

TEACHING AS IT RELATES TO ANXIETY OF
THE HOSPITALIZED ADULT

A THESIS
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PAT H. JARCZEWSKI, B.S.N.

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DEDICATION

To David, my devoted and faithful husband; you never left my side and constantly encouraged me to continue, long before the end was in sight;

To Dee, my precious daughter; for all the times we had and for the closeness of those times;

To Daddy and Mother; from you I learned along the way the real meaning of the value of education. Somehow, you helped me to develop my potential and realize I could succeed.

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TABLE OF CONTENTS

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

CHAPTER

I.	INTRODUCTION.	1
	Statement of Problem.	2
	Statement of Purposes	2
	Background and Significance	3
	Hypothesis	5
	Definition of Terms	5
	Limitations	6
	Delimitations	7
	Assumptions	8
	Summary	8
II.	REVIEW OF LITERATURE.	10
	Introduction.	10
	Theory of Stress.	10
	Theory of Adaptation.	11
	Theory of Learning	12
	Anxiety, Teaching, and the Nurse.	13
III.	PROCEDURE FOR COLLECTION OF DATA.	20
	Setting	20
	Population.	20
	Tool	21
	Reliability.	22
	Validity	23
	Data Collection	24
	Treatment of Data	25
	Summary	26

TABLE OF CONTENTS (continued)

CHAPTER	Page
IV. ANALYSIS OF DATA.	27
Demographic Data.	27
Test Scores	31
Summary	35
V. SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS	36
Summary	36
Conclusions	37
Implications	37
Recommendations	38
REFERENCES.	40
BIBLIOGRAPHY	43
APPENDIX A	44
APPENDIX B	47
APPENDIX C	50
APPENDIX D	54

LIST OF TABLES

	Page
Table 1. Participants' Mean Age.	27
Table 2. Participants' Race by Percentage. . . .	28
Table 3. Participants' Mean Educational Preparation	28
Table 4. Participants' Religious Affiliation by Percentage	28
Table 5. Type of Patient (Medical or Surgical), Type of Catheterization, and Prior Catheterizations	29
Table 6. Type of Room Occupied and Significant Other(s) Present During Teaching	29
Table 7. Questions Asked by Participants Upon Completion of Teaching	30

LIST OF FIGURES

	Page
Figure 1. The State Anxiety Scale for Pre- and Posttests.	31
Figure 2. Trait Anxiety Scores	32
Figure 3. Mean Scores for State and Trait Anxiety	33
Figure 4. Participants' State and Trait Anxiety Scores, Pre- and Posttest	34

CHAPTER I

INTRODUCTION

Anxiety as a concept or a phenomenon has attracted much interest from researchers in varied fields. It is now one of the most commonly used physiological as well as psychological indicators for research purposes. Anxiety seems to be present in all humans, some experiencing a higher degree than others, but it does exist. There also seems to be a relationship between anxiety and teaching. Much has been written about the two concepts.

Teaching is an incorporated function of the nurse in her daily care of patients. In an effort to hasten the patient's recovery and improve his adjustment to the disease process, the nurse must teach. No one in nursing today should consider teaching a bothersome task that is postponed until it is necessary to obtain legal consent from the patient, i.e., permits, consent forms. Much of the health care delivery system is fragmented. With the patient receiving assembly-line care, minimal or no teaching at all only serves to fragment the system more for the patient.

According to the Commission on Nursing Research of the American Nurses' Association, research priorities for practice include studies of life-threatening situations, anxiety, pain, and stress. Using these priorities as criteria, this thesis will suggest a relationship between increased anxiety of hospitalized adults and lack of teaching prior to bladder catheterization.

Statement of Problem

What effect will teaching prior to bladder catheterization have on the anxiety levels of hospitalized adults?

Statement of Purposes

The purpose of this study was to examine the anxiety levels of hospitalized adults who had received teaching prior to bladder catheterization by:

1. Measuring the trait anxiety level of hospitalized adults per the State Trait Anxiety Inventory
2. Measuring the state anxiety level of hospitalized adults who had received teaching prior to bladder catheterization per the State Trait Anxiety Inventory

Background and Significance

Hospital environments are designed to facilitate the delivery of special medical care to promote healing, but because of the unfamiliar equipment and procedures many patients are as upset and frightened by the medical resources made available to them.

From many sources it is clear that there is characteristic lowering of intellectual control, attention, and concentration in overly anxious individuals. A large body of the nursing literature speaks to the concept of stress and adaptive mechanisms of hospitalized patients as being directly related to each other.

Nurses teach patients for various reasons: 1) to provide a basis of understanding of the disease process, 2) to assist the individual in maintaining optimum wellness, 3) to hasten recovery, 4) to assist the patient and family to accept any alteration in body-image or functioning, and 5) to provide information for self-care after discharge (Redman, 1972, p. 3). Thus, the major emphasis on client/patient education at present should be of no surprise to the educated nurse.

Anxiety can be measured to some degree; most testing is designed to measure it in an indirect fashion. Precise

levels of anxiety may not be obtainable with methods currently available, but a great deal of information about the patient's anxiety level will emerge with current testing (Brunch, 1968, p. 317).

Bloomefield (1978, p. 20) stated that those patients in critical care areas if approached and handled without teaching or explanation by the nurse will have a high anxiety level. First, and most significantly, he is afraid of being physically hurt or harmed by measures such as invasive procedures and second, he reacts to the loss of dignity imposed upon him.

Nurses, doctors, and other hospital personnel become familiar with hospital routine and build up the necessary psychological defenses to treat it simply as a place of employment and thereby distance themselves from its distressing emotional overtones. Patients, on the other hand, must deal with these strange settings and procedures (often without sufficient explanation) at a time when their physical and emotional resources are already being taxed by their illness (Moos, 1977, p. 233).

Dodge (1963, p. 66) stated that giving total patient care implies the satisfaction of psychological as well as physiological needs. Failure to satisfy these needs may create anxiety that can seriously interfere with the

patient's ability to handle the stresses that his illness makes it necessary that he face.

At present there is no published information regarding anxiety that specifically relates to the invasive procedure of catheterization. However, there is a vast area in the literature relating to anxiety and teaching by the nurse.

Hypothesis

Since teaching is known to have some effect on the anxiety level of individuals, it will be hypothesized that:

1. Teaching the hospitalized adult prior to bladder catheterization will lower his anxiety level per the State Trait Anxiety Inventory

Definition of Terms

Subjective Anxiety - shall be defined as a state of tension and distress produced by the subjective loss of inner control (Hofling and Leininger, 1960, p. 505)

State Anxiety - shall be that anxiety measured per the State Trait Anxiety Inventory which is transitory and situational in nature (Spielberger, Gorsuch, and Lushene, 1970, p. 4)

Trait Anxiety - shall be that anxiety measured per the State Trait Anxiety Inventory which is basic personality characteristics (Spielberger, Gorsuch, and Lushene, 1970, p. 4)

Teaching - is any interpersonal process designed to make a change in the person's behavior (Redman, 1972, p. 6). This teaching shall be in audiocassette form and include a question and answer period between the investigator and the participant

Bladder catheterization - is the introduction of a catheter through the urethra into the bladder for the purpose of withdrawing urine (Fuerst et al., 1974, p. 372)

A patient - is any hospitalized female between the ages of eighteen and sixty-five

Mentally competent - that is they are able to make a judgment that will enable the person to understand the nature of his act

Limitations

Those variables that may have influenced results of the study, but were not controlled for:

1. The Hawthorne effect - There is considerable evidence that the fact of research participation has a measurable effect on people and is particularly pronounced

when they are participating in something which is new and different (Fox, 1970, p. 207)

2. Whether the patient is in a private or semi-private room

3. Feelings regarding nursing staff and nursing care

4. The presence of significant others

5. The number of previous catheterizations

6. More than one attempt to catheterize the participant is necessary

7. Consistency among staff who perform catheterizations

Delimitations

Those variables controlled in this study were:

1. Participants are mentally competent

2. The participants must have verbal and written command of the English language

3. The participants shall be alert and have received no medication that will obtund sensoria

4. The participants will not be in such acute distress, i.e., dyspnea or pain, that it will interfere with cognitive function

5. The participants must need to be catheterized

6. The patient must be a female between the ages of eighteen and sixty-five

7. The posttest (state) will be administered within the first half hour after catheterization

Assumptions

The following assumptions were made:

1. Bladder catheterization is a stressful event for the patient, and that anxiety is appropriate for that event

2. The behavior of the nurse is consistent with all participants

3. Participants will answer test items honestly

4. Patients will learn the content taught as stated in the audiocassette

Summary

Chapter I has introduced the reader to the specific problem investigated, as well as the purpose of the problem and background and significance of the problem area. Included also were the hypothesis, definition of terms, limitations, and delimitations.

Chapter II will provide review of literature pertinent to the problem, and Chapter III will identify the procedure for data collection and treatment of data. Chapters IV and V will focus on data analysis and summary of the study, respectively.

CHAPTER II

REVIEW OF LITERATURE

Introduction

Anxiety and patient education are areas of concern in the profession of nursing. Stress has been related to much pathology and documentation of this relationship exists in much of the nursing and medical literature.

Patient education is a change in behavior (learning) brought about by contact with a health care worker or agency (Redman, 1976, p. 25).

The frameworks on which this thesis is based are Selye's "Theory of Stress," "Adaptation Theory" by Dubos, and the "Learning Theory" of Knowles. Each theory will be briefly reviewed in this chapter.

Theory of Stress

Selye (1956) defines stress as a state manifested by a specific syndrome which consists of all the non-specifically induced changes within a biologic system. Stressors are defined as stimuli that produce tension, have potential for causing disequilibrium, a situational or maturational crisis, or the experience of stress within an individual's life (Selye, 1956, p. 12).

A great deal of confusion has arisen in lay as well as scientific literature because the term "stress" means different things to different people. Medical research has shown that, while all subjects face quite different problems, they respond with a stereotyped pattern of biochemical, functional, and structural changes essentially involved in coping with any type of increased demand upon vital activity, particularly adaptation to new situations. Stress is the nonspecific response of the body to any demand. Since stress is a dynamic state within an organism in response to a demand for adaptation, and since life itself entails constant adaptations, living creatures are continually in a state of more or less stress (Selye, 1976, pp. 4, 38, 88).

Theory of Adaptation

Dubos theorizes that living things can survive and function effectively only if they adapt themselves to the peculiarities of each individual situation. In the world of reality, places change and man also changes. Furthermore, his self-imposed striving for ever-new distant goals makes his fate even more unpredictable than that of other living things. For this reason, health and happiness cannot be absolute and permanent values, however careful the social and manual planning. Biological success in all its

manifestations is a measure of fitness, and fitness requires never-ending efforts of adaptation to the total environment, which is ever changing (Dubos, 1959, p. 34).

Theory of Learning

A learning theory utilized in support of this study is that of Knowles: a theory of adult education. He assumes that as the adult matures, his self-concept moves from that of a dependent personality toward that of a self-directed organism. He also states that since the mature person has accumulated a substantial reservoir of experience, he has a broader foundation on which to build. A mature person confronts a set of development tasks differently from those of youth. And last, the mature person approaches learning with a time perspective different from that of youth. All of these assumptions comprise his andragogical theory of learning. Therefore, the adult learner learns best in situations where he takes partial responsibility for formulating objectives and evaluating learning experiences, and when he applies immediately what he learns (Knowles, 1969, p. 29).

Anxiety, Teaching, and the Nurse

In one large body of research in the area of stress and illness, stress is conceptualized as produced by events or changes in the environment which wake some sort of adaptation response. A change may be pleasant or unpleasant, and the level of stress produced is considered to be directly related to the amount of demand the change makes on the adaptive mechanism of the individual (Volicer, 1977, p. 410).

Inspection of practice related nursing research literature over the past several years shows a steady increase in studies using anxiety as a variable. Anxiety has been related to other aspects of health care, notably, lack of information and pain. Research which examines postulated relationships between anxiety, information, and pain will provide insights into the process outcomes stages of care (Hayward, 1977, p. 252).

Events with a direct relationship to behavior of the hospital staff--inadequate explanation of diagnosis and treatment and unconcerned attitude of hospital staff--were rated relatively high by respondents asked to rate forty-five stress-producing events. These events related to the experience of hospitalization in terms of the relative amount of adaptation required to cope with each event, using an

arbitrary standard. In other words, some of the aspects of hospitalization which are perceived as very stressful are things which are amenable to change by changing staff behavior (Volicer, 1973, p. 496).

Schmitt and Wooldridge report a strong relationship between psychological preparation and support during the preoperative period and reduction of stress as measured by the patients' postoperation physiological responses. The data collected in their study supported the hypothesis that the extra preparation would increase patient participation, decrease tension and anxiety, and lead to a more rapid postoperative recovery (Schmitt and Wooldridge, 1973, p. 122).

In a study by Graham and Conley (1971, p. 122) patients facing major surgery do manifest many of the behaviors and signs commonly believed to represent anxiety, or portrayed in the psychiatric and psychological literature as representing anxiety and fear.

Brockway et al. (1976, p. 445) suggest that nursing reassurance may be more beneficial in the reduction of stress and anxiety than no reassurance by the nurse. However, academic reassurance which is of a factual nature versus superficial reassurance which is subjective in nature, does not, for the majority in this study, have as a benefit the reduction of stress and anxiety.

There are several ways to alleviate anxiety and facilitate the patient's own coping techniques. These include giving information, building up self-esteem, giving reassurance, promoting ventilation of feelings, fostering identification with those who survive, supporting a healthy use of denial, and encouraging future planning by the patient (Moos, 1977, p. 234).

Much has been documented concerning the need for patient education. Fralic (1976, p. 31) states that the distinguishing characteristic of today's patient teaching effort is that it is a deliberate and systematic effort with specific content. Organization, objectives, and standardized teaching plans are necessary for total patient education (Fralic, 1976, p. 33).

Fisher et al. (1977, p. 640) compared spoken, written, and computer-based instructions for a group of 99 women and found the group receiving computer-based instructions to have the lowest colony count of bacteria from midstream urine specimens. The authors point out that those who received no instructions had by far a larger number of bacteria in their urine than those who were taught by other methods.

Language is the primary tool for education and because communication can be so easily misinterpreted, Murray and Zentner (1976, p. 47) state that the use of aids and devices will serve to reinforce that which is spoken.

A study reported by Dodge (1969, p. 513) was concerned with patients' perceptions of their cognitive needs and the possible influence of personal and situational factors on these perceptions. Findings were that the patients in the study did express case-relevant information needs, that they placed higher priority on some information than on other, and that there were differences among patients related to the variables under consideration.

A study (Pender, 1974, p. 267) regarding the effect of the educational level of the patient supports Dodge's (1969) findings. Apparently, the higher the educational level of the patients, the more aware they are of their need for information and the more likely they are to express these needs openly and obtain information that will assist them in coping with their illness. Consequently, the nurse should be alert to the need for simple and sometimes repetitive explanation of the treatment procedure and nursing care to patients with a low level of formal education. Their need for information may frequently be overlooked.

Gusfa et al. (1975, p. 22) suggest that hospitals develop manuals of teaching plans that include purpose, objectives, teaching tools, teaching content, and evaluation in order to insure consistent, effective patient teaching.

Redman (1972, p. 3) states that it is possible to prevent, to promote, to maintain, or to modify a number of health related behaviors by means of teaching. She also points out that major objectives of teaching are often classified by phases of health care.

Teaching related to several procedures has been successful. Patients before delivery were more accepting of and had better results from an enema if the nurse focused her interaction on the patient's reaction to the procedure, instead of limiting the remarks to the procedure itself (Redman, 1972, p. 5).

The sensory information approach (Johnson, 1975, p. 409) is based on the observation that a person's emotional response during a threatening event depends on whether his expectations of what he will perceive through his senses are actually borne out by the experience. The more closely the experienced sensations reflect the expectations, the lower the degree of distress.

Teaching is goal directed toward accomplishing particular learning. It is necessary to be able to identify goals that are appropriate to the situation and that the learner is likely to be able to reach. This requires first a knowledge of the desirable learning in a particular situation. The learner can often participate considerably in this definition since he knows at least his perspective of the situation and the motivation he feels to make a change. He is also often able to indicate whether he thinks he has the ability to learn certain content, and what way might be easiest for him to accomplish it (Redman, 1971, p. 515).

Stress, adaptation, and patient education have been identified in the literature as major areas of research. Depending upon the variables of the studies, outcomes were variant; however, stress, anxiety, patient education, and adaptation (reduction of anxiety) are all shown to be somewhat interrelated, both in theory as well as in existing research.

In view of the information concerning anxiety and existing research, the effect upon her anxiety level of teaching the patient prior to catheterization was investigated.

The following chapter presents the methodology for collection of data. Included are the setting, population, and tool used.

CHAPTER III

PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

This chapter will present the methodology utilized in this study. This was a descriptive study, practice-oriented in nature.

There was only one group in this study, and the group was a convenience sample. The pretest-posttest design was implemented in order to support or reject the hypothesis.

Setting

The patient population came from a 120-bed hospital in a community of 50,000 located in Central Texas. The hospital is staffed primarily by licensed vocational nurses and registered nurses and has no formal patient education program.

Population

The sample population as mentioned earlier was a convenience sample from the general patient population. A collection of data was taken from those patients. Those

data answered questions of age, length of hospital stay, educational preparation, and ethnic/religious background. Also included were the patient's significant other(s) present, medical or surgical diagnosis, type of catheterization, and whether the patient had been catheterized before.

Tool

The tool used to measure the dependent variable of anxiety was the State Trait Anxiety Inventory (developed by Spielberger, Gorsuch, and Lushene, 1970) in which is a forty-item inventory asking general "state" questions and the patient responding on a Likert scale (Appendix A). This tool measures indirectly the anxiety level. There are two parts to this inventory; each are entitled, "Self Evaluation Questionnaire." The first part measures state anxiety which is transitory and situational, while the second part measures trait anxiety, which is basic personality characteristics (Spielberger, 1966, p. 13).

The forms are designed for self-administration, and there is no time limit. The average time, however, for college students is six to eight minutes to complete each test, and less than fifteen minutes to complete both. Less educated persons required ten to twelve minutes per test,

and twenty minutes for both. The range of scores on each test goes from a minimum of twenty (least anxiety) to a maximum of eighty (highest anxiety) (Spielberger, Gorsuch, and Lushene, 1970, p. 4).

Reliability

The test-retest reliability correlations for A-trait scales is relatively high. A study that involved undergraduate college students tested under varying circumstances on three different occasions exhibited ranges from .73 to .86. The A-state scale was low, with ranges from .16 to .54, which can be expected when the circumstances of stress vary. The alpha coefficient measuring internal consistency provides a more meaningful index of the reliability of A-state scales than test-retest correlations. Alpha coefficients for the STAI scales were computed by formula K-20 as modified by Cronback (1951) for the normative data obtained on three groups of students. The ranges for the reliability coefficient were from .83 to .92 for the A-state, and .86 to .92 for A-trait. Therefore, the internal consistency is reasonably good (Spielberger, Gorsuch, and Lushene, 1970, pp. 9-10).

Validity

Construct validity of the A-state scale is shown in a study involving 977 undergraduate college students under NORM conditions and under EXAM conditions. The mean scores under each condition were reported for each of the twenty-item A-state scale and for each separate item. Under EXAM conditions, the mean score was higher than the NORM. All but one item significantly discriminated between these conditions for the males, and all of the items were significantly higher in the EXAM condition for the females (Spielberger, Gorsuch, and Lushene, 1970, pp. 10-11).

Concurrent validity for the A-trait scale showed correlations between the STAI and IPAT Anxiety Scale (Cattell and Scheier, 1963) and the Taylor Manifest Anxiety Scale (TMAS) to be .75 to .83. These three tests have been concluded to be alternate measures of A-trait anxiety.

The participant's understanding of the instructions also involves validity. He must know that on one test he should answer how he feels "now," and on the other, "how he generally feels." It is recommended that state anxiety be measured first, since this can be influenced by the "emotional atmosphere that may be created" if the trait scale is given first (Spielberger, Gorsuch, and Lushene, 1970, p. 4). These recommendations were followed by the investigator.

Data Collection

After securing permission from the thesis committee, Human Rights and Research Committee, agency, and participant permission (Form B), the data collection began. After the convenience sample had been selected, participants were exposed to the teaching.

The teaching consisted of a lesson plan, learner objectives, basic anatomy and physiology of the urinary tract, and purpose for bladder catheterization.

The standardized presentation was in audiocassette form and was given after securing the permission of the participant. The investigator left the patient's room while the patient listened to the tape and then returned to answer questions and administer the STAI (state). The tape presentation took place before catheterization, and the posttest (state) was administered upon completion of the catheterization (performed by the staff).

Included in the teaching were two illustrations, one depicting anatomy of the female urinary system, and the other the same urinary system, but with a catheter in place.

An appropriate catheterization tray was also included with an explanation of its contents in the audio presentation. This tray included either an inflatable indwelling catheter or a straight catheter, depending on the type of

catheterization to be performed. This was, therefore, more than a procedural explanation of catheterization. A record of questions asked was also maintained in order to increase the validity of the teaching. The teaching was standardized in audiocassette form in order to reduce subjectivity on the part of the investigator and insure that each participant received the same information in the same manner.

The State Inventory was administered immediately after the patient had been exposed to the teaching and again after the catheterization had been performed. Upon completion of the State Inventory a Trait Inventory was administered per recommendation of Spielberger, Gorsuch, and Lushene (1970, p. 4). Therefore, a pretest-posttest design was successfully implemented; participants were exposed to the independent variable of teaching and anxiety, the dependent variable, was measured after teaching (before catheterization) and after catheterization.

Treatment of Data

The anticipated level of significance was set at .05. It was anticipated that data would be analyzed utilizing a t-test, comparing the scores of state anxiety before and after catheterization.

The sample consisted of those patients who met the controls of the study and who were catheterized from November 1, 1979, through December 1, 1979. The sample size was four in number. Due to sample mortality, statistical analysis is inappropriate, and therefore, will not be utilized. The data were, therefore, analyzed descriptively.

Summary

Chapter III has explained in detail the methodology utilized in this study. The teaching was defined and the tool's reliability and validity covered in detail. Chapter IV will present analysis of the data obtained.

CHAPTER IV

ANALYSIS OF DATA

The purpose of this study was to describe the hospitalized female patient's anxiety as measured by the STAI, after teaching (before catheterization) had been implemented and after catheterization by the hospital staff. The sample size consisted of only four participants, and the data, therefore, will be analyzed using descriptive statistics only. The present chapter includes tabling of demographic data and results of scores on STAI (State Trait Anxiety Inventory).

Demographic Data

Due to sample size, participants will be referred to as #1, #2, #3, and #4.

TABLE 1

PARTICIPANTS' MEAN AGE

Participant	#1	#2	#3	#4	$\bar{x}$
Age	44	28	32	18	30

TABLE 2

PARTICIPANTS' RACE BY PERCENTAGE

Participants	#1	#2	#3	#4	Percentage
Race	*C	*C	*C	*C	100.0

*C=Caucasian

TABLE 3

PARTICIPANTS' MEAN EDUCATIONAL PREPARATION

Participants	#1	#2	#3	#4	Percentage
Education (years)	11	13	14	13	12.7

TABLE 4

PARTICIPANTS' RELIGIOUS AFFILIATION BY PERCENTAGE

Participants	#1	#2	#3	#4	Percentage
Religious Affiliation	*P	*P	*P	*P	100.0

*P=Protestant

TABLE 5

TYPE OF PATIENT (MEDICAL OR SURGICAL), TYPE OF
CATHETERIZATION AND PRIOR CATHETERIZATIONS

Participant	Patient Type	Catheter Type	Prior Catheter
#1	Surgical	Straight	Yes
#2	Surgical	Indwelling	No
#3	Medical	Straight	No
#4	Medical	Straight	No

TABLE 6

TYPE OF ROOM OCCUPIED AND SIGNIFICANT OTHER(S)
PRESENT DURING TEACHING

Participant	Room Type	Significant Other(s)
#1	Semi-Private	Yes
#2	Private	No
#3	Private	Yes
#4	Private	No

TABLE 7

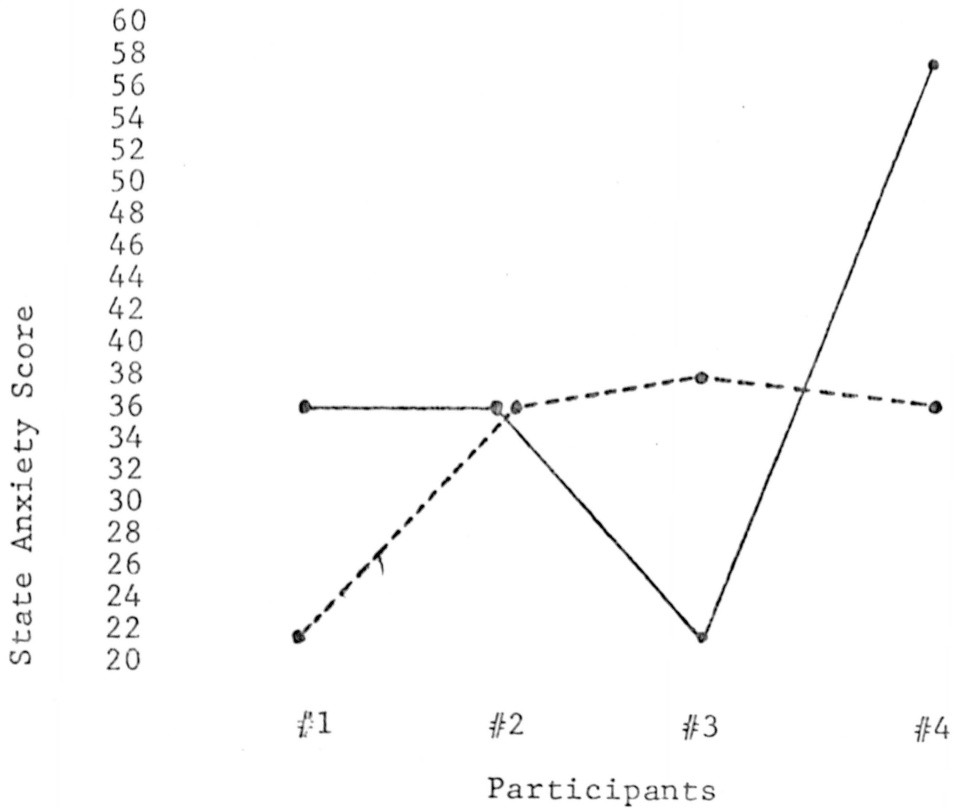
QUESTIONS ASKED BY PARTICIPANTS
UPON COMPLETION OF TEACHING

Participant #1:	"Why does it take so long to urinate after the catheter is pulled out?"
Participant #2:	No questions.
Participant #3:	"Now, how will the catheter be removed?"
Participant #4:	No questions.

Test Scores

Figure 1

THE STATE ANXIETY SCALE FOR PRE- AND POSTTESTS



Pre-test: _____

Posttest: - - - - -

FIGURE 2

TRAIT ANXIETY SCORES

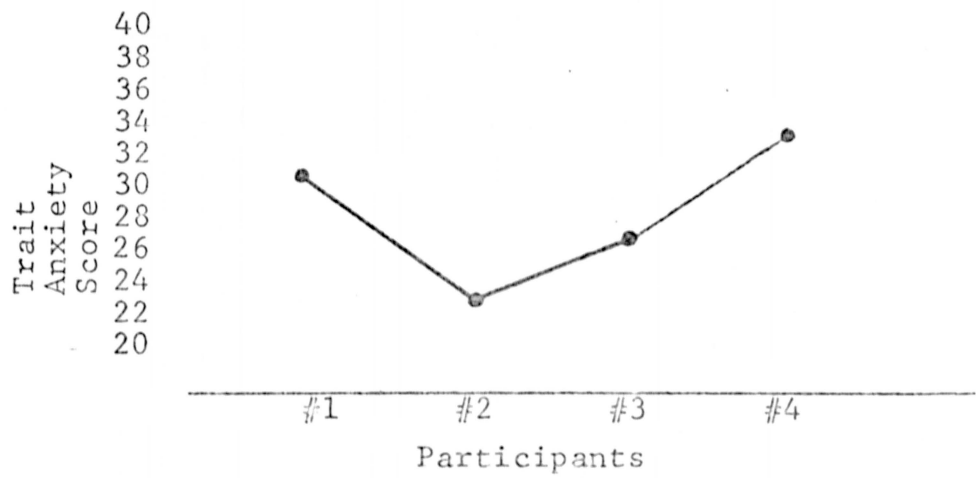


FIGURE 3

MEAN SCORES FOR STATE AND TRAIT ANXIETY

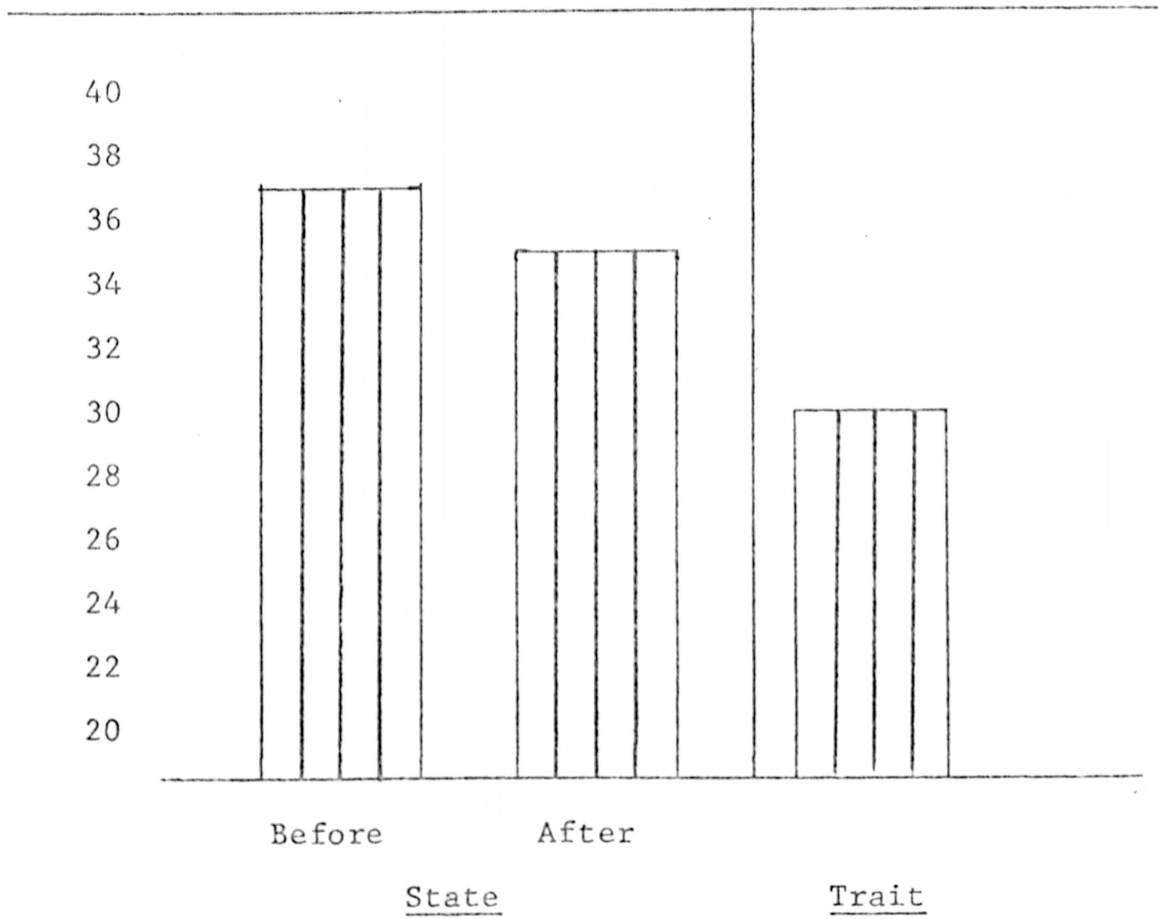
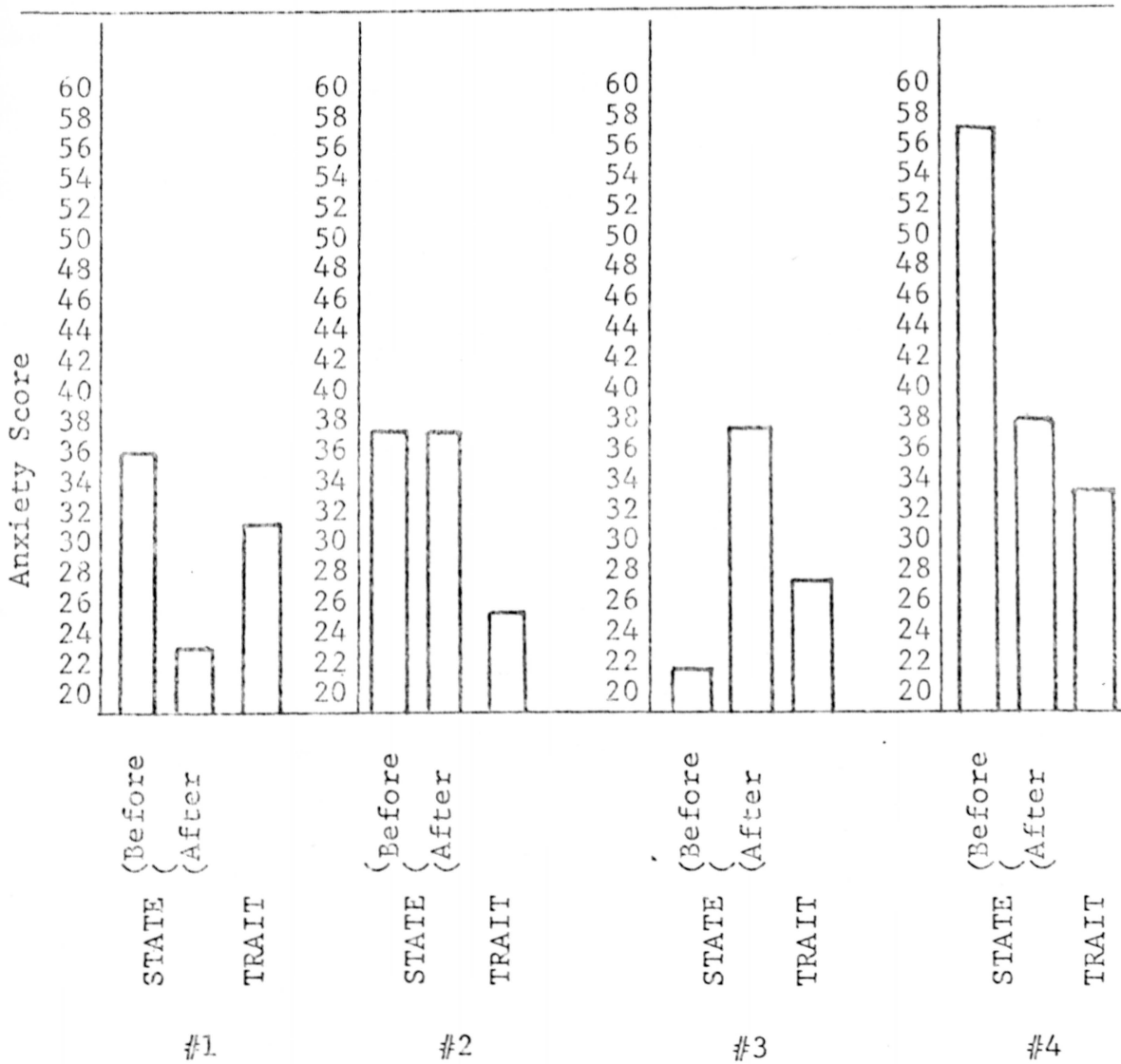


FIGURE 4

PARTICIPANTS' STATE AND TRAIT ANXIETY SCORES,
PRE- AND POSTTEST



Summary

Data were collected for one month, and a sample of four was obtained. Descriptive statistics were utilized in analyzing the data due to sample mortality. Demographic data are demonstrated in Tables 1 through 7. Test scores from the STAI (State Trait Anxiety Inventory) are demonstrated in Figures 1 through 4. These test scores were categorized according to State Anxiety scores, both pre- and posttest, Trait Anxiety scores, mean scores for both tests, and individual participant scores.

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

The following chapter is a summary of the study. Conclusions are drawn from data obtained, implications of conclusions stated, followed by recommendations for further study.

Summary

This investigation was a descriptive study implemented in a private 120-bed hospital in a community of 50,000 located in Central Texas. The study investigated hospitalized female patient's anxiety after being exposed to teaching prior to bladder catheterization. Purposes of the study were to measure the trait anxiety level and state anxiety level of hospitalized adults who received teaching prior to bladder catheterization and to determine from the data what relationship, if any, exists between teaching prior to bladder catheterization and anxiety level.

Out of the existing patient population, only four met the control criteria of this study. Data were collected over a one-month period; each participant was presented

with the teaching format, pretested for state anxiety, catheterized by a staff member, and posttested for state anxiety. Then, the participants were tested for trait anxiety.

Data were analyzed by descriptive statistics because of the small sample.

Conclusions

The conclusions which resulted from this study:

1. Anxiety in the hospitalized female adult was determined after implementing teaching prior to bladder catheterization utilizing STAI (State Trait Anxiety Inventory) scores.
2. Due to the sample size, no conclusions can be drawn about the relationship between teaching prior to bladder catheterization and anxiety.
3. Conclusions from the study cannot be generalized.

Implications

The implications drawn from this study show that anxiety can be determined in hospitalized female adults by the STAI (State Trait Anxiety Inventory). Patients'

receptiveness to learning a new area of health is dependent upon many variables such as developmental level, educational preparation, previous exposure to health care facilities and personnel, existing support system, and value system of the individual.

Nurses are continually faced with patients who manifest varying symptoms of anxiety. The fact that catheterization is a stressful event and causes anxiety for patients is a nursing concern and should be considered before approaching the patient.

Recommendations

Recommendations for further study are that this study be conducted over a greater time period, and that the population include a larger sample, both male and female. Collection of data should include more than one agency.

It should be noted that some factors do exist that could account for the small sample size. The only obstetrician/gynecologist staff physician for the agency utilized was on a leave of absence for ten days during the month of data collection. Also, surgical patients who formerly were catheterized on the individual hospital units prior to surgery are now catheterized in the surgical area after being medicated. The general surgical schedule

for the month of November consisted primarily of male adults rather than the high female surgical population in the past. It should also be noted that four more subjects could have participated except for the upper age limit of sixty-five.

Further recommendations concerning this study are using a control and experimental group to determine the relationship between anxiety and teaching. This study could also include patients undergoing other invasive procedures such as venipuncture, endoscopy, angiography, or gastrointestinal studies and related anxiety.

This same study could be implemented with patients who receive teaching by various methods and compare anxiety levels according to teaching methodology, i.e., demonstration, written instructions, verbal instructions, audio-visual presentation, standardized presentation, or "improptu" presentation by the nurse.

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APPENDIX A

STATE TRAIT ANXIETY INVENTORY

SELF-EVALUATION QUESTIONNAIRE

Developed by C. D. Spielberger, R. L. Gorsuch and R. Lushene

STAI FORM X-1

NAME _____ DATE _____

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle to the right of the statement to indicate how you *feel* right now, that is, *at this moment*. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

	NOT AT ALL	SOMEWHAT	MODERATELY SO	VERY MUCH SO
1. I feel calm	①	②	③	④
2. I feel secure	①	②	③	④
3. I am tense	①	②	③	④
4. I am regretful	①	②	③	④
5. I feel at ease	①	②	③	④
6. I feel upset	①	②	③	④
7. I am presently worrying over possible misfortunes	①	②	③	④
8. I feel rested	①	②	③	④
9. I feel anxious	①	②	③	④
10. I feel comfortable	①	②	③	④
11. I feel self-confident	①	②	③	④
12. I feel nervous	①	②	③	④
13. I am jittery	①	②	③	④
14. I feel "high strung"	①	②	③	④
15. I am relaxed	①	②	③	④
16. I feel content	①	②	③	④
17. I am worried	①	②	③	④
18. I feel over-excited and "rattled"	①	②	③	④
19. I feel joyful	①	②	③	④
20. I feel pleasant	①	②	③	④

SELF-EVALUATION QUESTIONNAIRE

STAI FORM X-2

NAME _____ DATE _____

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle to the right of the statement to indicate how you *generally* feel. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you generally feel.

	ALMOST NEVER	SOMETIMES	OFTEN	ALMOST ALWAYS
21. I feel pleasant	①	②	③	④
22. I tire quickly	①	②	③	④
23. I feel like crying	①	②	③	④
24. I wish I could be as happy as others seem to be	①	②	③	④
25. I am losing out on things because I can't make up my mind soon enough	①	②	③	④
26. I feel rested	①	②	③	④
27. I am "calm, cool, and collected"	①	②	③	④
28. I feel that difficulties are piling up so that I cannot overcome them	①	②	③	④
29. I worry too much over something that really doesn't matter	①	②	③	④
30. I am happy	①	②	③	④
31. I am inclined to take things hard	①	②	③	④
32. I lack self-confidence	①	②	③	④
33. I feel secure	①	②	③	④
34. I try to avoid facing a crisis or difficulty	①	②	③	④
35. I feel blue	①	②	③	④
36. I am content	①	②	③	④
37. Some unimportant thought runs through my mind and bothers me	①	②	③	④
38. I take disappointments so keenly that I can't put them out of my mind	①	②	③	④
39. I am a steady person	①	②	③	④
40. I get in a state of tension or turmoil as I think over my recent concerns and interests	①	②	③	④

APPENDIX B

PERMISSION FOR THE STUDY

TEXAS WOMAN'S UNIVERSITY
Box 22487, TWU STATION
DENTON, TEXAS 76204

HUMAN RESEARCH REVIEW COMMITTEE

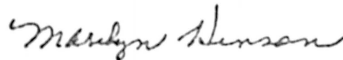
Name of Investigator: Pat H. Jarczewski Center: DentonAddress: 617 N. 1st Date: September 27, 1979Temple, Texas 76501Dear Pat H. Jarczewski

Your study entitled Teaching as it relates to Anxiety of the
Hospitalized Adult
has been reviewed by a committee of the Human Research Review Committee
and it appears to meet our requirements in regard to protection of the
individual's rights.

Please be reminded that both the University and the Department
of Health, Education and Welfare regulations require that written
consents must be obtained from all human subjects in your studies.
These forms must be kept on file by you.

Furthermore, should your project change, another review by
the Committee is required, according to DHEW regulations.

Sincerely,



Chairman, Human Research
Review Committee
at Denton

PLEASE ADD TO INFORMED CONSENT FORM:
NO MEDICAL SERVICE OR COMPENSATION IS
PROVIDED TO SUBJECTS BY THE UNIVERSITY
AS A RESULT OF INJURY FROM PARTICIPATION
IN RESEARCH.

Put period after the word down and delete rest of that sentence. (oral resume, line 18)

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 Kings' Daughters Hospital
GRANTS TO Patricia H. Jurewski

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:

Anxiety as it relates to catheterization in female surgical patients after being taught about catheterization by the RN (self-graduate student).

*The conditions mutually agreed upon are as follows:

1. The agency (may) (~~must~~) 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) (~~must~~) a conference with the student when the report is completed.
4. The agency is (willing) (~~would like~~) to allow the completed report to be circulated through interlibrary loan.
5. Other: _____

Date Oct. 24, 1979

J. H. Edman
Signature of Agency Personnel

Pat H. Jurewski
Signature of student

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

TEACHING PRESENTATION

TEACHING SCRIPT

Your doctor has ordered that you be catheterized. In order for you to cooperate with the staff in this procedure, you should first understand what the word "catherization" means.

A catheter is the name of a small soft tube about the size of a pencil. This tube will be passed into your bladder and left in to drain urine. Before we get too much further along, let me explain something about your urinary system. You should look now at the first picture which is a drawing of the urinary system. The kidneys are the two bean-shaped organs and are the filters of the blood. The kidneys form urine. Once the urine is made, it travels from the kidneys to the storage container called the bladder. The kidneys are attached to the bladder by the tubes called the ureters. Once urine gets to the bladder it is stored until you get the urge to urinate. The bladder will only hold about two cups of urine, and this is when the urge to urinate comes about. Urine is then passed from the bladder to the outside from the small opening called the urethra. In your case, this opening or urethra, is just above the birth canal or vagina, as it is called.

This whole system is sterile, or free of germs. Since it is sterile, whatever is put into the system must also be sterile. This catheter will be passed into your bladder from the outside opening or the urethra in order to drain urine.

You should now look at the plastic box on your table. You will see that it has two catheters. They are the soft yellow tubes with the holes in the ends. You can also see that there is a small "Y" piece on the other end. One of the catheters is straight which is labeled #1, and the other has the balloon blown up--labeled #2. Once the nurse has put the catheter in place, she will keep it in place by blowing up the balloon with a syringe. She will do this by putting sterile water in the tube through that "Y" opening.

Now, if you will look at the second picture, you will see what the catheter looks like when it is in place. As you can see, the tube is in the passageway and into the bladder where it drains the urine. The balloon is what keeps the catheter from coming out.

Remember, all of this is sterile, so that is why the nurse puts on sterile gloves and cleans you beforehand. When the catheter is in, it will be hooked up to a drain bag that hangs on the side of the bed. The catheter that

is left on the outside will probably be taped to your thigh so it does not pull and irritate you.

The procedure of catheterization is not painful, but somewhat uncomfortable. In order to make it easier to pass the tube and keep you as comfortable as possible, it will help if you take some slow deep breaths when the nurse asks you to. She will do this as she passes the catheter. This taking of slow deep breaths will relax your muscles. The tube will drain all of the urine and you should not feel the urge to urinate.

You will need to have this tube because surgery and anesthesia relaxes your organs. The tube takes over urination for you until you wake up and get back on your feet. When the doctor determines that it is okay to take out the catheter, then the nurse will take it out. She will deflate the balloon first, and then pull the catheter out. This should not have any effect on your ability to urinate afterward.

If you have questions that have not been answered, I will return so that I may answer them if possible. Thank you.

APPENDIX D

BIOGRAPHICAL DATA SHEET

BIOGRAPHICAL DATA SHEET

1. Age of participant
2. Medical or Surgical Diagnosis
3. Type of Catheterization
4. Educational Preparation
5. Semi-Private or Private Room
6. Significant Other(s) Present
7. Previous Catheterization
8. Length of Hospital Stay
9. Ethnic Background
10. Religious Affiliation