

AN EVALUATION OF PATIENT ANXIETY LEVELS THROUGH EFFEC-
TIVE INTERACTION IN THE EMERGENCY ROOM

A THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF MASTER OF SCIENCE

IN THE GRADUATE SCHOOL OF THE

TEXAS WOMAN'S UNIVERSITY

COLLEGE OF NURSING

BY

DENISE M. KORNIWICZ, R.N., B.S.N.

DENTON, TEXAS

MAY 1977

The Graduate School
Texas Woman's University

Denton, Texas

April 14 1977

We hereby recommend that the thesis prepared under
our supervision by Denise M. Korniewicz
entitled "An Evaluation of Patient Anxiety
Levels Through Effective Interaction in
the Emergency Room"

be accepted as fulfilling this part of the requirements for the Degree of
Master of Science

Committee:

Margaret M. Gandy R.N., Ph.D.
Chairman
Robert H. Hargrave M.D., Ph.D.
Frances H. Hargrave M.S.

Accepted:

Phyllis Bridges
Dean of The Graduate School

DEDICATION

This thesis is dedicated to my family:

Mom: for her unrelenting encouragement,
guidance and constant support

Sandy: for her continued caring,
consideration and motivation

David: for his competition, enthusiasm,
and analytical knowledge.

ACKNOWLEDGEMENTS

A grateful thanks to each member of my committee:

Dr. Mona Counts, who positively encouraged and motivated me to complete this project;

Dr. Robert Raszkowski, who persuaded and guided me to scientifically approach a problem; and

Frances Gilmore, R.N., M.S., who gave graciously and unselfishly of the limited time she had.

Sincere appreciation to David Turgeon, M.S., the microbiologist who kept me on the right track and helped me with the review of the microscopic slides for the Palmar Sweat Index.

A special and big thanks to Juanita Malina for her patience, and to the many friends who offered support and encouragement.

Denise M. Korniewicz

TABLE OF CONTENTS

	Page
Dedication	iii
Acknowledgements	iv
Table of Contents	v
List of Tables	vii

CHAPTER

I	INTRODUCTION	1
	Statement of Problem	2
	Purposes	2
	Background and Significance	3
	Questions	6
	Definition of Terms	6
	Limitations	7
	Delimitations	7
	Assumptions	8
	Summary	8
II	REVIEW OF LITERATURE	9
	Introduction	9
	Communication Theory and Application to Nursing	9
	Communication: Health Care Systems, Providers, and Consumers	13
	Nursing Communication, Role Process, and Job Satisfaction	15
	Anxiety	18
	Physiological Anxiety	19
	Psychological Anxiety	20
	Crisis - Time	21
	Nurse/Patient Interaction	23
	Summary	24
III	PROCEDURE FOR COLLECTION OF DATA	26
	Introduction	26
	Setting	27
	Population	28
	Tools	29
	Data Collection	35
	Treatment of Data	39
	Summary	40

TABLE OF CONTENTS

	Page
 CHAPTER	
IV	ANALYSIS OF DATA ; 41
	Introduction 41
	Characteristics of the Population 42
	Categorization of Subjective Responses to Questionnaire 46
	Analysis of Nurse-Patient Interaction Time and Palmar Sweat Index 58
	Discussion 61
V	SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS 65
	Summary 65
	Conclusions 67
	Implications 69
	Recommendations 69
	 LIST OF REFERENCES 71
	 BIBLIOGRAPHY 76
 APPENDICES	
	A - CRITERIA FOR AN EMERGENCY ROOM PATIENT 79
	B - PERMISSION FOR THE STUDY 80
	C - PATIENT PERCEPTION QUESTIONNAIRE 83
	D - NURSE PERCEPTION QUESTIONNAIRE 84
	E - PROTOCOL FOR COMMUNICATIONS INSERVICE CLASS 86

LIST OF TABLES

1	Characteristics of Nurse Sample - Age, Sex, and Education	42
2	Comparison of Patient Group A and Group B by Age	43
3	Comparison of Group A and Group B by Sex	44
4	Comparison of Group A and Group B by Presenting Diagnosis Categories	45
5	Summation of Nurses' Responses to Questions Number Two and Ten - Job Satisfaction	46
6	Summation of Nurses' Responses to Questions Number One, Five, and Six - Time Allocations	47
7	Summation of Nurses' Responses to Question Numbers Three, Four, and Nine - Role Concepts	49
8	Summation of Nurses' Responses to Questions Numbers Seven and Eight - Perceptions of Communications	50
9	Group A and Group B Responses Summary for Personnel Identification	51
10	Group A and Group B Response Summary for Personnel Treatment	51
11	Group A and Group B Response Summary for Personnel Feelings	52
12	Group A and Group B Response Summary for Patient Instructions	53
13	Group A and Group B Response Summary for Explicit Instructions	54

LIST OF TABLES (continued)

14-Group A and Group B Response Summary for Longer Interaction	55
15-Group A and Group B Response Summary for Patient Fears	55
16-Group A and Group B Response Summary for Medication	56
17-Group A and Group B Response Summary for Explanations	57
18-Group A and Group B Response Summary for Patient Perception of Time	58
19-Comparison of Interaction Time - Group A and Group B	59
20-Group A Compared with Group B by Palmar Sweat Index Scores	60
21-Correlation of Palmar Sweat Index Scores and Interaction Time - Groups A and B	61

CHAPTER I

INTRODUCTION

The ability to effectively communicate is essential to everyday living. The process to interact with another individual helps to make us more human. Man is a social being who desires companionship with other human beings. In this way he can exchange ideas and experience emotional moods such as love, joy, hate, and caring. This art is developed gradually throughout our lifetime and depends on how well we can communicate with others.

In the health care system communication is important since relationships should be developed between the health care providers and receivers. For mutual satisfaction to be obtained time, interest, and energy are needed to establish a meaningful relationship between health care producers and receivers. In order to communicate effectively, an exchange of ideas and interests must be involved in the delivery of health care.

Nursing is a changing, challenging, and stressful occupation. It is made easier through the employment of

effective communication. The nurse should develop the ability to communicate with all individuals, especially during moments of stress, anxiety, anger, frustration, and crisis. How the nurse responds during anxiety-producing moments may influence the quality of patient care and may affect the communication process. Thus, for effective interaction to occur, an interpersonal relationship must be developed between the nurse and the patient. This most often occurs during a minimal time frame.

It was the aim of this research study to determine if the time spent interacting with the nurse in the emergency room was reflected in patient anxiety levels.

Statement of the Problem

Will time spent interacting with the nurse in the emergency room be reflected in patient anxiety levels?

Statement of the Purpose

1. To determine the amount of time the emergency room nurse spends with specific patients
2. To determine anxiety levels of these specific patients
3. To develop and implement an inservice program for emergency room nurses on communication

4. To determine the amount of time emergency room nurses spend with specific patients following the inservice program
5. To determine anxiety levels of the specific patients following implementation of the inservice programs
6. To correlate emergency nurse-patient interaction time and anxiety levels

Background and Significance

Failure to effectively communicate between health care providers and patients has been reported as an area of concern over the last several years (Korsch and Negrete 1972, p. 66). Often the problem is not recognized until a complaint is registered on behalf of the patient in a health care setting. This complaint usually arises during a time of crisis, such as in an emergency room (Korsch and Negrete 1972, p. 66).

In any health care system an important part of the nurse's role is to be able to effectively interact or communicate with the patient during a time of crisis. During these anxious moments, the nurse's interaction with the patient may be effective if it is based on the concept of the communication theory (Meyer 1976, p. 872). The communication theory states that there are five essential elements

of communication: 1) a sender, 2) a receiver, 3) a message, 4) a channel of transmission, and 5) a response or effect (Rickelman 1971, p. 398). An individual, as a communication unit, may be both a source of and a destination of messages. He may both send and receive messages and often this is done simultaneously. In the practice of nursing, the nurse and the patient contribute to the communication theory as both a sender and receiver of messages.

Since the nursing care process involves the nurse in direct interaction with patients, it seems logical that interaction between the nurse and the patient be defined as an interpersonal relationship (Bermosk and Mordan 1964, p. 2). This interpersonal relationship is composed of obtaining information, teaching, counseling, and determining goals constitutes an ongoing process between the patient and the nurse. This two-way interaction process supports the communication theory as a constantly recurring process between the patient and the nurse (Bermosk and Mordan 1964, p. 2).

The need for the nurse to understand the patient, both through verbal and nonverbal communication, has been clearly defined through the nurse-patient interaction process (Travelbee 1971, p. 96). This interaction process constituted a need for the nurse to develop skills toward goal-directed and purposeful communication. It became evident that the nurse's ability to understand her own, as

well as the patient's, needs and goals was necessary. This understanding would then contribute to effective interaction between the nurse and the patient (Bermosk and Mordan 1964, p. 3).

Anxiety is a painful uneasiness of the mind over an impending or anticipated crisis (O'Brien 1974, p. 59). Our anxieties influence the nature of our communication. When we are anxious, we often give much of our energy to preparing for the occasion, the encounter, or the communication. The level of our anxiety can help us in the productive step of realizing the seriousness of the situation and trying to cope with it. On the other hand our anxiety level can be so high or so unreal that we cannot function effectively and our communications, therefore, become very emotional (O'Brien 1974, p. 58).

In 1971 the task of adapting a more meaningful conversation with the patient became more evident. A study conducted in Los Angeles revealed an increase in anxiety among patients in an emergency room who were dissatisfied with the doctor-patient interaction (Korsch and Negrete 1971, p. 111). However, this study did not pursue the effect of nurse-patient interaction. Thus, a study concerning an approach to effective patient interaction with the nurse would be useful to the health care providers in an

emergency setting. The present study was designed to investigate the following questions.

Questions

1. What is the amount of time emergency room nurses spend with patients?
2. What is the anxiety level of these patients?
3. Did the implementation of an inservice program about communication affect the amount of time spent with patients in the emergency room?
4. What were the anxiety levels of those patients following the inservice program?
5. Did the inservice program on communication theory affect the time emergency room nurses spent with patients

Definition of Terms

Anxiety - A painful uneasiness of the mind over an impending or anticipated crisis

Communication/Effective Interaction - Action between persons. Includes an interpersonal relationship between the nurse and the patient

Crisis - a crucial situation

Protocol - an original draft of a document or plan

Emergency room nurse - identifies any fulltime registered nurse regularly assigned to work the emergency room

Limitations

1. The selection of the nurses who work in the emergency room is uncontrolled by the investigator
2. The Hawthorne effect may occur and alter the results
3. Time, money, and one investigator may limit the scope

Delimitations

1. All emergency room patients who met the criteria for selection were included in the study during the allotted time period (Appendix A)
2. Patient population was highest during the 3 - 11 p.m. shift and, therefore, this study was limited to that period of time
3. Only the interaction of registered nurses with the patient was included

4. No family members were included in the study

Assumption

It was assumed that all responses would be truthful.

Summary

Interaction between members of the health care team and the patient is an important aspect of emergency room care. Through effective interaction the health care provider or nurse may be able to affect patient anxiety levels during a time of crisis. The study was concerned with investigating patient anxiety levels as reflected through time spent interacting with the nurse in the emergency room.

The following chapter is a review of the literature which includes communication theories, the health care team, the nursing process, the importance of anxiety in crisis situations, and the importance of interaction between nurses and patients in an emergency room. Chapter III includes a description of the setting and the population, the tool used, the method of data collection, and the treatment of data. The analysis of the data and the interpretation of the data collected will be presented in Chapter IV. Finally, Chapter V is the summary, conclusions, implications, and recommendations for further study.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The review of literature is divided into six sub-headings. The first section will include communication theories and their application. Section two involves a discussion of communication between the health care providers and receivers. Section three depicts the role of the nurse, the nursing process of communication, along with job satisfaction among nurses. Section four includes both the physical and psychological manifestations of anxiety. A discussion of crisis situations and anxiety-producing situations are included in section five. The final section discusses the importance of the nurse in effective interaction with the patient during stressful situations.

Communication Theory and Application to Nursing

The word "communication" is derived from the Latin word "communis" which means common. When someone tries to communicate, he attempts to establish "commonness" with

someone else. Attitudes, ideas, feelings, and thoughts are interchanged with another person. Thus, communication is the interchange of meanings between people. Conceived in this manner communication is a basic social process and through it interaction is possible. With communication individuals are able to influence one another, carry on group activity, and socialize (Skipper 1965, p. 51).

Communication theory states that there are five essential components of communication: (1) a sender, (2) a receiver, (3) a message, (4) a channel of transmission, and (5) a response or effect (Rickelman 1971, p. 398). Consequently, communication has not occurred unless a message is received and acted on, or until some response to it is elicited (O'Brien 1974, p. 27). Thus, for communication to take place, an idea or thought must be conveyed to and understood by another person (Lewis 1969, p. 9). If the receiver does not comprehend the message or does not apply the message, interaction does not take place. Communication, therefore, can be viewed as a two-way process which involves a sender and a receiver.

When a person has a particular message to convey, he should be careful and plan the best way to communicate that message to others (Campbell and Hepler 1970, p. 3). One of the reasons people encounter problems in communication is a lack of sufficient thought and preparation before communica-

ting (Bormann 1969, p. 24). If the message is important, then sufficient preparation is a prerequisite (Bormann 1969, p. 24). Casual communication will not do when a message is meaningful and significant. Thus, each person needs to deliberate on how to convey his message so that it will be received and understood (Borman 1969, p. 24).

The interpretation of the messages depends upon the receiver--his state of mind, his needs at the moment, and the impact of the sender's personality on him (Dance 1970, p. 202). Campbell and Hepler (1970, p. 5) believe that for successful communication to evolve, it must involve at least two persons and their effect on one another. This means that the receiver must modify his behavior so that it more clearly conforms to the expectations of the sender. Certain factors determine whether individuals will take the trouble to communicate recommendations and/or act upon recommendations they receive (Mortensen 1972, p. 111). One of these factors is reward, which consists of a change in an individual's situation that is consistent with what that individual needs (Mortensen 1972, p. 111). Another factor is whether or not these rewards involve one or both parties of the communication. Campbell and Hepler (1970, p. 6) suggest that persons will attempt to communicate messages only if the reward involved is greater than the effort necessary to produce the

message. Apparently, it is important that the person sending the message believe that his relationship with the recipient is such that the receiver will acknowledge and accept the message. If this is not the case, but the sender interprets it as such, then he must expend additional effort to bring about the desired change in the relationship (Campbell and Hepler 1970, p. 4).

One important aspect of communication is interpersonal interaction. In order for effective interaction to take place our perceptions of ourselves and our perceptions of the other person must be included with our verbal and non-verbal messages. Communication with another individual includes all the processes by which people influence one another and is modified by our culture and value system. As a result, interpersonal interaction is the attempt to understand the other person's point of view, from his frame of reference, and his feelings about the situation (Lewis 1969, p. 8).

The nursing care process involves the nurse in direct interaction with patients. Therefore, interaction between the nurse and the patient may be defined as an interpersonal relationship (Bermosk and Mordan 1964, p. 2). Since communication involves an interaction between people with an exchange of information and feelings, positive

nurse-patient relationships are dependent upon a two-way process (Kramer and Shuff 1971, p. 420). This interpersonal relationship is composed of obtaining goals and constitutes an ongoing process between the patient and the nurse. This two-way interaction process supports the communication theory as a constantly revolving process between the patient and the nurse (Bermosk and Mordan 1964, p. 2).

Communication: Health Care Systems,
Providers, and Consumers

More than fifteen years ago a famous Harvard psychologist, the late Gordon Allport, stated:

. . . health workers agree that we have now entered an era when the human factor--the whims, values, and perceptions of the ordinary citizen--must be considered before future progress can be made. . . . It is the public part of public health that will increasingly concern us (Allport 1965, p. 49).

Scores of studies undertaken during the past quarter century sought to identify these "whims, values, and perceptions" (Allport 1965, p. 491).

Since communication is a basic tool for both the practice of medicine and nursing, hearing what the patient has to communicate and then making clear what they, in turn, want to communicate, characterizes total patient-centered health care (Raimbault et al. 1975, p. 401). An examination

of doctor-patient communication skills was reviewed by analyzing the medical dialogue presented to patients. The results of this study concluded that interviewing skills, different points of view, level of education, sex, and culture all enhanced the quality of communication both among health care providers and consumers. It was concluded that many factors influence the effectiveness of communication between the health care providers and the consumer (Raimbault et al. 1975, p. 404).

Failure to effectively communicate between the health care providers and patients has been reported as an area of concern for several years (Korsch and Negrete 1972, p. 66). In 1968, 800 patient visits to the walk-in clinic of the Children's Hospital of Los Angeles were studied by means of tape recording the doctor-patient interaction. Seventy-six percent of patient visits resulted in satisfaction on the part of the patient's mother, while in 24 percent of the visits, there was dissatisfaction. A number of communication barriers between the pediatricians and patient's mothers were found to contribute significantly to the patient's mother dissatisfaction (Korsch, Gozzi, and Francis 1969, p. 869).

A need for physicians and other health workers to attempt to speak the patient's language, and if not to accept, then at least understand the patient's value system

became evident in 1971. During this time a study was conducted at Children's Hospital of Los Angeles which evaluated those aspects of doctor-patient communications which significantly influence the patient's attitudes toward health behavior. This study concluded that effective communication was a fundamental consideration in enhancing preventative health care measures and child guidance (Korsch et al. 1971, p. 112).

Another essential area of effective interaction is the adequacy of the communication. DeCastro (1972, p. 86) conducted a study at the Pediatric Clinic of St. Louis University. The investigation revealed that patients were satisfied with the care rendered, but their knowledge of the diagnosis, expected duration of illness, treatment prescribed, and importance of the return visit, was inadequate. Thus, communication was seen as important, not only because of its psychologic significance, but also because it influenced the thoroughness to which the prescribed therapy was followed.

Nursing Communication, Role Process, and Job Satisfaction

O'Brien (1974, p. 56) stipulates that the ability to effectively communicate in the nursing process consists of sincere thoughts, efforts, and a desire to know yourself as well as others. She further concludes that nursing

communication is a process which is composed of flexibility, alertness, receptiveness, thoughtful preparation, encouragement, and listening (O'Brien 1974, p. 56). Through such characteristics nurses may influence the quality of communication.

As the nursing process evolved nurses have re-evaluated their ability to communicate to the clients. Understanding what the patient has to say both verbally and nonverbally has become an important aspect of total patient care (Bermosk 1964, p. 2). As the importance of nurse-patient interaction developed, it became evident that the dynamics of human behavior and the principles of communication were an essential part of the nursing process (Travelbee 1971, p. 96). Thus, the nurses' ability to communicate her own, as well as the patient's goals and needs, became an essential element of the nursing care process (Byers 1968, p. 58).

Communication with patients is a therapeutic function of nursing (Calnan 1971, p. 67). Since nurses are concerned for the health of the client effective communication may enhance the quality of health care provided by the nurse. Therapeutic communication that provides information and psychological support was evidence toward the mothers of hospitalized children. Results reflected in an alteration in the mother's stress and positively changed her image of the

hospital (Skipper and Leonard 1968, p. 72). This, in turn, affects the child's stress level, and his social, psychological, and physiological responses to hospitalization and surgery. This research was based on the premise that communication skills were as essential for professional nursing care as any procedure or technique used by nurses (Tarasuk, Rhymes, and Leonard 1968, p. 110).

The nurses inability to interact effectively with patients may be due to a response to internal working situations (Shapiro 1972, p. 229). Nurses claim that the attitude of the physician and inadequate value of time contribute to the lack of the communication process (Peitchinis 1976, p. 66). Lack of sufficient staffing, and administrative support for emphasizing the importance of interaction with patients restrict effective communication (Peitchinis 1976, p. 66). Surveys, conducted on patients and emergency room personnel to determine the exact nature of communication breakdown indicated that patients were generally dissatisfied with the impersonal attitudes of the staff when they were being ignored or treated rudely (Roberts 1976, p. 76). Emergency room staff often failed to understand what was expected of them, believed that changing the situation was impossible, and were dissatisfied with organizational communication in general (Roberts et al.

1976, p. 76). This study implied that with less job satisfaction among nursing staff, a communications barrier can be perceived by patients under their care, thus resulting in inadequate or ineffective health care (Roberts et al. 1976, p. 77).

Anxiety

Research on stress has indicated that if a person is informed about medical procedures, then he is able to go through the "work of worrying" which is necessary for crisis resolution (Janis and Terwilliger 1962, p. 403). Studies of physician-patient interaction has suggested that a great deal of anxiety is due to the patient's feelings of helplessness (Jacobs 1968, p. 151). Patients who felt that information was unclear or inadequate were often dissatisfied, confused, and noncompliant. Communication of specific information may lessen patient anxiety, especially when it provides the patient with realistic expectations regarding the treatment regimen (Kupst et al. 1975, p. 420).

The literature in nursing, psychology, and medicine abounds in descriptions of anxiety, the anxious patient, and methods for the alleviation of anxiety. Attempts have been made to describe the meaning of anxiety, to describe and explain the various physiological and psychological manifestations of anxiety, to classify the degree or level

of anxiety experienced and to suggest ways for nurses to deal with anxiety (Laughlin 1967, p. 406).

Physiological Anxiety

In 1934 Kuno demonstrated that the palms of the hands respond to emotional tension through an increase in respective sweat glands (Kuno 1934, p. 169). Emotional sweat has been quantitated indirectly through electrical study of skin resistance, and directly by observing the activity of the palmar sweat glands (Ferreira et al. 1963, p. 377). Darrow (1936, p. 73) interpreted this physiological response to anxiety as the mobilization of the epinephrine mediated "fight or flight" response (Darrow 1936, p. 73). Later studies have shown that epinephrine administered systemically produces palmar anhidrosis by nonperipheral mechanisms, and that adrenocorticoid hormone produces the same effect (MacKinnon 1966, p. 88).

A simple experimental stress test including 28 randomly selected students was conducted to investigate the activity of the palmar sweat glands. Prior administration of an epinephrine-blocking agent prevented this palmar anhidrotic effect in most subjects. The effect of the stress and of epinephrine was investigated in hypophysectomized patients. Although not all of these subjects exhibited the

usual palmar response to stress, they did so to epinephrine. The findings suggest that the effect on the palmar glands of stress is primarily due to circulating catecholamines independent of pituitary-adrenocortical activation (Harrison et al. 1966, p. 88). Other physiological responses to anxiety can be manifested through anxiety neurosis. During clear consciousness the person complains of cardiac palpitations, dyspnea, constriction of the throat, difficulty in breathing, epigastric discomfort or pain, dizziness, weakness, tremor, vomiting, sudden micturition, defecation, and running in panic (Lader 1975, p. 939).

Psychological Anxiety

Psychological anxiety has been defined as an unpleasant, emotion with subjective quality of fear and closely related feelings of inadequacy (Salkind 1973, p. 2). The individual experiences impending danger, but either the threat is identifiable or it is a presumed threat which is disproportionate to the intensity of the emotion (Tyrer 1974, p. 14). People who experience high psychological anxiety often feel threatened or fearful of the surroundings (James 1974, p. 381). For example, a study of thirty-two mountaineers and sixty-four race drivers concluded that psychological anxiety was higher while in the location of

the event. Comparison of the anxiety levels after the subjects were removed from that environment showed a decrease in their anxiety levels (Marks 1969, p. 48). Thus, psychological anxiety is viewed as a diffuse, emotion directed towards the future and associated with feelings of threat to the individual (Cader and Malcom 1975, p. 939).

Psychological states of anxiety have been observed while patients were hospitalized for surgical procedure (Schmitt, Wooldrige 1973, p. 18). A study that employed 25 control and 25 experimental patients supported the hypothesis that extensive pre-operative preparation by the nurse preceding surgery would increase patient participation, decrease tension and anxiety, and would lead to a more rapid post-operative recovery (Schmitt, Wooldrige 1973, p. 19). Exploratory studies with patients whose sensory input is restricted because of eye surgery have shown the value that accrues to patients when nurses take time to communicate pre-operatively with them (Ellis et al. 1968, p. 131).

Crisis - Time

The terms "emergency" and "crisis" are frequently used interchangeably to designate some type of situation that needs immediate attention (Getz et al. 1974, p. 15).

Caplan defines crisis as a state

. . . provoked when a person faces an obstacle to important life goals that are, for a time, insurmountable through the utilization of customary methods of problem-solving (Caplan 1961, p. 521).

Caplan (1967, p. 311) feels that the obstacles or problems the individual is faced with in the crisis state represent damage to him. The circumstances of the crisis situation are such that individuals' usual ways of solving the threatening problems are not working. They are not effective enough to reduce the high level of tension and anxiety he is feeling. Crisis, according to Caplan, refers to the individual's reaction to the situation, not to the situation itself (Caplan et al. 1967, p. 331).

In stressful situations timing is a critical factor in effective communication. Time in a hospital environment obviously is important since it is limited in the emergency department (Ehat 1967, p. 62). Because many patients are seen in the course of the day, the contact time between the nurse and the patient is often too short for a relationship to develop. Thus, for a communication to be effective, it must take into account the limits of time and the multiplicity of the personnel involved (Kupst et al. 1975, p. 421).

Nurse/Patient Interaction

In any health care system an important part of the nurse's role is to obtain specific information from patients which is useful to their physical and emotional well-being. Often, the only way the nurse can obtain such information is through direct interaction with the patient (Wallston 1975, p. 16). In stressful situations such as in an emergency room, a person who is not already in distress over a presenting problem may become worried or anxious, as when faced with a previously undetectable condition (Kupst et al. 1975, p. 420). Because the emergency room can be a stressful environment, it is important to examine the reactions associated with these patients. As an independent variable, anxiety has been found by some to be helpful in learning situations, while others have found that a high degree of initial anxiety can create resistance to communication (Janis and Terwilliger 1968, p. 409). As a dependent variable, anxiety levels have been found to decrease with improved communications. For the nurse to tell the patient what is going to happen to him decreases the patient's anxiety and can make him more comfortable during stressful events (Meyers 1976, p. 882).

The results of an exploratory six-week study in Massachusetts in which a psychiatric nurse clinician worked with the staff of an emergency department strongly supports the assumption that such nurse specialists can be extremely effective in psychologically stressful situations (Brower 1971, p. 8). O'Brien and Haywood (1973, p. 52) state that simple, direct communication with patients in critical care settings may help to alleviate some of the deleterious effects of the patient's environment thus reducing the patient anxiety (O'Brien et al. 1973, p. 52). These authors maintain that every staff contact with patients should enable them to share their difficult experiences and glean information about their situation. To reduce the patient's sense of isolation, helplessness, hopelessness, and alienation, staff interaction with the patient should give him knowledge, understanding, reassurance, and hope, as well as elevation of one's self esteem (Schmitt 1973, p. 109).

Summary

Communication is viewed as an essential social process which involves a sharing of thoughts and ideas for the delivery of health care. Communication is an important aspect toward mutual satisfaction among both health care

providers and consumers. Nurses, as part of the health care team, are involved in the process of effectively communicating to the clients. Through effective communication skills, nurses can reduce the threat to the individual and reduce his anxiety about his situation.

Anxiety levels may be reflected in the patient's response to a crisis situation such as in an emergency room. Since communication sometimes is not considered by nurses rendering the nursing care, measurements of anxiety may serve to increase the nurse's awareness of effective communication in the emergency room. The following chapter outlines the method utilized to determine patient anxiety levels prior to and after teaching nurses effective communication skills in the emergency room.

CHAPTER III

PROCEDURE FOR COLLECTION OF DATA

Introduction

Descriptive research is primarily concerned with obtaining accurate and meaningful descriptions of the phenomena under study. By this definition, Abdellah and Levine (1965, pp. 425-426) stated that the primary aim of descriptive research is to discover new facts. Although descriptive studies may not present as formidable an intellectual challenge as do methodological and explanatory studies, they occupy an important place in the total research spectrum. In nursing descriptive research has yielded important data for program planning and for decision-making, and thus may provide a basis for undertaking explanatory research.

Descriptive studies, where the aim of the research is to generate new facts, are largely nonexperimental. Nonexperimental research is especially suited, since description implies natural observation of the research subject without deliberate manipulation of the variables over the

research setting (Abdellah and Levine 1965, p. 41). However, a weakness of nonexperimental research is in the control of extraneous variables since the study is conducted in its natural setting (Abdellah and Levine 1965, p. 436).

Although descriptive research has its limitations, its greatest advantage lies in this weakness in that limited control of external factors allows greater generalizability to a larger population (Kerlinger 1973, p. 325). A non-experimental design, descriptive in nature, was used in this study to observe the time of interaction between the nurse and the patient in an emergency room.

Setting

The study was conducted in a 499-bed, privately operated, hospital located in a Central Texas town. The emergency department of the hospital was utilized during the 3- 11 p.m. shift, serving a population of 35 - 50 patients. Total patient population was 80 patients per day. This unit had a capacity of 14 beds, which included 2 trauma rooms, 1 cast room, and 11 treatment rooms. Staffing of this unit consisted of 6 registered nurses, 1 graduate nurse, 6 physicians, 1 medical resident, 8 nurses aides, and 3 unit clerks.

Population

All patients admitted to the emergency room within the selected time-frame who met the criteria of an emergency room patient were admitted to the study (Appendix A). The criteria set forth by the investigator for an emergency room patient were:

1. Must be eighteen years of age or older
2. Must be able to speak English
3. Must agree to participate in the study
4. Must meet the criteria of an emergency room patient. The criteria definition of an emergency room patient was a client who exhibited an injury or disease that was unexpected, serious, and demanded immediate attention. This included only those patients who received immediate care and then were discharged to return home.

A verbal explanation of the study was given to each participant and confidentiality was guaranteed by the investigator. Agreement to participate was evidenced by the patient's signature on Form B (Appendix B).

Tools

The first step in this study was the development of the tools which occurred in four phases.

Phase I

Phase I included the development of the nurse's perception questionnaires. This questionnaire was designed to elicit the following data from nursing participants:

1. Level of education
2. Age
3. Perception of nurse/patient interaction
4. Perception of role
5. Perception of job satisfaction

The questionnaire designed for patient participants yielded data concerning:

1. Age
2. Sex
3. Reasons for presentation to the emergency room
4. Perception of emergency room nurse's role
5. Perception of interaction with emergency
room nurses

The questionnaires were developed by the investigator through a compilation of criteria found indirectly through the

review of literature. Validity of the questionnaire was established by submission of sample questions to an expert panel. The panel consisted of:

1. A registered nurse currently involved in hospital inservice education
2. A registered nurse involved with communication in psychiatric nursing
3. A registered nurse currently involved in private practice with psychiatric patients

Suggestions were incorporated, and the final forms are presented in Appendices C and D.

Phase II - Palmar Sweat Index

A. Definition - the Palmar Sweat Index is defined as the number of glands which secrete sweat in a 4 mm. square area around the central whorl of a fingertip (Johnson and Dabbs 1967)

B. Validity and reliability - sweat glands in the palmar surfaces of the hand respond rapidly to mental and emotional stimuli (Dabbs 1967, p. 18). The sweat glands of the palm do not function in response to changes of the environment or body temperature (Darling 1948, p. 150), but are activated by alternating stimuli. Palmar sweating has been observed in association with conditions likely to induce emotional

distress whether or not this is accompanied by physical strain (Kuno 1956, p. 6). Instances of this phenomenon have been reported in subjects walking while in a heat chamber (Kuno 1956), in mountaineers climbing at high altitudes (MacKinnon 1959, p. 199), and in patients during disturbing psychiatric interviews (Vanderbalk 1960, p. 49). These various situations can exhibit palmar sweat gland response to stress which is primarily due to circulating catecholamines independently of the pituitary-adrenocortical activation in man (MacKinnon et al. 1966, p. 88).

The laboratory studies Harrison and MacKinnon (1966, p. 90) observed that a task involving physical exertion and discomfort (as in holding one's leg extended as long as possible) led to a reduction in the number of active sweat glands and to increased pupillary dilation. They also reported that increased blood levels of the adrenal hormones are associated with decreased sweating and they postulated that "stress" causes decreases in sweating (Harrison and MacKinnon 1966, p. 88). In studies with surgical patients the number of active sweat glands showed a steady daily drop before surgery with a return increase in the number of active sweat glands during the recovery phase (Johnson and Dabbs 1970, p. 19).

Johnson and Dabbs (1968) obtained prints from 12 females before, during, and after a statistics examination

before a regular class, and later while working on multiplication problems. A higher number of open pores was obtained for the examination condition than for the other conditions. During the multiplication problems, a high number of open sweat pores was obtained at the start and at the end of the task with a depression in the middle period (Dabbs et al. 1968, p. 347). These increases correlated with reported mood ratings of an increase in arousal and happiness and decrease in anger and depression. Johnson and Dabbs further explained that increased numbers of open pores are associated with interacting with the environment, while decreased numbers of open sweat pores were found to be associated with introspection and withdrawal from the environment. Thus, the selectivity of responses makes palmar sweating a potentially useful indicator of psychological changes.

The Palmar Sweat Index has been utilized to obtain data about physiological responses to emotional environment and stimuli. A study was undertaken utilizing responses to treatment in a dental emergency room (Weisenberg 1975, p. 4). Weisenberg concluded that there was an increase in the number of open pores in patients during treatment in comparison to the pre-treatment period.

Physiological responses in relation to psychological responses to the environment are able to manifest

through the use of the Palmar Sweat Index. Dabbs reported that sweat glands in the palmar surfaces of the hand respond rapidly to mental and environmental stimuli (Dabbs 1967, p. 18). Since palmar sweating is a simple and direct method for obtaining such data, it was utilized in this study.

C. Method of enumerating active sweat glands. The Palmar Sweat Index is based on sweat gland activity in a fingertip. A fingertip is more readily accessible than an area in the palm and can be located easily for repeated measures. Any finger which is not caloused and does not have an excessive-ly worn print can be used.

Active sweat glands are visible in a fingertip print made with the following solution (Johnson and Dabbs 1967):

Polyvinyl Formal (Formvar)	5 gm
Butyl pthylate	10 ml
Semi-colloidal dispersion of graphite in trichlor- ethylene	20 gm
Ethylene dichloride	100 ml

Polyvinyl formal withdraws from moisture, leaving holes or bubbles in the print wherever there are pores containing droplets of sweat. Butyl phthalate gives strength to the print, graphite provides the visual contrast agent, and ethylene dichloride is utilized as a solvent.

The literature reflected use of the above chemicals. However, the investigator found that butyl phthalate was no longer available. After conferring with several chemists and pharamcologists, it was suggested to use a substitute: butyl benzyl phthalate in the same quantity.

Phase III - Development of Protocol for Inservice Program

The third phase included a review of the literature concerning nurse and patient interaction. Established criteria for determining effective nurse and patient interaction were researched by the investigator. Upon completion of a review of literature, a written protocol for a communication inservice program was designed (Appendix E). Face validity of the inservice program was established by an expert panel composed of three members involved in the delivery of education. The members consisted of:

1. A registered nurse with two years' experience in hospital inservice program
2. A registered nurse, with six years experience in hospital inservice program
3. A registered nurse with a master's degree currently involved in graduate education

Internal validity of the developed protocol was established by the skills and knowledge of the investigator. Reliability will be established upon replication of this study.

Phase IV - Recording of the Time of Interaction Observed

The final phase includes the recording of time for nurse/patient interaction. A stop watch was used to record the interaction between the nurse and the patient. The time was recorded in seconds per minute.

Data Collection

Thirty patients and six registered nurses were utilized in this study. Patient population was designated as control group A and experimental group B. The following steps were taken to obtain data:

1. Timing of nurse/patient interaction
2. Administration of patient perception questionnaires
3. Administration of the Palmar Sweat Index
4. Administration of nurses' perception questionnaire
5. Presentation of the nurses' communication inservice program

Before the study was implemented, permission in writing was obtained from the administration of the hospital, participants (Appendix B), and from the Human Rights Committee from the Texas Woman's University (Appendix B).

A. Control Group A

During a three and one-half week period, all patients seeking emergency care at the study institution during the 3- 11 p.m. shift were approached as follows:

1. Only those subjects who met the criteria of an emergency room patient were approached
2. The investigator timed the nurse/patient interaction by keeping a stop watch inside her lab coat. Recording occurred as inconspicuously as possible to insure reliable results. The interaction was recorded in seconds per minute.
3. Upon completion of the rendered treatment the investigator explained the study to the subject and received written permission
4. The investigator administered the patient perception questionnaire to the subject
5. Upon completion of the questionnaire, the investigator administered the Palmar Sweat

Index test using the procedures described below.

The procedure for enumeration of active sweat glands as described by Johnson and Dabbs (1967) was used:

- a. The fingertip was wiped with a tissue to remove residual sweat
- b. A thin layer of solution was applied from the container with a single dab on the fingertip
- c. The fingerprint was made with the following solution:

5 gm polyvinyl formal
10 gm. butyl benzyl phthalate
20 gm. semicolloidal dispersion of graphite in trichorethylene
and 100 ml ethylene dichloride
- d. After the solution dried (10 - 30 seconds), it was covered with a piece of Scotch "Magic transparent" tape
- e. The tape was removed and placed directly on a glass microscope slide
- f. The print was enlarged on a low-powered microscope and scored by counting the number of open pores in a 4-mm. square area around the central whorl of the

fingertip

- g. A qualified microbiologist rechecked the investigator on the scoring of the fingerprints

6. This group consisted of 15 patients.

B. Implementation of the Inservice Protocol

Upon completion of the data collection for Group A, an inservice program on communication was presented to the nursing staff in the emergency room. This occurred two days later. Objectives of the class were outlined (Appendix E).

1. The nurses' perception questionnaire was administered
2. An informal period during the class was allotted for questions and answers
3. Time allotted was 45 minutes
4. Upon completion of the inservice class, informal instruction was given individually to each staff nurse. This informal teaching lasted 30 - 60 minutes per registered nurse
5. The material presented during the interview was based on content reviewed in the literature

C. Experimental Group B

Three days following the presentation of the inservice program, the investigator began to collect data on the post-teaching of communication skills. This period lasted 1 - 1/2 weeks.

1. The procedure for collection of data was the same as presented in Group A
2. A total of 15 patients were included in this group

Treatment of Data

Data collected during this study were subjected initially to descriptive nonparametric analysis. According to Siegel (1956, p. 31), this is a test whose model does not specify conditions about the parameters of the population from which the sample was drawn.

The interval data obtained for "time of interaction" were compared to participant's Palmar Sweat Index value by utilization of analysis of variance and t-test. The absence of the assumption of normalacy was not considered a deterrent for this analysis. Kerlinger (1973, p. 286) stated that in using the t and F tests that the samples with which we work have been drawn from populations that are normally

distributed. It is said that if the populations from which samples are drawn are not normal, the statistical tests that depend on the normality assumption are vitiated.

Comparison of Control Group A and Experimental Group B for similarity was accomplished by a t -test and chi-square goodness of fit test.

Summary

A sample of thirty patients and six nurses were chosen for participation in this study. The Palmar Sweat Index was utilized as a measure of anxiety levels. The total number of patients ($N=30$) were divided into a control group A and an experimental group B. The nurses involved in the study received an inservice class concerning communication. Following the inservice, data were collected for group B. This study investigated the time patients spent interacting with the nurse and whether or not the anxiety levels of these patients were different. The following chapter presents the analysis of these data.

CHAPTER IV

ANALYSIS OF DATA

Introduction

A group of thirty patients and six nurses participated during the six weeks of this study. A descriptive design was implemented to answer the question: Will time spent interacting with the nurse in the emergency room be reflected in patient anxiety levels? The purpose of the study were to determine the time nurses spent interacting with the patient in the emergency room and to compare the time spent with the patient's anxiety level. All patient participants were seen in the emergency room of the study institution and were discharged to return home. All registered nurses chose to work in the emergency room.

The remainder of this chapter is presented in three sections. These sections are: 1) a description of the sample population characteristics, 2) categorization of participant's subjective responses to the questionnaires, and 3) statistical analysis of the data obtained for nurse/patient interaction time and patient's Palmar Sweat Index.

Characteristics of the Population

Nurse Sample

Seven "nurses" were employed in the emergency department during the time frame of data collection. Of these seven, six were registered nurses holding a current state license and were included in the sample. Table 1 presents age, sex, and basic educational preparation of these nurses. The mean age of the nurses was 27.6. Five nurses were females, and one nurse was male. Fifty percent of the nurse sample received their preparation from an associate degree program of nursing. Two nurses were prepared at the baccalaureate level of education. One received her nursing education in a hospital diploma school of nursing.

TABLE 1

Characteristics of Nurse Sample Age, Sex, and Education

Age Range	Number	Sex	Number	Educational Preparation	Number
20 - 25	2	Male	1	Diploma	1
26 - 30	2			Associate Degree	3
30 <	2	Female	5	Baccalaureate Degree	2*
\bar{x} 27.6	$\bar{6}$				$\bar{6}$

*1 baccalaureate degree was in a foreign country

Patient Sample

The characteristics of the patient population assessed included age, sex, and presenting diagnosis. Table 2 presents the ages of patient Group A as compared to Group B.

TABLE 2

Comparison of Patient Group A and Group B
By Age

Age Range	Group	
	A	B
18 - 27	6	5
28 - 37	3	6
38 - 47	2	1
48 - 57	1	2
58 - 67	1	1
68 <	2	0
	N = 15	N = 15
	$\bar{x} = 37.9$	$\bar{x} = 34.6$
Grand Mean = 36.3 years		
<hr/>		
t = 0.56	df = 28	

The mean age of Group A, control group, was 37.9 years with ages ranging from 20 years to 71 years of age. Group B, experimental group, had a mean age of 34.6 years with a range between 19 years to 68 years. When the data were analyzed by a t -test for a difference in means, it was

found not to be statistically significant. Therefore, the two groups were similar in age.

In Table 3 control Group A and experimental Group B are compared by sex distribution.

TABLE 3

Comparison of Group A and Group B by Sex

Sex	Group	
	A	B
Male	5	8
Female	10	7
Total	15	15

$$\chi^2 = 1.73$$

$$E = 7.50$$

Group A had proportionately more females (66 percent) than did experimental Group B (53 percent). When these data were analyzed by the chi-square statistic for the goodness of fit, there was not a statistically significant difference between the control and experimental group by distribution of sex.

The patient sample's presenting diagnoses are classified in three general categories. These are:
 1) trauma, 2) acute minor illness, and 3) recurrent previously diagnosed pathology. Table 4 presents a comparison of Group A and Group B by presenting diagnoses.

TABLE 4
 Comparison of Group A and Group B by Presenting
 Diagnosis Categories

Category	Group A		Group B	
	Number	Percent	Number	Percent
Trauma	5	(33.3)	7	(46.6)
Acute Minor Illness	5	(33.3)	2	(13.3)
Recurrent Pathology	5	(33.3)	6	(40.0)
	N=15	(100.0)	N=15	(100.0)

As seen in Table 4, Group A was evenly distributed among the three categories. Group B had 13.3 percent more "trauma" as a presenting diagnosis with a 20.3 percent decrease in the "acute minor illness" category. However, this variance is not significantly different between the two groups. The similarity of presenting diagnosis between the two groups was consistent between Group A and experimental Group B.

Categorization of Subjective Responses
to Questionnaire

Nurses' Responses

The nurse sample completed the questionnaire found in Appendix D. Questions may be classified in categories of 1) increased perception of job satisfaction, 2) perception of time allocation for role, 3) perception of role concepts and, 4) perceptions of communication.

Question Number Two, "I like working in the emergency room," and Question Number Ten, "If given the opportunity to gain total job satisfaction, I would choose to work in the emergency room," both apply to direct perception of job satisfaction. Table 5 has a summary of nurses' responses to these questions.

TABLE 5

Summation of Nurses' Responses to Questions
Number Two and Ten - Job Satisfaction

Question Number	Response				
	Always	Usually	Sometimes	Rarely	Never
2	5 (83.3)	1 (16.6)	0	0	0
10	6 (100)	0			

(Numbers in parentheses are percentages.)

Responses illustrated in Table 5 show nurses report a high perceived job satisfaction consistently. The effect of the directness of these questions and the verbalized desire to "do well" on the part of the nurses, may have influenced these responses.

Table 6 presents summary results of nurses' responses to Question Number One, Five, and Six, which relate to perceptions of time allocations associated with their role. The following is a listing of the questions:

Question Number One: I feel sufficient time
is spent interacting with the patient

Question Number Five: If given the opportunity
I would spend more time with patient
interaction

Question Number Six: I take the time to explain
medication to the discharged patient

TABLE 6
Summation of Nurses' Responses to Questions
Number One, Five and Six - Time Allocations

	Response				
	Always	Usually	Sometimes	Rarely	Never
1	0	5 (83.3)	1 (16.6)	0	0
5	2 (33.3)	1 (16.6)	3 (50.0)	0	0
6	0	5 (83.3)	1 (16.6)	0	0

(Numbers in parentheses are percentages.)

Responses illustrated in Table 6 show that 83.3 percent of the nurses felt that sufficient time was spent interacting with the patient. Nurses' perceptions of their role as providing information to the patient about medical and discharge was 83.3 percent. These results may have been influenced by the Hawthorne effect, presence of the investigator, or a need to "please" the investigator.

Table 7 is a summary of perceptions of role concepts. This includes questions number Three, Four, and Nine, which are as follows:

Question Number Three: Before assessing the individual, I read the diagnosis.

Question Number Four: I view patient teaching as an integral part of my responsibility as an emergency room nurse

Question Number Nine: I feel adept at handling emergency room situations

TABLE 7

Summation of Nurses' Responses to Question
Numbers Three, Four, and Nine
Role Concepts

Question Number	Response				
	Always	Usually	Sometimes	Rarely	Never
3	3 (50.0)	2 (33.3)	0	0	1 (16.6)
4	2 (33.3)	3 (50.0)	1 (16.6)	0	0
9	4 (66.6)	2 (33.3)	0	0	0

(Numbers in parentheses are percentages)

Illustration of the results in Table 7 demonstrate that 50 percent of the nurses conceptualized their role as assessing the individual by diagnosis. Responsibility of patient teaching and adaptability of emergency room situations was viewed as an integral part of emergency room nursing (83.3 percent). Presence of the investigator and discussion of communications may have influence these results.

Table 8 includes Questions Seven and Eight which illustrate perceptions of communication, which are as follows:

Question Number Seven: I give the patient
interaction concerning follow-up care

Question Number Eight: Do you feel the patient
comprehends instructions regarding follow-up
care?

TABLE 8

Summation of Nurses' Responses to Questions
Number Seven and Eight -
Perceptions of Communications

Question Number	Responses				
	Always	Usually	Sometimes	Rarely	Never
7	3(50)	3(50)	0	0	0
8	1(16.6)	2(33.3)	3(50)	0	0

(Numbers in parentheses are percentages.)

Responses illustrated in Table 8 demonstrate more than 50 percent of the nurses perceiving themselves as communicating instructions to patients. The effects of the communications inservice program may have resulted in the responses by the nurses. Patients (Group B) perceived nurses as communicating more effectively upon completion of the inservice program. Therefore, results displayed are questionable.

Patients' Responses

Patients included in this study both Group A, control, and Group B, experimental, completed the questionnaire found in Appendix C. Group A responses and Group B responses are compared for each question. Table 9 presents this comparison for Question One, Can you identify the nurse?

TABLE 9

Group A and Group B Responses Summary for
Personnel Identification

Responses	Group		Difference
	A	B	
Yes	10 (66.6)	10 (66.6)	0
No	5 (33.3)	4 (26.6)	-1
Other	0	1	+1

(Number in parentheses are percentages.)

Table 9 displays no significant difference between the central Group A or the experimental Group B. Both groups responded "yes" or 66.6 percent as to the identification of the nurse. Presentation of the inservice communications class to nurses had no effect upon patient responses.

Table 10 displays the comparison for Question Number Two: Did you feel you were treated as a number rather than a person?

TABLE 10

Group A and Group B Response Summary for
Personnel Treatment

Response	Group		Difference
	A	B	
Yes	7 (46.6)	8 (53.3)	-1
No	7 (46.6)	7 (46.6)	0
Other	1 (6.6)	0	+1

(Numbers in parentheses are percentages.)

Table 10 showed no statistical significant differences between the two groups. Table 11 presents a comparison for Question 3: Was the nurse friendly toward you?

TABLE 11

Group A and Group B Response Summary for
Personnel Feelings

Responses	Group		Difference
	A	B	
Yes	12(80)	11(73.3)	+1
No	2(13.3)	3(20.0)	-1
Other	1(6.6)	1(6.6)	0

(Numbers in parentheses are percentages.)

Responses in Table 11 show no statistical significant difference between the control or experimental group. Patients from both groups felt that nurses were friendly toward them.

Table 12 illustrates a comparison of groups for Question Number 4: Did the nurses give you any instructions to follow at home?

TABLE 12

Group A and Group B Response Summary for
Patient Instructions

Response	Group		Difference
	A	B	
Yes	3(20)	10(66.6)	-7
No	12(80)	5(33.3)	+7
Other	0	0	0

(Numbers in parentheses are percentages.)

Responses illustrated in Table 12 demonstrate a significant difference between Group A and Group B. Group B had 66.6 percent "yes" to the question of the nurses giving instructions to patients. The communication inservice program did influence patients' responses for Group B as compared to Group A. Nurses spent more time post-inservice with the patient which may account for nurse/patient satisfaction for the experimental group. Whether or not nurses instructed more for Group B is questionable since the nurses were more aware of the presence of the investigator and communication skills.

Table 13 presents a comparison for question number five: Were the instructions clear enough to follow?

TABLE 13

Group A and Group B Response Summary For
Explicit Instructions

Response	Group		Difference
	A	B	
Yes	3 (20)	10 (66.6)	-7
No	5 (33.3)	3 (20)	+2
Other	7 (46.6)	2 (13.3)	+5

(Numbers in parentheses are percentages.)

Table 13 displays a significant difference in the experimental Group B (66.6 percent) as compared to Group A (20 percent). The communications inservice class among the nurses did elicit better patient responses in the experimental group. Whether the quality of communication skill used by nurses increased post inservice or if patients were more satisfied because nurses spent more time with them can account for such responses.

Table 14 displays a comparison for Question Number Six: Did you want to talk longer with the nurse?

TABLE 14

Group A and Group B Response Summary for
Longer Interaction

Response	Group		Difference
	A	B	
Yes	1 (6.6)	0 (0)	1
No	14 (93.3)	15 (100)	-1
Other	0	0	0

(Numbers in parentheses are percentages.)

Table 14 shows no significant difference in the responses between the control and experimental group. The nurses' inservice programs had no effect on patient responses among the two groups.

Table 15 exhibits a comparison of Question Number Seven: Were you afraid to ask the nurse questions?

TABLE 15

Group A and Group B Response Summary for
Patient Fears

Response	Group		Difference
	A	B	
Yes	1 (6.6)	0 (0)	+1
No	14 (93.3)	15 (100)	-1
Other	0	0	0

(Numbers in parentheses are percentages.)

Responses in Table 15 reflect no significant difference between the control or experimental group. Patient fears of asking the nurse questions were not affected by the nurses spending more time with them post inservice.

Table 16 presents a comparison for Question Number Eight: Did you receive any medication to take home?

TABLE 16

Group A and Group B Response Summary for
Medication

Response	Group		Difference
	A	B	
Yes	9 (60.0)	5 (33.3)	+4
No	4 (26.6)	7 (46.6)	-3
Other	2 (13.3)	3 (20.0)	-1

(Numbers in parentheses are percentages.)

Responses illustrated in Table 16 demonstrate no significant difference between the two groups. However, Group B received less medication as compared to Group A.

Table 17 displays a comparison for Question Number 9: Did the nurse explain the medication to you?

TABLE 17

Group A and Group B Response Summary for
Explanations

Response	Group		Difference
	A	B	
Yes	2 (13.3)	6 (40.0)	-4
No	11 (73.3)	6 (40.0)	+5
Other	2 (13.3)	3 (20.0)	-1

(Numbers in parentheses are percentages.)

Table 17 shows no significant difference in comparing Group A to Group B. However, patient perceptions in Group B of an explanation of medication by nurses may have resulted in the nurse's increased awareness of communication and time spent with the patient. Also, since the utilization of medication to patient decreased in Group B as seen in Question Number Eight: Nurse perception of instruction and explanation of medications, could have influenced the results.

Table 18 presents a comparison for Question Number Ten, as follows: Did you feel hurried by the nurse's manner while talking with her?

TABLE 18

Group A and Group B Response Summary for
Patient Perception of Time

Response	Group		Difference
	A	B	
Yes	4 (26.6)	1 (6.6)	+3
No	11 (73.3)	11 (73.3)	0
Other	0	3 (20.0)	-3

(Numbers in parentheses are percentages.)

Table 18 illustrates that responses by patients in general perceived themselves as being less hurried by nurses (6.6 percent) as compared with Group A (26.6 percent). These results could have been influenced by the awareness among nurses to spend more time with the patient after inservice class.

Analysis of Nurse-Patient Interaction
Time and Palmar Sweat Index

Control Group A and experimental group B were compared by t-test and analysis of variance. The results of this comparison is presented in Table IXX.

TABLE 19

Comparison of Interaction Time - Group A
with Group B

Group	
A	B
$\bar{x} = 93.9$ seconds	$\bar{x} = 158.8$ seconds
$f = 20.58$	$df = 1/28$ $p < .001$
$t = 4.54$	$df = 28$ $p < .001$

Table 19 shows a highly significant difference between the interaction time of Group A to Group B. Nurses spent more time interacting with patients after the presentation of the communication inservice program. Awareness of time and communication skills could have contributed to such responses. Presence of the investigator and the Hawthorne effect may have influenced the results.

Table 20 presents analysis of the data comparing Palmar Sweat Index scores of Control Group A and experimental Group B.

TABLE 20

Group A Compared with Group B by Palmar
Sweat Index Scores

Group A	Group B
$\bar{x} = 40.9$	$\bar{x} = 38.8$
$t = .16$	$df = 28$
$f = .03$	$df = 1/28$

There is not a statistically significant difference in the Palmar Sweat Index scores of the two groups. Patient anxiety levels could have decreased upon completion of the treatment rendered in the emergency room. The utilization of the substitute chemical (Butyl Benzyl phthalate) could have influenced the reliability of the Palmar Sweat Index scores. There is a question as to the validity of the Palmar Sweat Index being an indicator of patient anxiety levels.

Palmar Sweat Index scores were correlated with interaction time for Group A and Group B. Correlation was completed by using Spearman's rank order correlation. Results of this analysis is presented in Table 21.

TABLE 21

Correlation of Palmar Sweat Index Scores and
Interaction Time
Groups A and B

	Group A	Group B
r_s	-.27	.33
z	-1.02	1.23

There is no statistical correlation of nurses' interaction time and the Palmar Sweat Index scores of the two groups. Since the quality of communication skills was not measured, the quantity of time did not influence the Palmar Sweat Index scores. Since the scores obtained from the Palmar Sweat Index were not as accurate as those reported in the literature, there is questionable reliability and validity of the Palmar Sweat Index as an indication of patient anxiety levels.

Discussion

The demographic characteristics of nurses revealed their mean age as 27.6 years. Sex and educational level of

the six nurses did not differ significantly among the nurses. Therefore, education level was not considered an integral part of the study. General patient population revealed the grand mean age as 36.3 years of the two groups. Sex and diagnosis of patients did not differ significantly between the control group and experimental group. Thus, characteristics displayed by nurses and patients did not influence the results of the study.

Interpretation of the nurses' subjective responses to the questionnaire showed that nurses reported 100 percent job satisfaction and would choose the emergency room as their area of work. Nurses perceived themselves as allotting enough time (83.3 percent) for interaction and instructions to patients. The majority of these nurses (50 percent) conceptualized their role in the emergency room as assessing the patient teaching and being able to perform during emergency room crisis situations. More than 50 percent of the nurses perceived themselves as effectively communicating with patients.

Patient subjective responses to the questionnaire for the control group and experimental group concluded that they were satisfied with their treatment by nurses. Patients in the experimental group perceived nurses as giving more explicit instructions (66.6 percent) post nursing inservice class than patients in the control group. Whether nurses

used better communication skills for the experimental group versus the control group remains questionable. Patients received less medication in the experimental group and perceived nurses as giving more instructions to them as compared to the control group. These results could have been influenced by the presence of the investigator, the Hawthorne effect, or the nurses' awareness of communication skills.

The results of the interaction time was greater for Group B (158.8 seconds) as compared to Group A (93.9 seconds). Nurses spent more time interacting with the patient post-inservice communication class which may have resulted from an increased awareness of time, communication, or the nurse's wish to "please" the investigator. Again, the Hawthorne effect and the presence of the investigator in the emergency room may have influenced these results.

The Palmar Sweat Index scores decreased in Group B ($\bar{x} = 38.8$) as compared to Group A ($\bar{x} = 40.9$). Analysis of the Palmar Sweat Index by t and F tests showed no statistical significance in the difference between the two groups. Patient anxiety levels remained equal. Therefore, there is a question as to the reliability and validity of the Palmar Sweat Index. Also due to the use of the substitute chemical, Butyl benyl phthalate, the scoring of the Palmar Sweat Index may have influenced the results. Therefore, the use of the Palmar Sweat Index as an accurate means for

testing patient anxiety levels remained a question.

There was no correlation between the time the nurses spent interacting with the patient and patient anxiety levels. The quantity of time had no influence on patient anxiety level between the groups. The quality of communication skills was not recorded; therefore, the communication inservice program did not affect patient anxiety levels.

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

Summary

A descriptive quasi-experimental study was implemented in the emergency room of one hospital. This study investigated: Will time spent interacting with the nurse in the emergency room be reflected in patient anxiety levels? The purposes of the study were to determine the amount of time nurses spent with the patient, and patient anxiety levels. The second purpose was to develop an in-service program about communication and its effect upon the patient anxiety levels. The final purpose was to correlate nurse/patient interaction time with patient anxiety levels. The tool utilized for measuring patient anxiety levels was the Palmar Sweat Index.

Failure to effectively communicate between the health care providers and patients has been reported as an area of concern over the last several years (Korsch and Negrete 1972, p. 66). Often the problem of poor communication is not recognized until a complaint is registered on behalf of the patient. This complaint usually arises during

crisis-producing moments such as in an emergency room (Korsch and Negrete 1972, p. 66).

The task of adapting and understanding methods for conducting a more purposeful and meaningful conversation with the patient to the context of nursing as practiced in the emergency room became evident in 1971. A study conducted in Los Angeles revealed an increase in anxiety among patients in an emergency room who were dissatisfied with doctor/patient interaction (Korsch and Negrete 1971). Thus, a study concerning an approach to effective patient interaction with the nurse would be useful to the health care providers in an emergency room. Therefore, this study was concerned with communication skills of nurses and whether or not these skills influence patient anxiety levels.

A total of thirty patients and six nurses were utilized in the study. The patients were assigned to a control group (Group A) pre-inservice, and an experimental group (Group B) post-inservice. All registered nurses were taught communication skills during a 45-minute period by the investigator.

Questionnaires for both the patients and the nurses were developed by the investigator. An expert panel reviewed the questionnaires before distribution. Subjective responses to the questionnaires were summarized and recorded.

The timing of nurse/patient interaction was performed by the investigator as inconspicuously as possible while observing in the emergency room. The control group (Group A) demonstrated actual nurse/patient interaction time since these data were collected prior to the communication inservice class. The experimental group displayed nurse/patient interaction time upon completion of the nurses' communication inservice class. The communication inservice class revealed increased time with the patient; however, the quality of this communication remains questionable.

The Palmar Sweat Index test was administered to both groups of patients and recorded. Palmar Sweat Index scores obtained were counted and revealed no statistical difference between the control group and experimental group. The use of time and patient anxiety levels statistically revealed no significant difference between the two groups. There was no statistical correlation between the time nurses spent interacting with the patient and patient anxiety levels.

Conclusions

The results of this study had the following conclusions:

1. Interaction time does increase with increased awareness of communication among nurses. This

conclusion may be due to the presence of the investigator of the Hawthorne effect

2. The Palmar Sweat Index may not be an appropriate physiological measure of anxiety levels, since anxiety levels were measured after treatment of the patient. True anxiety levels may not have been obtained
3. Findings evidenced by the Palmar Sweat Index do not support those reported in the literature
4. The quantity (i.e., times of interaction) is not a definitive indicator of quality of interaction
5. The presence of the investigator during data collection may influence the validity of collected data. The nurses want to "please" the investigator may have influenced the responses. The Hawthorne effect may have occurred
6. Patients reported satisfaction was enhanced by the nurses' increased awareness of communication
7. The nurses' perceptions of role and job satisfaction may be affected by the wish to "please" the investigator and the Hawthorne effect.

Implications

The implications derived from the findings of this study are directed toward nursing service and nursing education. An increase in nurses' awareness of communication skills can influence patient understanding of health care. Although it cannot be said that anxiety levels of patients decreased with increased interaction, it can be said that patients' personnel satisfaction and their perceptions of instructions did, in fact, increase. Perhaps the benefit of time spent with the patient can enhance the quality of communication.

Since the quality of communication was not measured, the nurse must assume that the quantity (i.e., time) may influence patient responses. Because patient anxiety levels showed no statistical correlation with time, awareness of communication skills may provide for better patient satisfaction in the emergency room.

Recommendations

Additional research remains to be done regarding nursing and communication skills. It has been shown that patient's satisfaction is increased with more time nurses spend with the patient, but it is not known how these skills reflect patient behavior. For this reason it is recommended

that a different design be developed to eliminate the effects of the investigator. It is further recommended that more studies be developed to observe the quality of nurse/patient interaction. If the Palmar Sweat Index is utilized, then it should be modified or a replication of this study is recommended. Perhaps an alternate method of measuring anxiety should be utilized.

Also based on the outcomes of this study, it is recommended that communication theories be tested in other health care settings. Perhaps other methods of teaching communication techniques would be more effective for nurses. Additional research is also needed to determine if nurses are aware of their communication skills.

LIST OF REFERENCES

Books

- Abdellah, Faye and Levine, Eugene. 1965. Better Patient Care Through Nursing Research. New York: MacMillan Co.
- Bermosk, Loretta and Mordan, Mary. 1964. Interviewing in Nursing. New York: MacMillan Co.
- Bormann, Ernest G. et al. 1969. Interpersonal Communication in Modern Organizations. New Jersey: Prentice Hall, Inc.
- Byers, Virginia. 1968. Nursing Observations. Dubuque: William C. Brown Co.
- Campbell, J.H. and Hepler. H.W. 1970. Dimensions in Communication. California: Wadsworth Publishing Co.
- Caplan, G. 1961. An Approach to Community Mental Health. New York: Grimes and Stratton.
- . 1963. Emotional Crisis. In Encyclopedia of Mental Health. New York: Franklin and Walt Co.
- Ellis, M. et al. 1968. ANA Regional Clinical Conferences. New York: Appleton-Century Crofts
- Getz, William et al. 1974. Fundamentals of Crisis Counseling. Toronto: Lexington Books.
- Jackson, Don. 1973. Therapy, Communication and Change. California: Science and Behavior Books, Inc.
- Kerlinger, Fred. 1973. Foundations of Behavioral Research. New York: Holt, Rinehart, and Winston, Inc.
- Kuno, Y. 1956. Human Perspiration. Thomas: Springfield.
- Laughlin, H.P. 1967. Neuroses. New York: Appleton-Century-Crofts.

- Lewis, Garland K. 1969. Nurse-Patient Communication. Dubuque: William C. Brown Co.
- Marks, I.M. 1969. Fears and Phobias. London: Heinemann.
- Mortensen, C.D. 1972. Communications: the Study of Human Interaction. New York: McGraw Hill.
- O'Brien, Maureen. 1974. Communications and Relationships in Nursing. Saint Louis: C.V. Mosby.
- Siegel, P. 1956. Nonparametric Statistics for the Behavioral Sciences. New York: McGraw-Hill.
- Skipper, James K. and Leonard, R. 1965. Social Interaction and Patient Care. Philadelphia: Lippincott.
- Tarasuk, M.B. et al. 1968. An Experimental Test of the Importance of Communication Skills for Effective Nursing. Social Interaction and Patient Care. Skipper and Leonard. Montreal: Lippincott.
- Travelbee, Joyce. 1971. Interpersonal Aspects of Nursing. Philadelphia: F.A. Davis Co.
- Webster's New Collegiate Dictionary. 1975. Springfield: G&C Merriam.

Articles

- Allport, G.W. 1965. Perception and public Health. In Health and the Community: Readings in the Philosophy and Science of Public Health. Ed. by A.H. Katz and J.S. Felton. New York: The Free Press. 491-505.
- Brower, D.F. 1971. The utilization of a psychiatric nurse by the staff in the emergency room. Yale University School of Nursing: Studies in Nursing.
- Calnan, Mary F. and Hanron, J.B. 1971. Patient centered communication. Supervisor Nurse. 2:67-71.

- Dance, F.E.X. 1970. The concept of communication. *Journal of Communication*. 20:201-210.
- Darrow, C.W. 1937. Neural mechanisms controlling the palmar galvanic skin reflex and palmar sweating. *Archives: Neurology and Psychiatry*. 37:641.
- DeCastro, Fernando. J. 1972. Doctor patient communication. *Clinical Pediatrics*. 11 February. 86-88.
- Ehat, D.M. 1967. Communication skills analyzed for E.R. personnel. *Hospital Topics*. October. 61-63.
- Ferreira, Antonio J. and Winter, William D. 1963. The Palmar Sweat Print: a methodological study. *Psychosomatic Medicine*. 25:377-383.
- Harrison, J. et al. 1962. Behavior of the palmar sweat glands before and after operation. *Clinical Science*. 23(October): 371-377.
- Jacobs, J. 1968. Perplexity, confusion, and suspicion: a study of selected forms of doctor-patient interaction. *Social Science Medicine*. 5:151-157.
- Janis, I. and Terwilliger, R. 1962. An experimental study of psychological resistance to fear arousing communications. *Journal of Abnormal and Social Psychology*. 65:403-410.
- Johnson, J. and Dabbs, J. 1967. Enumerative of active sweat glands: a simple physiological indicator of psychological changes. *Nursing Research*. 16(Summer):273-275.
- Johnson, J.; Dabbs, J.; and Leventhal. 1970. Psychological factors in the welfare of surgical patients.. *Nursing Research*. 19(January-February):18-29.
- Korsch, B. Gozzi et al. 1969. Gaps in doctor patient communication. *Pediatrics*. 42:855-869.
- Korsch, B. and Negrete, Vida E. 1967. Doctor patient communication. *Scientific American*. 23(July): 66-74.
- Korsch, B. et al. 1972. Practical implications of doctor patient interaction analysis of pediatric practice.

- American Journal of Disabled Children. 121: 110-114.
- Kramer, J. and Shuff, F. 1971. Organizational concepts. American Journal of Occupational Therapy. 23: 428-431.
- Kupst, Mary J. et al. 1975. Evaluation of methods to improve communication in the physician patient relationship. 45(April):420-427.
- Lader, Malcom. 1975. Anxiety: its nature and treatment. South African Medical Journal. 49:939-943.
- Mackinnon, C.B. and Harrison, J. 1966. Physiological role of the adrenal medulla in the Palmer anhidrotic responses to stress. Journal of Applied Physiology. 21:88-92.
- Meyers, M. 1976. The Effect of communication on patients' reaction to stress. Nursing Research. 13(February) 126.
- Obier, K. and Haywood, L. 1973. Enhancing therapeutic communication with acutely ill patients. Heart and Lung. 2:49-53.
- Raimbault, M.D. et al. 1975. Aspects of communication between patients and doctors. an analysis of the discourse in medical interviews. Pediatrics. 55(March):401-406.
- Rickleman, B. 1971. Bio-Psycho-Social linguistics. Nursing Research. 20(September-October):398-403.
- Roberts, Karlente et al. 1976. Changing perceptions of organizational communication: can short term intervention help? Nursing Research. 25:197-200.
- Salkind, M.R. 1973. The construction and validation of a self-rating anxiety inventory. Doctoral thesis. University of London.
- Schmitt, F.E. and Wooldridge, P.J. 1973. Psychological preparation of surgical patients. Nursing Research. 22:108-116.

- Shapiro, I.S. 1972. Health education horizons and patient satisfaction. American Journal of Public Health. 62:229-232.
- Tyrer, P.J. 1974. Anxiety. British Medical Journal. 2:14.
- Vandervalk, J.M. 1958. Thesis. University of Amsterdam.
- Wallston, Kenneth and Barbara. 1975. Nurses Decisions to listen to patients. Nursing Research. 24:16-22.
- Weisenberg, M. et al. 1975. Interpreting palmar sweat prints: a not so simple measure. Journal of Psychosomatic Research. 20:1-5.

BIBLIOGRAPHY

Books

- Anderson, Elizabeth. 1960. Communication in Everyday Use. New York: MacMillan Co.
- Aguilera, Donna and Messick, J. 1974. Crisis Intervention. Saint Louis: C.V.Mosby Co.
- Hein, E. 1973. Communication in Nursing Practice. Boston: Little Brown and Company.
- Kron, Thora. 1972. Communications in Nursing. Philadelphia: W.B. Saunders.
- Murray, R. and Zentner, J. 1975. Nursing Assessment and Health Promotion to the Life Span. New Jersey: Prentice-Hall.
- Orlando, Ida J. 1961. The Dynamic Nurse-Patient Relationship. New York: Putnam and Sons, Inc.
- Peitchinis, Jacquelyn A. 1976. Staff and Patient Communications in the Health Services. New York: Springer Publishing Co.
- Reusch, Jurgen. 1961. Therapeutic Communications. New York: Norton and Company.
- Siegel, S. 1956. Nonparametric Statistics. New York: McGraw-Hill.
- Ujhely, Gertrud B. 1973. Determinants of the Nurse-Patient Relationship. New York: Springer Publishing Co.

Articles

- Aiken, L. and Aiken, J. 1973. A systematic approach to the evaluation of interpersonal relationships. American Journal of Nursing. 68(April):758-762.
- Anderson, M. and Pleticha J. 1974. Emergency unit patients' perceptions of stressful events.
- Anxiety, recognition, and intervention. 1965. American Journal of Nursing. 65:129-152.

- Blum, G.S. and Wohl, B. 1971. An experimental analysis of the nature and operation of anxiety. *Journal of Abnormal Psychology*. 78:1-8.
- Comptom, Allan. 1972. A study of the psychoanalytic theory of anxiety. *American Psychoanalytic Association*. 20:341-351.
- Francis, V. et al. 1969. Gaps in doctor patient communication. *New England Journal of Medicine*. 280 (March):535-540.
- Graham, J. and Conley E. 1971. Evaluation of anxiety and fear in adult surgical patients. *Nursing Research*. 20:113-121.
- Hanoff, L.D. et al. 1974. Programs of crisis intervention in the emergency room. *American Journal of Psychiatry*. 131:47-50.
- Hunter, A.F. 1973. The personal relationship between the doctor and patient. *New Zealand Medical Journal*. 78:1334-1337.
- Jacobson, Roman. 1972. Verbal communication. *Scientific American*. 227:73-80.
- Lindeman, Sarol A. and Stetzer, S. 1973. Effect of pre-operation visits by operating room nurses. *Nursing Research*. 22:4-14.
- Lum, Jean. 1970. Interaction patterns of nursing personnel. *Nursing Research*. 19:324-330.
- Martin, I. and Venables, P.H. 1964. The contribution of sweat gland activity to measure of palmar skin conductances and potential. *The Society for Psychophysiologic Research*. Washington, D. C.
- Nield, Margaret. A. 1971. The effect of health teaching on the anxiety level of patients with chronic obstructive lung disease. *Nursing Research*. 20: 537-539.
- Risser, Nancy. 1975. Development of an instrument to measure patient satisfaction with nurses and nursing care in primary care setting. *Nursing Research*. 24:45-51.

- Shulberg, Herbert D. et al. 1968. The probability of crisis and strategies for preventative interaction. Archives of General Psychiatry. 18:553-557.
- Stephens, Linda S. 1967. Staff communications on the medical surgical services. A research note. Journal of Health and Social Behavior. 48: 148-153.
- Sutarman, M.L. 1952. A new technique for enumerating active sweat glands in man. Journal of Physiology. 117-151.
- Ujhely, Gertrud. 1968. What is realistic emotional support? American Journal of Nursing. 68(April): 758-762.
- Venables, P.H. and Martin I. 1966. The relations of palmar sweat gland activity to level of skin potential and conductance. Psychophysiology. 51:121.
- Veninga, Robert. 1973. Communications: a patients' eye view. American Journal of Nursing. 73(February): 320-322.
- Wachtel, Paul L. 1968. Anxiety, attention and coping with threat. Journal of Abnormal Psychology. 73: 137-141.
- Yusin, Alvin S. 1974. Analysis of crisis using a stress motivation response model. American Journal of Psychotherapy. 28:409-416.

APPENDIX A - CRITERIA FOR AN EMERGENCY ROOM PATIENT

The criteria set forth by the investigator for an emergency room patient will be as follows:

A. A client who exhibits an injury or disease that is unexpected, serious, and demanding immediate attention. This includes only those patients who receive immediate care and then are discharged to home.

B. Must be eighteen years of age or older

C. Must be able to speak English

D. Must agree to participate in the study

E. Must meet the criteria of an emergency room patient as described in "A".

APPENDIX B

PERMISSION FOR THE STUDY

81
TEXAS WOMAN'S UNIVERSITY
DALLAS, TEXAS 75235



DE OF NURSING

February 4, 1977

Ms. Denise M. Korniewicz
Texas Woman's University
College of Nursing
1522 Thornton Lane
Temple, Texas 76501

Dear Ms. Korniewicz:

The Dallas Center Sub-Committee for Human Research has approved your proposal for "An Evaluation of Patient Anxiety Levels Through Effective Interaction in the Emergency Room." Following acquisition of agency approval you may now proceed with your data collection as planned.

Sincerely,

A handwritten signature in cursive script that reads 'Geri Goosen'.

Geri Goosen
Chairman of Human Research Committee

cc: Dr. Phyllis Bridges
Graduate Dean

GG:js

CE OF THE ASSOCIATE DEAN
S WOMAN'S UNIVERSITY
LAS CENTER
INWOOD ROAD
LAS, TEXAS 75235

OFFICE OF THE DEAN
TEXAS WOMAN'S UNIVERSITY
Box 23028, TWU STATION
DENTON, TEXAS 76204

OFFICE OF THE ASSOCIATE DEAN
TEXAS WOMAN'S UNIVERSITY
1130 M. D. ANDERSON BLVD.
HOUSTON, TEXAS 77025

82
TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING
DENTON, TEXAS

DALLAS CENTER
1810 Inwood Road
Dallas, Texas 75235

HOUSTON CENTER
1130 M.D. Anderson Blvd.
Houston, Texas 77025

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE _____

GRANTS TO Denise M. Korniewicz

a student enrolled in a program of nursing leading to a Master's Degree at Texas Woman's University, the privilege of its facilities in order to study the following problem:

An Evaluation of Patient Anxiety Levels Through
Effective Interaction in the Emergency Room

The conditions mutually agreed upon are as follows:

1. The agency (~~may~~) (may not) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (~~may~~) (may not) be identified in the final report.
3. The agency (wants) (~~does not want~~) a conference with the student when the report is completed.
4. The agency is (willing) (~~unwilling~~) to allow the completed report to be circulated through interlibrary loan.
5. Other: _____

Date Dec 15 1977

Denise M. Korniewicz
Signature of student

Lillian E. Archilles
Signature of Agency Personnel

M. M. Grants R.N., Ph.D.
Signature of Faculty Advisor

*Fill out and sign three copies to be distributed as follows: Original -- Student; first copy -- agency; second copy -- T.W.U. College of Nursing.

APPENDIX C - PATIENT PERCEPTION QUESTIONNAIRE

Please answer the following questions with one response:

	Yes	No	Some- Times	Un- Decided	Not Under- stood
1. Can you identify the nurse?					
2. Did you feel you were treated as a number rather than a person?					
3. Was the nurse friendly to you?					
4. Did the nurse give you any instructions to follow at home?					
5. Were these instructions clear enough to follow?					
6. Did you want to talk longer with the nurse?					
7. Were you afraid to ask the nurse questions?					
8. Did you receive any medication to take home?					
9. Did the nurse explain the medication to you?					
10. Did you feel hurried by the nurse's manner while talking to her?					

Age_____

Sex_____

Diagnosis_____ Time_____

APPENDIX D - NURSE PERCEPTION QUESTIONNAIRE

Please answer the following questions with one response:

	Always	Usually	Some Times	Rarely	Never
1. I feel sufficient time is spent interacting with the patient.					
2. I like working in the emergency room.					
3. Before assessing the individual, I read the diagnosis.					
4. I view patient teaching as an integral part of my responsibility as an emergency room nurse.					
5. If given the opportunity, I would spend more time with patient interaction.					
6. I take the time to explain medication to the discharged patient.					
7. I give the patient instructions concerning follow-up care.					
8. Do you feel the patient comprehends instructions regarding follow-up care?					
9. I feel adept at handling E.R. situations.					
10. If given the opportunity to gain total job satisfaction, I would choose to work the emergency room.					

APPENDIX D - NURSE PERCEPTION QUESTIONNAIRE

Age_____

Sex_____

Registered Nurse: Yes_____ No_____

APPENDIX E - PROTOCOL FOR COMMUNICATIONS INSERVICE CLASS

Description: This course was designed as a communication inservice class presented to registered nurses working in an emergency room. This course serves as a guide for an increased awareness on nurses' communications skills and therapeutic involvement during crisis situations.

Course

Objectives:

- 1) Explanation of the definition of communication
- 2) Describe the purpose of effective communication skills during crisis situations
- 3) Relate the reviewed literature on theories of communication
- 4) Describe and define anxiety and its relationship to communications
- 5) List methods of improving communication skills in the emergency room
- 6) List ways to utilize time and communication skills in the emergency room
- 7) Participate in role-playing situations about patient/nurse interaction
- 8) Evaluate the role playing methods and describe ways of changing the situation

Criteria

and

Evaluation:

- 1) Observe and record the time nurses spend interacting with the patient following the inservice presentation
- 2) Comparison of the control group and experimental group as to the time nurses spend interacting with the patient