man seeks to maintain. The nurse's role includes responding to man's attempts to maintain equilibrium by assessing his problem, and intervening in an appropriate manner.

Crisis Theory

In looking at the process through which the nurse enters the potential client's environment, it must be remembered that these calls are ordinarily made by a person responding to a stressful situation. The client calls because this action is his way of adapting to a situation in the environment. The nurse attempts to provide intervention which

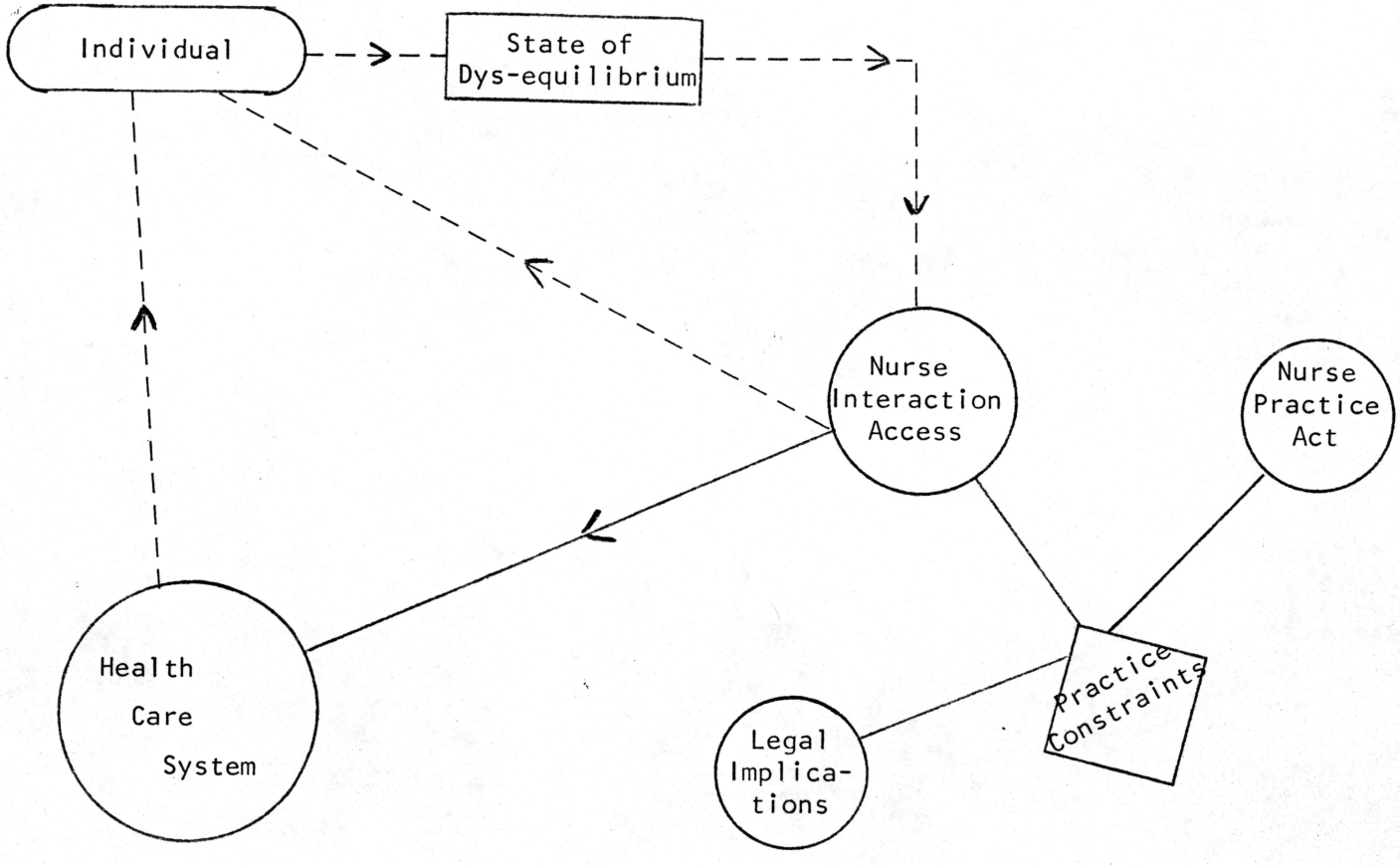


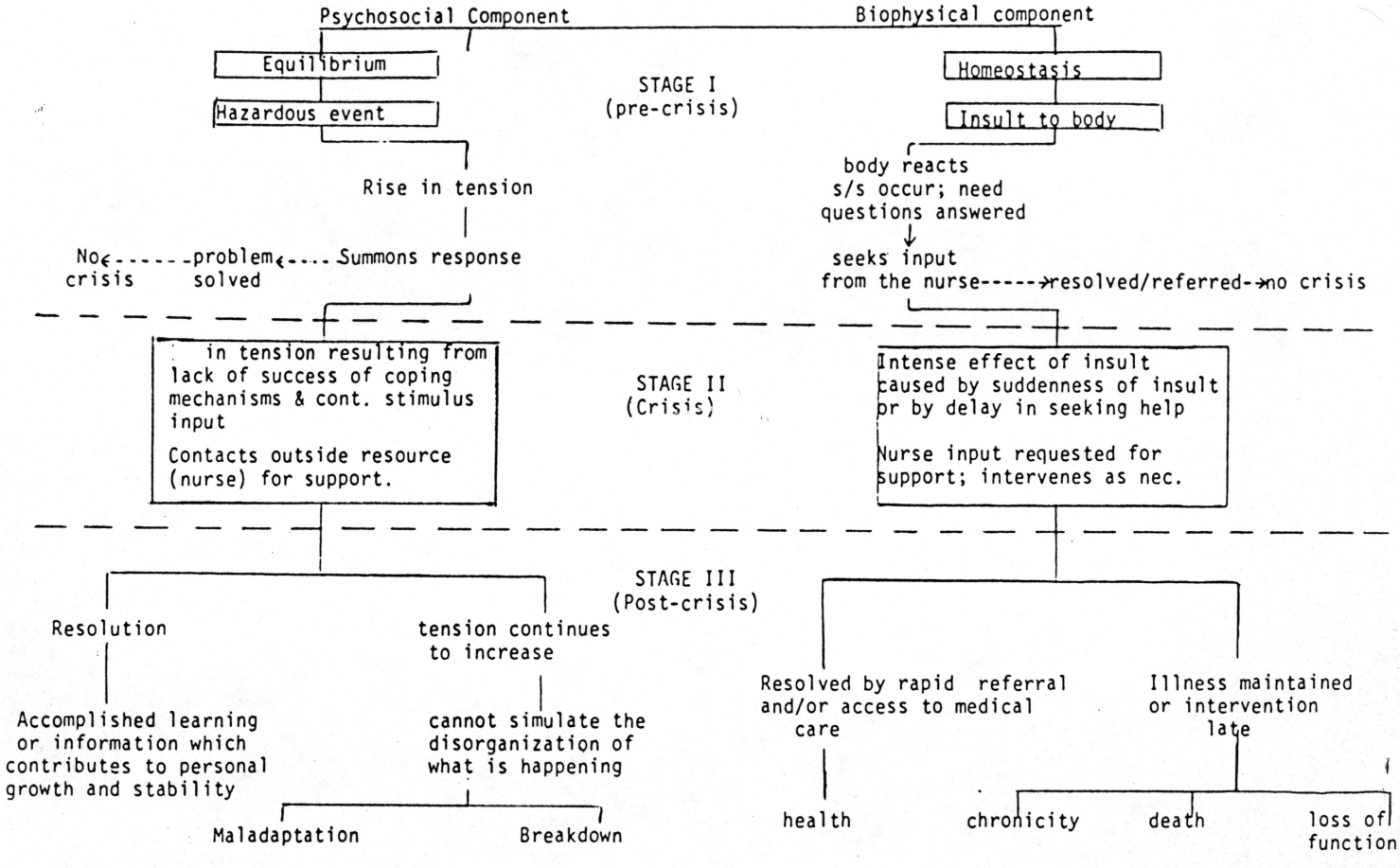
Figure 1

Systems Model of Nurse As Part of Health Care System

will decrease the stress or assist the client in adapting to the stressfulness. In some cases, the patient/client demonstrates that there is no longer the ability to adapt--the patient is in a state of dys-equilibrium --and is truly in a crisis state. Caplan's theory allows for the nurse to immediately begin to focus on those interventions and assessments that will bring control back to the client. It is not difficult to understand that the nurse in the Emergency Department would frequently be in a position, as medical advice calls are taken, to make rapid assessment and intervene to provide external support which is necessary if equilibrium is to ever be possible for that client (Riehl and Roy, 1980, p. 366).

A crisis model can be used to demonstrate the nurse's focus on the individual requiring advice via telephone. Since the crisis model does not lend itself to an approach in which the disease is the focus, it does focus well on the caller's perception of events. The nurse, then, uses problem-solving activity which promotes health by restoring and/or recommending an action which will maintain equilibrium between the person and the environment. Prevention of illness or further dys-equilibrium is a primary goal of the nurse's interaction.

Figure 2 shows a crisis model applied to the individual who may seek advice early, or at any stage in a health-related situation. Whenever the person calls for advice, the nurse can effect positive intervention which will help the person achieve equilibrium. The key role of this nurse is that of providing for rapid access to information or to health care delivery. The nurse must be highly skilled to recognize (on the basis of layman terms), assess, and facilitate appropriate action (Thibodeaux, 1983, p. 49).



(Thibodeau, 1983, p. 49)

Figure 2

Crisis Model Applied to the Nurse as Responder to Telephone Requests for Advice/Assistance

Other Frameworks

There are other concepts and frameworks which must also be considered when discussing this issue. The Emergency Department Nursing Association standards, the Nurse Practice Act, and medico-legal aspects must also be considered.

The California Nurse Practice Act provides the limitations within which the nurse can safely perform activities under legal licensure.

The Emergency Nurse Standards define the scope of emergency nursing practice to encompass "nursing activities which are directed toward health problems of various levels of complexity." This practice must also be congruent with the Nurse Practice Act (American Nurses' Association Publication, 1975, p. 5). The scope of emergency nursing includes appropriate health education, interventions which can apply to certain categories of telephone inquiries.

Medico-legal abandonment is a serious charge which all care providers must treat with due respect. Utilization of the telephone for provision of advice can automatically carry with it a potential for abandonment. If the nurse advises a patient to "wait 'til morning and see how the pain is," the nurse can be liable for negligence or abandonment should some type of ill effect occur. There must be an ironclad rule that diagnosis and treatment never occur over the telephone. The greatest risk in the practice of nurses functioning as telephone responders does depend upon the nurse's ability to recognize the role of nurse as educator, supporter, and facilitator during times when urgent action is indicated, and to differentiate these aspects from those actions

which ultimately can identify the nurse as a care prescriber--the practice of medicine (Chayet, 1969, p. 183).

The nurse can readily get caught in the situation of giving true medical advice and directives, resulting in medico-legal litigatory actions, which can bring charges against the nurse because of a "bad outcome" occurrence for the patient. This in turn has the potential for other charges, practicing over and beyond the scope of nursing practice--an action which can be initiated by the professional licensing board. The nurse alone can protect himself from becoming caught in the entwining of these legal forces.

Summary

The nurse can be viewed as a central problem solver in an open system which provides man with the capability of resolving situations which alter his state of equilibrium in wellness. The nurse, as respondent to requests for information or advice, is key in a system with constraints and limitations such as health care, legal systems, and licensing bodies which define the scope of practice for nurses and physicians. Crisis management theory provides a model which gives opportunity for the nurse to participate in immediate intervention modes to act in the best interest of the client who shows evidence of requiring support.

Variables

This is a level one inquiry, factor-searching design in which there is no manipulation of the variants, and the two variables being investigated are types of information sought and the nurse qualifications.

Operational Definition of Terms

For the purpose of this study, the following terms were defined:

Advice Calls

Any call to the Emergency Department which requires medical knowledge in order to answer the request.

Nurse

A nurse is defined as a registered nurse (RN).

Nurse Practice Act

Refers to the State of California Nurse Practice Act which is legally recognized at this point in time.

People

Refers to any person who calls the Emergency Department for health care information.

Emergency Department

A hospital-based Emergency Department which is licensed and identified as such by the State of California.

Advice

The responses that a registered nurse may give to any telephone inquiry regarding health care in which a patient has a specific question needing an answer.

Independent

Any services that insure safety, comfort, personal hygiene, disease prevention.

Interdependent

Implementation of treatment regimen, disease prevention as prescribed by the physician; referral to a physician.

Dependent

Assessment of signs and symptoms and determining abnormal findings or characteristics; and implementing treatment or referral according to standardized procedures (Board of Registered Nursing, 1980, p. 9)

Summary

This study is concerned with the need to identify the types of questions people ask over the telephone when they utilize the emergency department as their resource for health care information.

The concepts discussed can be useful in defining the nurse's role within a health care system. The system of health care provides the setting in which the nurse can perform effectively as an input person or as a facilitator.

There are several components, or subsystems, in the health care system which impact on the nurse's practice; in some instances these factors are constraints and in others they provide further definition of the nurse's scope of practice.

CHAPTER TWO

Review of Literature

Introduction

The practice of Emergency Department nurses giving medical advice seems to be widespread; however, one does not find an abundance of literature which speaks clearly to this issue. A number of textbooks on emergency nursing do not even speak to the issue of whether or not the nurse's practice involving telephone medical advice should or could be a significant expansion of the nurse's role. It is believed that the lack of discussion by nurse authors is a distinct disadvantage for Emegency Department nurses since the use of the telephone could play a key role in health care delivery, triage, appropriate utilization of emergency services, and even marketing. However, there is a possibility that study should be given to develop standards and protocols which protect the nurse, assure a high quality of advice given, and provide a cost-effective mechanism for saving the consumer the unnecessary cost of a trip to the Emergency Department or for care of a non-urgent problem.

Telephone Utilization

Shah, Egan, and Bain have described in a 1980 study a program which utilized registered nurses in providing a conglomerate of information which included a physician consultation service, a poison center, and telephone medical advice calls. Data were collected for two years prior to opening of the service, during the first months of service, and at

the end of the study. Inclusive profiles were developed regarding who calls, when and why the party called. Information provided through tables demonstrates the subject categories of medical advice calls and how they were handled. Data collection occurred by using questionnaires and recordings of telephone calls. They suggest that utilization of nurses is an effective and appropriate method of providing triage and handling telephone advice calls. The conclusions of this study were that, rather than being a liability, the protocols and guidelines, along with the training of the personnel, improve management of telephone inquiries and increase the effective use of the Emergency Department because fewer patients receive instruction to seek care at the Emergency Department (1980, p. 620). Data showed that medical advice calls fell into several specific categories, a trend which continued throughout the data collection period. This information was gathered through careful detailed logging of all calls (Shah, and Others, 1980, p. 622).

Another source cites a different approach to providing telephone service. In this particular study the researchers did not particularly look to nurses as the information providers. Also, the study did not take place within an Emergency Department, but in a busy Pediatric department at Johns Hopkins Health Services Research Center. The research was triggered by increasing inquiries from parents as to who was administering advice and how they were trained. The structure of this program was such that during daytime hours when resource physicians and nurses were available, the non-professional advisors answered and gave advice. At night when resource people were not as accessible, a nurse specially trained gave the advice (Katz, Pozen and Mushlin, 1978, p. 32).

In order to research the appropriateness of advice, Katz and his associates used an evaluative method which focuses on outcome assessment in ambulatory care. An independent interviewing agency was used to conduct a telephone interview with all parents whose calls resulted in home care visits or a visit to the physician. A secondary finding suggested that nurses and non-professionals handled inquiries identically and there was no difference in the satisfaction or accuracy levels. The rationale for using a non-professional was that the physician and nurse were left free to see more patients. After using the system for five years the group surmised that on-the-job training and specific guidelines are the key, and therefore, non-professionals can contribute effectively in a pediatric practice (Katz, and Others, 1978, p. 36).

Use of Telephone Protocols

It is assumed that correlations can be made between pediatric telephone service and Emergency Department telephone services. Is it true, then, that telephone advice calls in the Emergency Department can be effectively triaged and managed by nurses?

Katz's study did not use a random clinical trial; however, a study by Strasser and his associates did use such a method. They used a control group and an experimental group system. The usefulness of protocols was tested. The authors indicated that the protocols, when followed, were extremely useful and acceptable for use by physicians and nurses in Emergency Departments (Strasser, Levy, Lamb, and Rosekrans, 1979, p. 553). As projected by Strasser et al, the protocols

> 1) provide a check-list, so the user will not forget to ask for information. 2) They make explicit guidelines for decisions regarding the management of a telephone problem. 3) They provide a record of the telephone call information that is often valuable and could be included in the medical record. (1979, p. 553)

There is need for telephone protocols, regardless of who does the advising. Schmitt indicates in the book Pediatric Telephone Advice, that protocols are necessary and any service that provides telephone medical advice is well advised to have standard protocols and to record each call. Adherence to protocols has a built-in quality control factor which can protect us from risk of liability (1980, p. 11).

Since patient problems can be difficult to assess over the telephone, Murphy and Chronopoulos suggest that skills needed for telephone intervention require communication skills as well as special tools. The tools required should include established guidelines and also a form that asks for information which provides an outline of the problem--ranging from chief complaint through signs and symptoms, nursing diagnosis, identification of the problem, and treatment subscribed and instructions given. By following guidelines, the nurse then can function professionally within the appropriate limitations allowed. This article speaks to the freedom to practice as a professional and allows for the use of professional judgment in deciding appropriate intervention. However, the authors suggest that establishing guidelines is instrumental in maintaining quality of care to the patient (1979, p. 505).

Scope of Nursing Practice

Protocols or guidelines are a realistic, practical, and feasible approach to assuring that the nurse functions within the scope of practice

provided through licensure. California laws relating to nursing practice provide for "standardized procedures" which can be defined as meaning policies and protocols developed by collaborative activities of administrators, physicians, and nurses. This is provided for by the California Nurse Practice Act (Board of Registered Nursing, 1979).

> The practice of nursing includes
>
> observation of signs and symptoms of illness, reactions to treatment, general behavior, or general physical conditions, and (1) determination of whether such signs, symptoms, reactions, behavior, or general appearance exhibit abnormal characteristics; and (2) implementation, based on observed abnormalities, of appropriate reporting, or referral, or standardized procedures, or changes in treatment regimen in accordance with standardized procedures, or the initiation of emergency procedures. (Board of Registered Nursing, 1979, p. 9)

Thus, protocols encompassed by the above regulations do suggest that nurse practice of providing telephone advice does fall within the nurse's scope of practice.

Robert Anderson offers an explanation of the nurse's scope of practice and an interpretation of the expanded role, within the constraints of the scope of practice. He suggests that subsection (d) of the Business and Professions Code Section 2725 allows the nurse to perform functions and procedures falling within the gray area where the practice of medicine and the practice of nursing overlap. The nurse responder to telephone advice calls frequently meets the dilemma of functioning in a gray area. He also suggests that as non-physician health care personnel continue to upgrade practice, the overlapping of practice will continue to grow (1980, p. 41). He further supports the concept of developing standardized procedures which protect the nurse in practice, thereby

decreasing the possibility of the nurse being charged with practicing medicine (1980, p. 42).

It is mandatory that every nurse, in this case those nurses practicing in Emergency Departments, have a thorough understanding of the Nurse Practice Act for the state in which the nurse is practicing. While the practice act's general provisions help the nurse to stay within the legal scope of nursing practice, the nurse must be aware of how the practice acts are interpreted. There is no word-for-word checklist on how the nurse is to function; therefore, the nurse must also depend upon the hospital's policies and procedures as additional guidelines to help the nurse practice within the state laws which govern nursing (Board of Registered Nursing, 1979, p. 10).

Legal Opinion

Literature review would not be complete without considering opinions from legal advisors. It is the opinion of James George in Law and Emergency Care that telephone advice is always a medico-legal hazard. He states that emergency nurses are customarily far too free with dispensing medical advice over the telephone. The risk of the nurse practicing beyond the scope of practice is great and she may be accused of or perceived to be practicing medicine without a license. This possible finding must be viewed as having the potential of leading to a case of negligence against the nurse (1980, p. 71). George does not speak to the issue of protocol usage or defined standards; therefore, his discussion seems somewhat incomplete. He cites the example of Love v. Ramsey (a 1976 Santa Clara County case) when discussing nurse telephone triage.

However, since in this case a physician rather than a nurse was the advisor, the example seems inappropriate (1980, p. 71).

Another text, Emergency Care and the Law, by Mancini, does not address telephone triage at all (1981). This is of concern since telephone inquiries to Emergency Departments is commonplace. The literature reviewed as to medico-legal opinions on aspects of telephone medical advice is lacking, and should be expanded.

Of further interest is a discussion of telephone medical management of pediatric illness by nurse practitioners, house officers (resident physicians), and pediatricians. Calls were tape recorded and scored for history taking, interviewing skill, and disposition. Nurses consistently scored 10 percent higher than residents and greater than 20 percent better than pediatricians in all three of the skills mentioned above. This suggests again that the giving of advice over the telephone, for pediatric problems, can be done effectively and safely by nurses (Perrin and Goodman, 1978, p. 130).

W. A. Regan brings us to the sophistication of our times by reminding us that the telephone is a marvelous invention and that no segment of society makes greater use of the telephone than those involved in the delivery of health care. Using the telephone may sometimes be the only effective way to communicate immediately; therefore, if the telephone is a necessary means of providing patient care, it cannot be considered illegal. As he points out, risk is there, and poor documentation can engulf the nurse in a bitter legal controversy (1982).

Critique of Related Studies

One article in the literature was very informative because it dealt specifically with testing the reliability of management of pediatric telephone calls through the use of protocols. Levy et al, in their study of telephone protocols, provide a broader understanding in support of the use of protocols for assuring better telephone management. The abstract of this article succinctly describes the problem under study and states important findings. The general design used in the study was quasi-experimental. Protocols for 25 common health problems were developed and then tested by professionals and non-professionals. This seems to be the best suited design since the protocols required testing via real telephone inquiries in order to substantiate validity. Also, in-patient charts of patients admitted for problems for which the protocols had been designed were randomly selected so that protocol could be tested against them as well (Levy, Rosekrans, Lamb, Friedman, and Others, 1979, p. 558).

Several examples of actual protocols are demonstrated in the article and discussed thoroughly. Comparison tables identify results of findings where professionals and assistants tested the protocols. These tables serve to support the article's intent to demonstrate that the use of protocols can be effectively utilized as a safe method for handling telephone calls requesting health information. It is very easy to interpret the study results when reviewing the comparison tables. The format and structure of the article are good in that the variables and concerns are approached logically so that the reader can, through the

process of progressive reading, follow each required action studied. Detail was sufficient to replicate this study. One aspect which was not addressed was the nurse's freedom from liability in actual practice involving the use of protocols. Exploration of this aspect would have been helpful to the study; however, a basic issue is the value and need for protocols to guide practice. The design and purpose of this study did not include nurse practice in detail, but rather, how protocols would provide a tool for better telephone management by various levels of health care workers (Levy, and Others, 1979, p. 563).

Summary

In summary, there is very little information in the literature which speaks specifically to the issue of nurses in Emergency Departments giving advice over the telephone. However, a great deal of information exists in the area of pediatric illness calls. Studies have been done on a limited scale to support the theory that telephone advice is effective, that there are key illnesses which receive the most inquiry, and that it does not necessarily require a nurse or other professional to triage the calls and to give appropriate information. Various design methods were used to research this question, including quasi-experimental systems with comparison control groups, and surveys. Most researchers collected data from logs as well as through questionnaires. Legal sources do not provide complete guidance and reflect outdated concepts of health care. Based upon the Nurse Practice Act, giving telephone advice is within the scope of practice of the nurse providing there is a standardized system which has had input from nursing and medicine and which sets

limitations and mechanisms through which the nurse can refer certain calls to a higher expertised resource. But there is a shadow of concern in all of this: the legal opinions are strong; can a nurse possibly gain support for an action supported by protocol?

CHAPTER THREE

Research Methodology and Design

Overview of Chapter

This chapter will describe the type of research design and methods which will be used to study and investigate the variables in the research question: (1) types of advice calls that Emergency Department nurses respond to, and (2) whether the nurse can respond within the framework of the Nurse Practice Act. A factor-searching design will be used in this study.

The methods to be used in answering the questions will include recording questions and responses in a log for the purpose of defining what kinds of calls are made to Emergency Departments. Convenience sampling will occur since a large university teaching hospital is immediately accessible, and a random sampling of at least 10 other large hospitals in the mid and southern sections of the state will be selected so that data collection can readily occur. With an organized approach to collecting such data, the end result will be a documented sampling which supports the concern about what is common practice, and what types of actions would help to better prepare nurses for this role.

Design

The design used in the study will be a factor-searching, level one inquiry design, a fact-finding process. The study is basically one of a descriptive nature in that the researcher is trying to identify what is actually occurring.

> Descriptive studies are not concerned with relationships among variables. Their purpose is to observe, describe, and document aspects of a situation. Because the intent of such research is not to explain or to understand the underlying causes of the variables of interest, experimental designs are not required. (Polit and Hungler, 1983, p. 170)

The identification of types of advice calls directed to Emergency Departments and categorization of nurse responses will be identified prospectively by using a survey tool.

Sample

In order to retrieve data which reflect Emergency Department client calls, hospital Emergency Departments in hospitals with greater than 500 beds will be randomly selected from a list. Randomization will occur by starting with the first hospital listed, and proceeding to select every fifth one until a sample hospital list of 10 has been achieved. The hospitals will be chosen from a list which represents locations in central and southern California. Also, hospitals will be chosen that utilize nurses to respond to client health information calls. Based on the assumption that most hospital Emergency Departments of the size mentioned above use nurses to respond to calls, no attempt to verify this will occur until the time to contact each hospital. If it is found that a randomly-selected hospital does not utilize nurses for this purpose, another hospital will be randomly selected until there is the full sample of 10 hospitals for data collection. The study requires that nurses record the data; all nurses who agree to record data will be accepted into the study.

A total sample of 500 calls from at least ten hospitals will be chosen. This is based upon the assumption that a minimum of 50 calls

will be logged and surveyed from each facility. Since large hospitals are spaced relatively far apart, it is assumed that the population will be fairly distributed and represented. The underlying bases for the study are not the hospitals chosen, but the calls that come to the hospitals' Emergency Departments are the target for study. A cluster of calls will be collected from each sample facility (Polit and Hungler, 1983, p. 423).

Setting

The setting will be an Emergency Department where nurses respond to health information telephone calls. Nurses in that setting will log information and will have been fully informed about the study so that greater success in data collection can be assured. No extra orientation will be needed, and it is expected that approximately one minute will be required for logging each incident. The nurses will not be required to learn any new procedures or terminology other than how to record actual data in the log.

Data Collection Tools

The instrument to be used in this survey will be a log in which specific data related to types of telephone calls will be recorded. Specific items to be recorded include (1) the health care question as the client states it; (2) the response that the nurse gives; (3) whether male or female; (4) age; and (5) city from which calling occurred. Items 3, 4, and 5 above are variants which can be easily collected, not particularly valuable to this study but as a possible basis from which further study might be generated at a later time.

The telephone survey tool is an original one made specifically for use in this study. Since very little data are available in the literature, there were no known tools which would lend themselves to satisfactory data collection. Each component of the survey log was included for a specific reason. Since a key element in the study is to ascertain the types of calls which come to Emergency Departments, it is logical to have the nurse record the question asked by the client. In order to compare nurse responses to the guidelines and limitations indicated in the Nurse Practice Act, there must be space for the nurse to record her response. Other data are requested to be logged based on a foreseeable future interest in other variants. If these elements are inadvertently not recorded by the recorder nurse, it will not affect the validity of the logged data for that call.

Because a data collection tool was developed for this study, no validity or reliability studies have been done to test the tool. However, a pilot study will be done for a two-day period of time to test the tool's basic validity. Any problems with the tool will be corrected at that time by revising the tool. The tool is designed to facilitate unbiased collection of "raw" data.

Ethical and Confidentiality Considerations

Once the study has been organized, including the development of tools and consents, the investigator will present the study proposal to the Research in Nursing Committee. The study will be modified according to the Committee's recommendations before research begins.

Since this is a study which primarily involves nurses, the Director

of Nurses of each facility randomly selected would be contacted for permission to collect data at each facility. Initially a telephone call would be made to each Director of Nurses to introduce the investigator and enter into verbal discussion about the research study. When permission is verbally indicated, a request for permission to contact the Emergency Department Nursing Manager would be made so that a further level of rapport could be established.

The telephone discussion and brief preparation would be followed by a letter of request for permission to perform data collection in the individual hospitals. The letters would be sent to the Director of Nursing at each facility.

The names of hospitals involved will be known only by the investigator. Each hospital will be assigned a number and all log forms will be marked with the number of the corresponding hospital to which they were sent. The code list will be kept in a locked personal file cabinet. The name of the hospital would not be published or mentioned in any way without first receiving written permission from the hospital.

An informed consent will be signed by every nurse willing to record telephone call data. The nurse will not write his/her name on any recorded entries; neither will the nurse's name be cross-referenced with the facility of employment. Therefore, the nurse would remain anonymous. The names of nurses would not be revealed in any published material, and the signed consent forms would be kept in a locked file.

Procedure for Data Collection and Recording

A pilot study following the steps indicated below will be performed in a university teaching hospital. The planned pilot study will be continued through a two-day period so that the validity of the survey tool can be tested. Revision of the tool would be done if any weaknesses in the tool were discovered.

Prior to collecting any data, the investigator will first submit the research proposal to the Research in Nursing Committee for the purpose of obtaining approval of the study.

Additional preparatory steps to be taken include:

1. Obtaining permission from the Director of Nurses in each facility by telephone, followed by a written request.
2. Setting an appointment to meet with the hospital Emergency Department head nurses and all staff--this may require more than one meeting.
3. Explaining the study to the nurses.
4. Defining possible benefits to be achieved by doing the study.
5. Explaining the instrument used for logging data.
6. Obtaining consent from nurses.

The investigator will provide for convenient logging of the data by supplying a large, mailable, pre-addressed and stamped manila envelope along with a large supply of "Telephone Survey Study, LLU" log forms. These supplies will be readily accessible in the area where the nurses will take telephone calls. The procedure for logging of data will require the nurse to:

1. Record client's question in the appropriate box with pen or pencil.

2. Record nurse's response in the appropriate box.

3. Record every call.

4. Record calls for a seven-day period.

5. Place completed log forms back into the manila envelope.

6. Contact investigator if any questions or concerns arise.

The investigator will monitor data collection in the following manner:

1. Contact the person designated to be liaison with the department nurses on the fifth day of the study.

2. Call each facility on the seventh day to ascertain the total number of calls logged; if less than 50, will discuss with the liaison person the feasibility of continuing study.

3. Remind the liaison person to collect all log sheets, place in the provided envelope, seal, and mail.

Analysis of Data

The intent of this research is to identify the types of health-related telephone calls that nurses respond to in the Emergency Department setting, and to categorize the calls according to the defined directives of the Nurse Practice Act.

In identifying the types of calls received, they will be categorized into the same groupings as in the informal survey noted in Chapter One. Along with the categorization, percentages of the total calls recorded will be ascertained. This procedure will readily identify the types

and frequency of specified types of calls. The categories of calls include:

1. Requests for educational information;

2. Requests for help in making decisions about need for medical care and advice about what to do for specific signs and symptoms; and

3. Requests for general information such as laboratory results, how to make appointments, and how to get to the hospital.

The researcher will analyze the nurse response so that a consistent approach will be used when categorizing each response. The Nurse Practice Act breaks down the nurse role into three categories: independent, interdependent, and dependent. Operational definitions for these categories, based on the Nurse Practice Act, are as follows:

1. Independent: Any services that insure safety, comfort, personal hygiene, disease prevention.

2. Interdependent: Implementation of treatment regimen, disease prevention as prescribed by the physician; referral to a physician.

3. Dependent: Assessment of signs and symptoms and determining abnormal findings or characteristics; and implementing treatment or referral according to standardized procedures (Board of Registered Nursing, 1980, p. 9).

Each response will be classified by the investigator into one of the above categories. Numbers of incidents in each category will be totaled and percentages of the total number will be calculated.

Simple analysis of this sort will provide answers to the queries asked in the research question. From this information it will be clear

what types of calls occur most frequently. Then the question of whether or not the nurse is qualified to respond according to the Nurse Practice Act, will be answered by the findings regarding nurse responses.

The emergency nurse specialist then has a data base to assume the following: that the nurse is qualified to function in the role as an educator, information giver, and implementor; implementation is based on

> observed abnormalities of appropriate . . . standardized procedures or changes in treatment regimen in accordance with standardized procedures . . . and means that a registered nurse, under standardized procedures, can diagnose a patient's condition and render certain types of treatment without a physician's order or without the patient having to see a physician. (Anderson, 1980, p. 41)

This freedom of practice authorizes the nurse to perform "functions and procedures falling within the vague area where the practice of medicine and the practice of nursing overlap." (Anderson, 1980, p. 41)

Summary

A level one, factor-searching design is used to describe what kinds of calls come to the Emergency Department and if the nurse is qualified within the framework of the Nurse Practice Act to give advice to the caller. The study is accomplished by randomly selecting hospitals with a minimum of 500 beds, where nurses in the Emergency Department respond to health-care related telephone calls. The participating nurse records calls on a pre-designed form; the nurse also records his response to the calls. The tool also allows for the collection of other demographic data. The procedure for carrying out the collection of data is defined adequately so that the process of collection of data could be duplicated if necessary.

The collected data are analyzed by (1) classifying the types of calls and identifying frequency of each, and (2) categorizing the nurse responses according to the nurse functions as delineated in the Nurse Practice Act, and noting the frequency of each response. The compilation of these data will clearly identify what are common practices as related to telephone inquiries and nurse responses. Steps will be taken to assure that confidentiality is maintained for the hospitals, inquirers and nurses involved.

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BIBLIOGRAPHY

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APPENDIX A

Telephone Survey Study Tool

LOG OF PATIENT TELEPHONE CALLS AND NURSE RESPONSES
(Telephone Survey Study, LLU)

Date survey started: ____________

Do not mark in this column		
☐ ☐	About the caller: ☐ m; ☐ fe City ____________ Patient Age--(if applicable) ☐ birth--10 yrs. ☐ 36 --50 ☐ 11 -- 17 ☐ 51 --65 ☐ 18 -- 25 ☐ 66 --80 ☐ 26 -- 35 ☐ 81 --	Caller's question: Nurse Response:
☐ ☐	About the caller: ☐ m; ☐ fe City ____________ Patient Age--(if applicable) ☐ birth--10 yrs ☐ 36 - 50 ☐ 11 - 17 ☐ 51 - 65 ☐ 18 - 25 ☐ 66 - 80 ☐ 26 - 35 ☐ 81 -	Caller's question: Nurse Response:
☐ ☐	About the caller: ☐ m; ☐ fe City ____________ Patient Age--(if applicable) ☐ birth--10yrs ☐ 36 - 50 ☐ 11 - 17 ☐ 51 - 65 ☐ 18 - 25 ☐ 66 - 80 ☐ 26 - 35 ☐ 81 -	Caller's question: Nurse Response:
☐ ☐	About the caller: ☐ m; ☐ fe City ____________ Patient Age--(if applicable) ☐ birth--10yrs ☐ 36 - 50 ☐ 11 - 17 ☐ 51 - 65 ☐ 18 - 25 ☐ 66 - 80 ☐ 26 - 35 ☐ 81 -	Caller's question: Nurse Response:
☐ ☐	About the caller: ☐ m; ☐ fe City ____________ Patient Age--(if applicable) ☐ birth--10yrs ☐ 36 - 50 ☐ 11 - 17 ☐ 51 - 65 ☐ 18 - 25 ☐ 66 - 80 ☐ 26 - 35 ☐ 81 -	Caller's question: Nurse Response:
☐ ☐	About the caller: ☐ m; ☐ fe City ____________ Patient Age--(if applicable) ☐ birth--10yrs ☐ 36 - 50 ☐ 11 - 17 ☐ 51 - 65 ☐ 18 - 25 ☐ 66 - 80 ☐ 26 - 35 ☐ 81 -	Caller's question: Nurse Response:

DO NOT SIGN YOUR NAME TO ANY ENTRY.
RETURN COMPLETED LOG SHEET TO DESIGNATED ENVELOPE.

APPENDIX B

Consent Form, Nurses

Loma Linda University

Graduate Division in Nursing
Loma Linda, California 92350
714/824-4360 or 796-3741
Extension 2139, 2601

CONSENT FORM

INFORMED CONSENT FOR PARTICIPATION IN THE STUDY
TO IDENTIFY TELEPHONE ADVICE CALLS AND NURSE
RESPONSES IN THE EMERGENCY DEPARTMENT

Information About the Study

As a graduate student in nursing at Loma Linda University I am investigating what kind of patient telephone calls are directed to nurses in the emergency department. I am collecting data as to the responses given to the patients by the nurse also. Other demographic information as it is recorded may be helpful as well. Information collected on the log will provide knowledge of what is common practice of nurses in responding to health care advice calls. This information may be useful in the development of professional practice standards for the emergency nurse specialist. Emergency nurse specialists could be better prepared for their role of responding to these calls if the types of calls were well understood.

I have been granted permission by the Director of Nurses to present this research study to you. I would like to request your assistance in data collection.

Methodology

You will be asked to complete the log survey questions and enter demographic data on the log sheets provided. The recording of this information will take approximately one minute of your time. Completed log forms should be placed in the large manila envelope which will be used for mailing the collected data to the investigator after the seventh consecutive day has concluded. You will not be required to learn any new procedure or terminology in order to participate in the data collection. You will be recording only what actually occurs. The recording of data should not delay any other activities which require your immediate attention.

There will be no marks on the logs by which to identify the recorder or the hospital emergency department. You understand that you may withdraw from the study at any time, and in the event that you choose not to participate, this will in no way jeopardize your employment status/benefits.

There is no financial remuneration for your participation in the data collection process. The information obtained in this study will not be disclosed without your consent in any published document.

Consent

I have read the contents of this consent form and have listened to the verbal explanation given by the investigator. My questions concerning this study have been answered to my satisfaction. I hereby give voluntary consent to participate in this study. I may call Connie Boskind at (714) 824-0800, extension 2848, if I have additional questions or concerns.

I have been given a copy of this consent form.

_____ _____

Signed Date

_____

Witnessed (study liaison person)

APPENDIX C

Consent Form, Hospital

Loma Linda University

Graduate Division in Nursing
Loma Linda, California 92350
714/824-4360 or 796-3741
Extension 2139, 2601

I, _____, have given approval for Connie Boskind, a graduate student at Loma Linda University, to include _____ (facility) in the research study sample. Since the data collection will occur in the Emergency Department, I have contacted the Nursing Director of that department and the contact person there is _____.

_____
Signed Date

_____
Title

APPENDIX D

Letter of Request

May 3, 1984

Phyllis McElmurry
Assistant Vice President for Nursing
Loma Linda University Medical Center
11234 Anderson Street
Loma Linda, CA 92350

Dear Ms. McElmurry,

I appreciated your taking the time on Wednesday to discuss over the telephone my request to carry out data collection in your facility. The opportunity to collect data in your hospital's emergency department will be very helpful as I proceed with my graduate school research project.

I would like to introduce to you, in writing, the substance of the research project. It is known that communities are more and more considering emergency departments to be resource centers for obtaining medical advice and information. Nurses frequently are given the responsibility to handle the calls and to respond appropriately. There is very little information in the literature to describe what types of calls are actually made and whether the Nurse Practice Act defines nurse function as that of providing service over the telephone. This research will be a fact-finding study only--to identify types of calls and to classify nurse responses according to the descriptions of nurse practice in the Nurse Practice Act.

The survey tool is a data recording form whereby the nurse records the caller's question or concern, and the response given to the client. There are three demographics--age, sex, and city--which have been added to the survey tool since it is projected that this research will stimulate further study of the issue in the future. Data collection will require one minute or less to complete after each telephone call. I have allowed for data to be collected for seven consecutive days only.

Since it is not physically possible for me to visit each facility, I would request your approval to contact the emergency department head nurse in order to explain fully the purpose and method of data collection. A large self-addressed and stamped manila envelope will be included, along with a full supply of survey forms. Supplies used will totally be at my expense.

The nurses who choose to participate in the data collection will be asked to sign a consent form which explains significant elements of confidentiality. There would also be no breach of confidentiality or means of identifying your facility name or that of the nurse completing the survey.

At no time would your facility be referred to in any published material without first contacting you and obtaining your permission.

I would be happy to share the research results with you, and want to thank you for your cooperation in this endeavor.

Would you please confirm your willingness to have your institution participate in the study by completing the enclosed consent form and returning it in the self-addressed envelope.

Sincerely,

Connie Boskind

CB:pc

Enclosures