

ANXIETY MANAGEMENT FOR ONCOLOGY  
NURSES

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## CHAPTER 1

### INTRODUCTION

The increasing complexity of society has increased modern man's search for ways of understanding and dealing with stress. According to Selye (1976), stress is needed to survive and grow, but continual stress leads to illness and eventually to death. While stress is incurred by everyone, the oncology setting provides added emotional stress to professionals who must daily face the stresses in their own lives and also are confronted with the emotionally charged stress of patients and their families, as well as the stress of fellow coworkers. The emotional risk to the oncology nurse is undeniable. The constant stress of facing the death of others takes a toll on the nurse's emotional state.

Friedman (1980) listed common psychological reactions of professionals in oncology. These reactions include the following:

1. Feeling that the whole world has cancer.
2. Cancer phobia.
3. Mourning each patient's diagnosis.
4. Identification with patients and families.



5. Frustration at inability to completely alleviate the patient's physical pain.

6. Frustration at inability to alleviate the patients' and families' emotional pain.

7. Conflict over involvement in experimental therapy or therapies which causes unpleasant side effects.

8. Conflict caused by time required for providing physical care and emotional support.

9. Frustration over difficulty in nurse-physician and patient-physician relationship.

10. Depression and mourning related to progression of disease or death. (Friedman, 1980, p. 106)

Robinson (1976) stated that the oncology nurse struggles with two constant reactions: (a) identification with the patient and recognition of her own mortality, and (b) guilt because the oncology nurse feels a sense of having failed the dying patient. Robinson also indicated that subconsciously the nurse experiences anger at the patient who does not respond to treatment. This frustration is experienced by the oncology nurse as a guilty feeling for again having failed the patient.

While oncology nurses cannot avoid the stress of the occupational setting, Spielberger and Sarason (1982) suggested that these nurses should be helped to develop their capacity to tolerate increased levels of stress. Newlin and Wellish (1978) pointed out that a helpful intervention would be an open forum for oncology nurses

to discuss and share experiences. The group setting should allow the nurse to become aware of her own needs and allow exploration of alternatives for release of tension.

### Problem of Study

The problem of this study was:

With state anxiety and trait anxiety controlled, is there a difference in the anxiety levels of oncology nurses who participate in a 4-week anxiety management course in comparison with oncology nurses who do not participate in an anxiety management course?

### Justification of the Problem

There is little question about the stress level in oncology nursing. Spielberger and Sarason (1982) explained that stress or anxiety exists when people experience feelings of helplessness and powerlessness in dealing with dying patients. These authors stated that fear of death is the ultimate anxiety that a person faces. Exposure to constant loss of human life causes people to develop a certain amount of emotional numbness to these events. There is often a failure to express grief for fear of feeling pain. It is possible

that this unexpressed or hidden pain may be more than the person can bear.

Quint (1966) stated that nurses who work with dying patients guard themselves against loss of composure. This loss of composure can be derived from one of three bases: (a) the nurse becomes attached to a particular patient, (b) the nurse defines herself as negligent, or (c) the nurse is unable to perform in what she considers an acceptable and professional manner. According to Quint, there is a number of factors which increases the anxiety level of a nurse who works with dying patients. The death of a certain patient, such as a child, seems to cause high levels of anxiety in oncology nurses. Also, prolonged contact with the patient and their family may cause emotional involvement. When a patient dies, the nurse may have feelings of failure or negligence that can result in increased anxiety levels.

Quint also pointed out that the oncology nurse has perceptions of professional behavior which govern her interactions with patients, their families, and their coworkers. Nurses are concerned about managing their conversations so as to prevent patients and their

families from becoming upset. Nurses may also try to maintain more or less harmonious work relationships with doctors and other staff members. This constant control of emotions can cause increased anxiety levels in oncology nurses.

Quint (1967a), in a study regarding dying patients, found that nurses develop composure tactics in order to maintain a professional demeanor. In order to protect themselves, the nurses learn to avoid predicaments that will cause them to become upset or lose control, or threaten their concept of self as professionals. Death, according to Quint, serves to remind an individual of the finiteness of human existence and, thus, arouses feelings of anxiety and fear. Constant exposure to death and impending death is a threat to the very core of oneself.

Engel (1964) studied the coping strategies that the health care worker uses to protect himself/herself from exposure to death and suffering. The health care worker must develop a shell to ward off the personal aspect, pretending that it does not exist or is none of his/her business. Brunner and Suddarth (1970) emphasized that nurses develop defenses from the full

impact of the repeated incidences of death and the stress involved while caring for the dying patient. Glaser and Strauss (1966) found in their study that despite adverse circumstances in the dying setting, it is necessary for a nurse to make every effort to maintain professional composure in her own work and in coordinating the work of other staff members.

While the literature demonstrates much regarding the behavior of nurses in response to stress, little research is available regarding the most effective way to reduce this stress or the most effective way to cope with stressful situations. Spielberger and Sarason (1982) indicated that individuals should be helped in developing their capacity to tolerate stress. Anxiety exists when the individual experiences feelings of hopelessness and powerlessness. When a person learns to cope with anxiety and transforms this technique into a challenging effort, then there can be creativity. According to Spielberger and Sarason, when anxiety strikes at the core of one's own self-esteem, either the person becomes helpless or becomes a stronger self. Thus, the oncology nurse may turn anxiety into greater awareness and greater self-confidence by developing more effective coping techniques in the occupational setting.

Oncology nurses, as individuals, must recognize their own stress and learn how to deal with it; thus, being better prepared to assist patients in dealing with their stress (Spielberger & Sarason, 1982).

This study was directed toward teaching anxiety management to oncology nurses in an effort to strengthen their coping skills in anxiety and emotional laden situations. The anxiety management course included the teaching of relaxation techniques, problem-solving, assertiveness training, and supportive-group discussions.

### Theoretical Framework

Spielberger and Diaz-Guerrero (1976) proposed that the terms "stress" and "threat" be used to denote different aspects of a temporal sequence of events that result in the evocation of an anxiety reaction. Stress refers to the objective, consensually validated stimulus properties of a situation that are characterized by some degree of physical or psychological danger. Therefore, where stress denotes the objective stimulus properties of a situation, threat refers to an individual's perception of a situation as more or less dangerous or personally threatening to him or her.

If a situation or thought is perceived as threatening, the person who views the situation as threatening will experience an increase in anxiety. Spielberger and Diaz-Guerrero discussed two types of anxiety. Trait anxiety was referred to as a personality disposition or tendency toward emotional and/or physical uneasiness. This personality disposition is associated with past experiences that predispose an individual to view the world in a particular way. In contrast, state anxiety is a reaction taking place at a particular point in time. State anxiety varies in intensity and fluctuates over a period of time. Trait anxiety is associated with state anxiety and predisposes an individual to respond to stressful situations with varying amounts of state anxiety.

Spielberger and Diaz-Guerrero stated that when anxiety strikes at the core of one's own self-esteem, either one becomes helpless or one can become a much stronger self. The oncology nurse could turn anxiety into greater awareness and greater self-confidence by developing more effective coping techniques in the occupational setting.

### Assumptions

The following were assumptions of this research study:

1. The occupational setting of the oncology nurse is stressful.
2. Anxiety is a symptom of stress.

### Hypotheses

The following hypotheses were tested:

1. With state and trait anxiety controlled, there is no significant difference in the state anxiety level of oncology nurses who participate in a 4-week anxiety management course in comparison with oncology nurses who do not participate in the anxiety management course.
2. With state and trait anxiety controlled, there is no significant difference in the trait anxiety level of oncology nurses who participate in a 4-week anxiety management course in comparison with oncology nurses who do not participate in an anxiety management course.

### Definition of Terms

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



1. Anxiety--the state of tension, signaling perceived impending danger. A component of stress syndrome, anxiety is caused by stress (Spielberger & Sarason, 1982).

2. State anxiety--current feeling of emotional and physical uneasiness and apprehension associated with perceived stressful events as measured by the A-State Anxiety Inventory. A high score indicates high anxiety.

3. Trait anxiety--a personality disposition or tendency toward emotional and/or physical uneasiness as measured by the A-Trait Anxiety Inventory. A high score indicates high anxiety.

4. Oncology nurses--nurses who are employed as staff nurses caring for cancer patients.

5. Anxiety management course--a course designed to help oncology nurses control anxiety. This course included problem-solving, relaxation techniques, and supportive group discussions.

#### Limitations

The following limitations may have influenced the conclusions of this study:

1. Conditions other than working with oncology patients may have contributed to nurses' level of anxiety.

2. Age, race, religion, education, or socioeconomic level may have influenced the anxiety levels.

### Summary

This study was designed to determine whether or not the teaching of an anxiety management course would decrease the anxiety level of nurses working in an oncology setting. This information could possibly be utilized by nursing to decrease stress and strengthen coping skills of nurses. By understanding and adapting to their own stress levels, nurses could better understand and help decrease the anxiety levels of their patients and members of the families of these patients.

## CHAPTER 2

### REVIEW OF LITERATURE

The fear of death strikes at the very core of one's own self-esteem and causes great anxiety (Spielberger & Sarason, 1982). The fear of death is constant. Nurses who work with terminally ill patients experience fear and anxiety regarding death on daily, even hourly, basis. This review of literature will examine three areas: stress and anxiety, stress and anxiety associated with care of the dying patient, and strategies for decreasing stress and anxiety.

#### Stress and Anxiety

Selye (1976) defined stress in physiological terms as "the nonspecific response of the body to any demands made upon it" (p. 14). Lazarus (1971) defined stress as environmental or internal demands that exceed the adaptive resources of a system.

Claus and Bailey (1977) stated that there is little agreement on a universal definition of stress; nor is there agreement on a classification system for types of stress. Such a definition has depended largely on the

investigator's interest and field of study. Claus and Bailey stated that another problem was that none of the present concepts adequately explain how psychosocial stressors stimulated physiological reactions in the body. These authors stated that there seems to be a missing link which frequently concerns the perceptual or intellectual processes that a person applies to incoming stimuli in determining whether or not the stimuli is harmful.

Both Selye (1976) and Lazarus (1971) emphasized the importance of perception in determining whether or not a stressor is negative or positive. The extent to which the manifestations of stress are exhibited is dependent upon the severity of the perceived threat. Lazarus (1966) described four main categories of reaction which have been typically used as an index of stress: (a) reports of disturbed affects such as fear or anxiety, anger, depression, and guilt; (b) motor-behavioral reactions such as tremor, increased muscle tension, and speech disturbances; (c) changes in the adequacy of cognitive functioning; and (d) physiological change resulting from the effects of the autonomic nervous system and the adrenal glands linked to the emotions of fear and anger.

Selye (1976) examined measures of the autonomic nervous system in an effort to analyze the physiological component of stress. Selye (1976) formulated the physiological theories of stress referred to as the General Adaptation Syndrome or G.A.S. Changes in heart rate, adrenal hormonal increase, muscle tension and palmar sweating indicated the preception of stress by the individual. Selye defines three stages of stress including alarm, adaptation and exhaustion.

A review of the literature in the area of anxiety/stress indicates both a physiological and psychological theory. The psychological concept of anxiety assumes a central position in most theories of behavior and/or personality, yet, despite the general agreement on its significance, there is minimal agreement among theoreticians as to what constitutes anxiety, conditions that arouse anxiety, specific experiences that influence an individual's vulnerability and the difference between anxiety and stress according to Spielberger (1972).

Spielberger and Diaz-Guerro (1976) referred to anxiety as a hypothetical concept operationally defined for research purposes. The definition being the instrument utilized to measure anxiety allowed researchers to attempt to construct measuring procedures.

The State Trait Anxiety Inventory (STAI) by Spielberger, Gorsuch, and Lushene (1968) was developed to provide reliable, relatively brief self-report measures of both state and trait anxiety. The A-State Scale consists of 20 statements designed to measure subjective feelings at a particular moment, while the A-Trait Scale consists of 20 statements designed to measure how the individual generally feels. Levitt (cited in Spielberger, Gorsuch, & Lushene, 1970) described the STAI as a carefully developed instrument from both a theoretical and methodological standpoint, utilizing highly sophisticated and rigorous test construction procedures. Academic learning situations have been the primary focus of studies using the STAI for measuring anxiety. A review of the literature published during the past decade indicated the STAI has been used extensively to evaluate anxiety in the hospitalized patient (Spielberger et al., 1970).

#### Stress and Anxiety Associated with Care of the Dying Patient

Death has always been considered as an unwelcome event by the vast majority of society. Kubler-Ross (1970) stated that from a psychiatrist's point of view,

this is very understandable and can best be explained by the premise that in the unconscious death is never possible. It is inconceivable to imagine the actual ending of one's own life here on earth; and if life has to end, the ending is usually attributed to a malicious intervention from the outside by someone else (Kubler-Ross, 1970).

Cappon (1965) expanded the association of death and fear, and pointed out that a striking aspect revealed in questioning people near death was that their over-protective custodians--the doctors and nurses--showed the greatest distress. Quint (1967b) offered an explanation for such a response in that it is not easy to let another person express his/her fears regarding dying because such talk tends to trigger personal fears regarding one's own death.

Folta (1965) stated that the occurrence of death may pose psychological hazards to the hospital staff. It may pose a threat to the equilibrium of adequate medical resources. Glaser and Strauss (1966) stated that few people who work in a medical setting are able to remain composed and in control at all times. This fact is probably due to the constant stress and anxiety related to caring for terminally ill patients.

A nurse's composure is vital to maintaining order in a high stress occupational setting. "Nevertheless, nurses can become very upset, and a nurse's fear in the dying situation is that she might lose control over herself" (Glaser & Strauss, 1966, p. 226). Nurses are expected to be experts regarding death, but the contrary appears to be the case. Facing death is difficult and helping others face death is trying; thus, attitudes and practices are developed to avoid emotional involvement and to reduce the stress of caring for a dying patient (Quint, 1967b).

Quint (1967a) stated that the care of dying patients tends to be regarded by nurses as more difficult and less rewarding than the care of recovering patients. Several reasons for these feelings were cited: (a) responsibilities and decisions are often difficult and tension-producing; (b) rules guiding the nurse's actions are not always clear-cut and simple; (c) choices available are complex and conflicting from many sources such as the patient, the medical staff, family, hospital, or other sources.

Quint (1969) suggested that nurses do not generally personalize their interactions with patients and, in



fact, are likely to avoid contacts with the dying patient. Quint stated that such behavior was as much a denial of impending death as were the patients' actions in negating fear. This behavior is quite understandable when one considers the pressures and stresses in such a setting, for there is the dilemma of two somewhat conflicting goals--to relieve suffering and to prolong and protect life (Quint, 1969).

Brim, Freeman, Levine, and Scotch (1970) observed that it has become the fashion among American families to delegate the care of the dying to someone else. The more common scene of "natural death" has shifted from the home to the institution. However, close scrutiny of health professionals and these institutions revealed that these settings were quite unprepared to cope with the needs of the dying patient (Brim et al., 1970).

Yeaworth, Kapp, and Winget (1974) concurred with Brim et al.'s viewpoint by stating that previous training has rarely prepared the health professional to cope with the stress involved in caring for dying patients. Discussing personal death can evoke sadness, fear, and/or anger. These reactions may be disturbing to those involved in the interaction. Glaser and Strauss (1966)

stated that the emotional turmoil which is created by this situation influences the nurse's desire to limit such situations. Although nurses are taught to give specialized nursing care to terminally ill patients (such as oncology patients), many of the nurse's attitudes toward death resemble those of the layman (Glaser & Strauss, 1966).

Death is frequently associated with the cancer patient. Marino (1976) stated that even though it may be unrealistic and illogical, most people (including health professionals) view cancer with dread. This dread can affect the care of cancer patients. Some nurses believe that caring for a cancer patient is depressing and they are reluctant to commit themselves fully to that patient. Marino suggested that this attitude could be due to a nurse (perhaps unconsciously) separating cancer patients from other patients; putting cancer patients into a special category. This attitude on the part of the nurse could be due to the fact that she has not emotionally accepted the fact that cancer is a chronic disease requiring continuous or periodic treatment (Marino, 1976).

The atmosphere in a cancer unit consists of problems, sorrow, and death. These feelings are physically and

emotionally exhausting and can cause physical illness on the part of the nurse (Marino, 1976). Popoff (1975b) found that most nurses surveyed experienced some degree of anger, depression, and discouragement when caring for terminally ill patients, although younger nurses showed a higher tendency toward these feelings.

As evidenced from a review of the literature, certain characteristics of nurses may influence the management and care of the dying patient and the amount of stress and anxiety a nurse is able to control. These characteristics include age, area of specialty, and education (Popoff, 1975a). The ages of nurses in Popoff's (1975a) sample were found to influence the nurses' comfort level in caring for dying patients of specific ages. More than one-half (59%) of the nurses, (ages 17-22 years) reported that they would be uncomfortable caring for a dying adult; whereas, slightly less than one-half of the other nurses felt this way. Most of the nurses surveyed experienced some degree of anger, depression, and discouragement when caring for the terminally ill patient (Popoff, 1975a).

In examining the clinical specialty area, Popoff found that nurses in the critical care areas had a

high contact rate with dying patients. Of the nurses responding to the survey, 35% stated that they cared for dying patients once a week, while the figure increased to 60% for nurses who worked in Intensive Care Units (ICU) or Coronary Care Units (CCU). The ICU/CCU, emergency, medical, surgical, and geriatric units were found to provide the most contact with the dying; whereas obstetrics/gynecology, psychiatry, and pediatric units provided the least amount of contact with dying patients.

Yeaworth et al. (1974) examined the importance of education in their study which measured attitudes toward death and dying. Subjects consisted of nursing students (108 freshmen and 69 seniors) in a baccalaureate nursing program. Compared to the freshmen, the responses of senior students indicated greater acceptance of feelings, more open communication, and a broader flexibility in relation to dying patients and their families. The overall findings of Yeaworth et al. suggested that important shifts in attitudes regarding death and dying could result from nursing education.

Although the majority of the literature sources indicated that care of the dying is stressful, some authors question this assumption. Maloney (1982) stated

that nurses working in intensive care units in oncology essentially have lower state anxiety due to the fact that these nurses seek out these areas for work and are, therefore, better trained to handle the problems. Nurses who choose to work in intensive care environments may have basic personality characteristics that allow them to tolerate excessive tension (Maloney, 1982).

According to Spielberger and Sarason (1982), because these nurses choose to work in this situation, they do not perceive any kind of threat. These nurses are trained for the situation, they know what they are doing, and they find it challenging and rewarding. "Either you learn to adapt to the high levels of stress, or you totally come undone from it" (Spielberger & Sarason, 1982, pp. 17-18). These researchers believed that usually a nurse adapts to the stress situation and becomes extremely creative in doing so.

Newlin and Wellish (1978) also contended that nurses are able to make an adjustment to the setting through a maturing process which is characterized by several changes in the way the nurse relates to patients. The nurse is then able to adjust her professional goals

so that success as a nurse does not depend on the cure or survival of the patient. As the nurse learns not to depend on this perception of success, she increases her clinical knowledge and experience. Therefore, natural progressions in the disease course are no longer shocking surprises which dash her hopes for the patient's recovery. The nurse who makes this kind of adjustment usually is the one who feels committed to oncology nursing as a career specialty (Newlin & Wellish, 1978).

Maloney (1982) suggested that successful coping mechanisms could be learned through repeated practical experience with stress; in other words, by working within this environment, individuals learn coping skills that enable them to tolerate the supposedly high levels of stress that other nurses might find difficult to deal with. Thus, it would seem that perceptions of a situation are more important than the actual situation itself. If the nurse seeks to work in oncology, she views herself as capable of meeting the responsibility. Therefore, one would assume that the anxiety level would not be significantly increased (Maloney, 1982).

### Strategies for Decreasing Stress and Anxiety

The position of the nurse is paradoxical. On the one hand, she is expected to be objective and firm; on the other hand, she is expected to emanate warmth and feeling. Maintenance of an appropriate balance in these opposing attitudes is in itself stress producing (Vreeland & Ellis, 1969). Lewis and Levy (1982) found that all too often, nurses acknowledge the experience of stress in terms of patients, peers, and colleagues, but not in terms of themselves. Lewis and Levy stated that even though nurses are quite skilled in identifying and minimizing stress for others, they do not recognize it in themselves until it is brought to their attention or until they are on the brink of a "burnout."

Claus and Bailey (1977) suggested that the nurse should develop awareness through self-appraisal. Learning how stress affects the individual appears to be the first step in deciding on the coping mechanism. A series of questions was proposed by Claus and Bailey (1977) as guidelines for self-assessment as follows:

1. Is stress work related?
2. Is something going on in the personal life of the individual that is worrisome and influential?

3. Is there a combination of demands made at home and at work?
4. Are unrealistic goals set?
5. Is there a resistance to change?
6. Is anxiety present all the time? (p. 61)

Claus and Bailey postulated that the general attitude of the nurse toward work, family members, and colleagues can influence stress and anxiety. If the nurse perceives the world as benevolent and challenging, there will be less anxiety experienced than if the nurse views the world as a relatively evil, hostile, and threatening environment. Claus and Bailey suggested managing stress through self-regulating modalities such as relaxation exercises.

According to Benson (1976), the relaxation response is the opposite of the stress of "fight or flight" syndrome. The relaxation response allows some control over the response. Benson explained that this response produces an altered state of consciousness which produces a mental state of relaxation and fosters temporary healing in a stressed organ system.

Donovan (1981) found that although relaxation does not prevent stress, it does serve to minimize or overcome some of the manifestations of stress. There seems to be a need for stress management programs. These



programs could include training in conflict resolution, training in time management, relaxation training, administrative commitment, and counseling programs (Donovan, 1981).

Other methods of relaxation suggested by Claus and Bailey (1977) are progressive relaxation, autogenic training, biofeedback, guided imagery, aerobic exercise, and other physical exercises. Additional techniques suggested by Claus and Bailey involve judicious use of humor, hearty interpersonal relationships, and changing and humanizing the environment.

Butler (1980), in discussing the stress management program initiated at her hospital, stated the outcome of the program was encouraging with a large majority of the participants accomplishing their objectives. The participants felt that they could better recognize tension when away from class, and that they knew how to decrease or eliminate this tension.

Newlin and Wellish (1978) found that an extremely helpful intervention in dealing with the emotional factors of oncology nursing is simply the provision of an open forum for discussion and sharing experiences. When it becomes evident that a nurse is experiencing

difficulties, there should be an investigation made on an individual basis if personal problems seem to add pressure to the point of intolerance (Newlin & Wellish, 1978).

Quint (1967b) offered the following suggestions for nurses in the oncology setting:

1. Nurses need to establish open and regular two-way communication with physicians.
2. Nurses need to find specific ways of compensating for their feelings of helplessness and frustration; e.g., helping the family to grieve even though they are unable to be supportive of the patient.
3. The nursing staff needs to find allies and resources for helping with especially difficult or taxing problems. Social workers, clergymen, and psychiatrists have often been used in this capacity.
4. Nurses need to set up a regular system for dealing with the social and psychological problems of care, including problems encountered by the staff. (p. 772)

A review of the literature has revealed a variety of approaches that have been used to reduce stress and anxiety. However, many of these strategies have not been adequately tested. No studies were discovered which examined the use of a combination of methods such as problem-solving, relaxation techniques, and supportive group discussion. The present study may be helpful in adding to the body of literature on methods to be used in reducing stress and anxiety.

### Summary

This review of literature has examined stress and anxiety, stress and anxiety associated with care of the dying patient, and strategies for decreasing stress and anxiety. The review of the literature has provided guidelines for developing insight into behavior and feelings of nurses which cause anxiety, as well as suggested avenues for dealing with the stress and anxiety.

## CHAPTER 3

### PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

A quasi-experimental design was used in this study (Polit & Hungler, 1978). This study was a non-equivalent, two-group, pretest-posttest design. In this type of study, there are two groups, one of which is the control group. The independent variable was participation in the anxiety management course; the dependent variable was the anxiety level of oncology nurses. The quasi-experimental design was used because there was no attempt at randomization of the subjects and groups.

#### Setting

The setting for this study was a cancer and research institute in a large Southwestern metropolitan city. Most of the patients were oncology clients, with a few of them having diagnoses of multiple sclerosis or other medical problems. There are approximately 100 beds. This is a research and treatment hospital, with some of the medical staff being Fellows from all over the world. The nursing staff consists of registered nurses

and non-licensed nurses. Some of the nurses have received their nursing education in foreign countries.

### Population and Sample

The population for this study was all staff nurses employed full-time on the second and third floors of the participating agency. All three shifts were included. A total of 18 volunteers was obtained to participate as subjects in this study. The volunteers designated as the experimental group asked to participate in the anxiety management course. Another group of volunteers were asked to take a pretest and posttest and act as the control group. The nurses in the control group were offered the anxiety management course at the conclusion of the study. The method of selection was non-random volunteer sampling. The experimental group was taught the anxiety management course once a week for 4 weeks. Three nurses (7-3 shift) were taught immediately following the shift. Four nurses (3-11 shift) were taught by request on their lunch break at 6 p.m. Two nurses (11-7 shift) were also taught on their lunch break at 2 a.m. No treatment was provided for the control group during this 4-week period of time.

### Protection of Human Subjects

Before conducting the study, an application was made to the Human Subjects Review Committee of Texas Woman's University (Appendix A) and to the graduate school (Appendix B) to conduct the study. Permission was also obtained from the participating agency (Appendix C).

Subjects were given a letter of explanation regarding the study (Appendix D) and were asked to sign consent forms (Appendix E) indicating that they understood the purposes of the study and their involvement. A verbal explanation was given at the end of each shift (7-3, 3-11, and 11-7). Subjects were advised that if they wished information concerning the study, a copy of the final results would be available to them through the cancer institute. Numbers, rather than names, on the pretests and posttests provided for confidentiality. The material discussed in group sessions was held in strict confidence. Nurses were advised that participation was strictly voluntary and that their employment would in no way be affected. All identifying information was destroyed at the end of the study. The subjects were advised that they could withdraw from the study at any time.

### Instruments

The first instrument utilized in this study was a demographic data sheet (Appendix F). This instrument was used to gather data regarding whether or not the nurse was registered in the state of Texas, age, length of time in present position, and length of time in oncology. These data were used to describe the sample.

The second instrument utilized in this study was The State Trait Anxiety Inventory (STAI) (Appendix G) by Spielberger et al. (1968). The instrument is a 40-item Likert scale which measures indirectly an individual's anxiety level. There are two parts to this inventory; each is entitled "Self-Evaluation Questionnaire." Each part contains 20 questions. The first part measures state anxiety which is transitory and situational; the second part measures trait anxiety, which is concerned with basic personality characteristics.

The forms are designed for self-administration and there is no time limit for completion of the questionnaire. The average time, however, for college students is 6 to 8 minutes to complete each test, and less than 15 minutes to complete both tests. Less educated persons required 10 to 12 minutes per test or approximately 20

minutes to complete both. The range of scores on each test is from a minimum of 20 (least anxiety) to a maximum of 80 (highest anxiety) (Spielberger et al., 1970).

### Validity

Construct validity of the A-State Scale was determined in a study involving 977 undergraduate college students under two conditions: NORM and EXAM conditions. The mean scores under each condition were reported for all of the 20 items on the A-State Scale for each separate item. Under EXAM conditions, the mean score was higher than the NORM. All except 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 et al., 1970).

Concurrent validity for the A-Trait Scale showed correlations between the STAI and IPAT Anxiety Scale and the Taylor Manifest Anxiety Scale (TMAS) to be .72 to .83. These three tests have been concluded to be alternate measures of A-Trait anxiety (Spielberger et al., 1970).



### Reliability

Test-retest reliability correlations for A-State are relatively high. A study involving undergraduate college students tested under varying circumstances on three different occasions exhibited ranges from .73 to .86. The correlations for the A-State Scale are 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 Scale than test-retest correlations. 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 et al., 1970).

### Data Collection

After obtaining approval from the Human Subjects Review Committee, the graduate school, and the participating agency, a notice was posted on all bulletin boards at the cancer hospital and research institute to announce the research project (Appendix H). The investigator was available on the posted date to answer questions and to secure volunteers at the end of the three shifts (7-3, 3-11, and 11-7). The verbal

explanation was presented at the end of each shift.

All volunteers were requested to read and sign the written consent forms.

The pretest State-Trait Anxiety Inventory was administered and a demographic data sheet was given to all volunteers to be completed. The demographic data sheet consisted of whether or not licensed in the state of Texas, age, length of time in present position, and length of time in oncology. Pretest questionnaires and demographic data sheets were coded with only the investigator knowing the code numbers of the volunteers. Eighteen volunteers were obtained. Nine nurses volunteered for the experimental group. The other nine nurses volunteered to be in the control group. The experimental group received the anxiety management course on each shift (7-3, 3-11, and 11-7) one time per week for 4 weeks.

The method of presentation for the anxiety management course included lecture, visual aids, demonstration, and participation. The course outline is presented in Appendix I. Week 1 was Progressive Relaxation, Open Group Discussion, How to Define Stress, and How to Identify the Physiological Affects on the Five Systems

of the Body. The second week, the nine nurses in the experimental group were taught Progressive Relaxation, Open Group Discussion, Recognizing Adverse Affects of Stress Injurious to Health and Job Performance, and Distinguishing Positive from Negative Stressors and Environmental Setting. Week 3 was Progressive Relaxation, Open Group Discussion, Identification of the Five Stressors in Professional Work Setting, and Five Stressors in the Personal Life Setting and Existing Methods Used for Coping with these Stressors. Also examined were five effective strategies for the management of stress. The fourth week was Progressive Relaxation, Open Group Discussion, and Preparing a Plan of Action for Managing Special Stressors in the Professional Work Setting, Problem Solving, and Assertiveness Training.

At the end of the 4-week session, held on each shift (7-3, 3-11, and 11-7), two posttests were given on the State-Trait Anxiety Inventory. Eighteen nurses completed the study, 9 in the experimental group and 9 in the control group. All 9 nurses participating in the anxiety management course completed the 4-week course. The anxiety management course was offered to the control group upon completion of the study. There

was no immediate response from the control group indicating a need for the anxiety management course.

### Treatment of Data

Descriptive statistics were used to describe the demographic characteristics of the sample. Hypotheses 1 and 2 were tested utilizing the analysis of covariance. The analysis of covariance procedure is an "extremely powerful and useful analytic technique for controlling extraneous or confounding influences on dependent measures" (Polit & Hungler, 1978, p. 583). The state and trait anxiety scores were the two covariates. For the purposes of this study, the level of significance was set at .05.

## CHAPTER 4

### ANALYSIS OF DATA

This study used a quasi-experimental design (Polit & Hungler, 1978). The purpose of this study was to compare state and trait anxiety levels of oncology nurses in an experimental group who participated in an anxiety management course, and in a control group who did not participate. The data were collected utilizing the State-Trait Anxiety Inventory by Spielberger et al. (1968). The collected data were analyzed using analysis of covariance. This chapter will provide a description of the study sample and present the findings obtained following statistical analysis of the data for each hypothesis.

#### Description of Sample

The sample consisted of 18 female oncology nurses. Nine subjects volunteered to participate in the anxiety management course and were considered as the experimental group. Nine subjects agreed to act as the control group. Both groups were given a pretest and posttest anxiety before and after the researcher conducted the course.

The age distribution of the two groups is shown in Table 1. One-half of the subjects, 4 (45%) in the control group and 5 (56%) in the experimental group were in the 36-55 year age group. The next most frequent category listed was the 26-35 year age group. Five nurses, 2 (22%) in the control group and 3 (33%) in the experimental group checked this category.

Table 1 also depicts the subjects' work experience in their present positions. Over 75% of the subjects, 6 (67%) in the control group and 7 (78%) in the experimental group, had worked in their present positions for over 24 months. The remaining subjects reported working less than 6 months in their present positions.

An examination of Table 1 shows a similar distribution for the subjects' length of time in oncology nursing. However, 1 nurse in the control group reported her oncology experience as 12-24 months.

Whether or not the subjects were licensed in the state of Texas is also presented in Table 1. Only one nurse indicated that she was not licensed in the state of Texas at the present time.

Table 1  
Demographic Variables of Sample

	Control Group ( <u>n</u> = 9 )	Experimental Group ( <u>n</u> = 9 )
<u>Age:</u>		
19-25 years	3 (33%)	0 (0%)
26-35 years	2 (22%)	3 (33%)
36-55 years	4 (45%)	5 (56%)
over 55 years	0 (0%)	1 (11%)
<u>Length of time in current position:</u>		
1-6 months	3 (33%)	2 (22%)
7-24 months	0 (0%)	0 (0%)
over 24 months	6 (67%)	7 (78%)
<u>Length of time of oncology experience by groups:</u>		
1-6 months	2 (22%)	2 (22%)
7-11 months	0 (0%)	0 (0%)
12-24 months	1 (11%)	0 (0%)
over 24 months	6 (67%)	7 (78%)
<u>Licensure in state of Texas:</u>		
Yes	9 (100%)	8 (89%)
No	0 (0%)	1 (11%)

### Findings

Two hypotheses were tested using the analysis of covariance. Hypothesis 1 stated that with state and trait anxiety controlled, there is no significant difference in the state anxiety level of oncology nurses who participate in a 4-week anxiety management course in comparison with oncology nurses who do not participate in the anxiety management course. To test Hypothesis 1, an analysis of covariance was computed to determine if the groups were different on the posttest state anxiety scores after controlling for pretest state and trait anxiety scores. The  $F$  value was 0.02,  $df = 14$ , and  $p = 0.90$  (Table 2). Thus, Hypothesis 1 failed to be rejected.

Hypothesis 2 stated that with state and trait anxiety controlled, there is no significant difference in the trait anxiety level of oncology nurses who participate in a 4-week anxiety management course in comparison with oncology nurses who do not participate in an anxiety management course. To test Hypothesis 2, an analysis of covariance was computed to determine if the groups were different on the posttest trait anxiety scores after controlling for pretest state and trait



Table 2  
Analysis of Covariance of State Anxiety Scores

Source	Sum of Squares	<u>df</u>	<u>MS</u>	<u>F-Value</u>	Probability
Group	1.507	1	1.5070	0.02	0.8990
Prestate	30.468	1	30.4680	0.34	0.5703
Pretrait	182.062	1	182.0620	2.02	0.1775
Error	<u>63.871</u>	<u>14</u>	89.747		
Total	1477.908	17			

anxiety scores. The  $F$  value was 0.00,  $df = 14$ , and  $p = 0.97$  (Table 3). Thus, Hypothesis 2 failed to be rejected.

#### Additional Findings

A visual examination of the data revealed a sizable decrease between pretest and posttest state anxiety scores for the experimental group. For further clarification a paired  $t$ -test was utilized. According to Polit and Hungler (1978), a paired  $t$ -test is concerned with the difference between the scores of pretreatment and posttreatment measures. There was a significant change in the scores of the experimental group from 45.2 on the pretest to 33.3 on the posttest ( $t = 2.389$ ;  $p = 0.025$ ). These data are presented in Table 4. The means, standard deviation, and differences for the pretest and posttest state anxiety scores are shown in Table 5.

Figure 1 depicts the pretest and posttest state anxiety scores for the control and experimental groups. An examination of Figure 1 shows the decrease in posttest state anxiety levels of both groups. The control group showed only a slight decrease (from 37.2 to 35.7). However, the posttest anxiety scores of the experimental group showed a decrease from 45.2 to 33.3. Although this was not statistically significant using the analysis of

Table 3  
Analysis of Covariance of Trait Anxiety Scores

Source	Sum of Squares	<u>df</u>	<u>MS</u>	<u>F-Value</u>	Probability
Group	0.04	1	.041	0.00	0.9697
Prestate	48.072	1	41.072	1.49	0.2431
Pretrait	420.235	1	420.235	12.99	0.0029
Error	<u>453.049</u>	<u>14</u>	32.357		
Total	921.401	17			

Table 4  
Differences in Pretest and Posttest State and  
Trait Anxiety Scores

Group	Pretest and Posttest State Anxiety <u>t</u>	Pretest and Posttest Trait Anxiety <u>t</u>
Experimental	2.389*	-.120
Control	0.313	0.699

\*p = 0.025.

Table 5  
Mean Difference between Pretest and Posttest  
State Scores

	Pretest	Posttest	Mean Difference between Pretest and Posttest State Scores
<u>Experimental Group</u> ( <u>n</u> = 9)			
Mean	45.2	33.3	11.9
Standard Deviation	13.0	10.1	
<u>Control Group</u> ( <u>n</u> = 9)			
Mean	37.2	35.7	1.5
Standard Deviation	10.1	8.8	

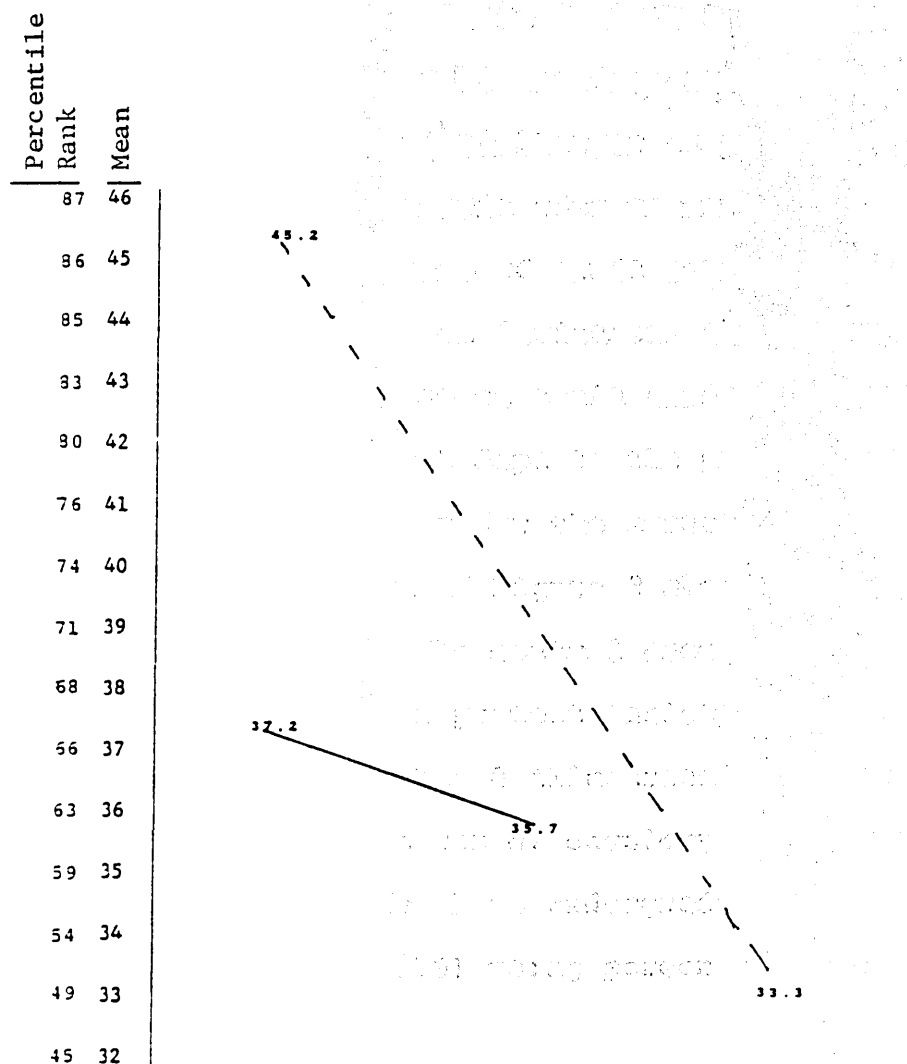


Figure 1. Pretest and Posttest Scores on Spielberger, Gorsuch, and Lushene (1970) State Anxiety Scores Compared to Norm Group.

Key. \_\_\_\_\_ (Control Group).  
 - - - - - (Experimental Group).

covariance statistical test, the findings indicated clinical significance. Table 6 shows a comparison of the state anxiety scores of oncology nurses with female undergraduate students (Spielberger et al., 1970) using percentile ranks as the criterion measure.

A further examination of trait scores (Table 7) depicts the mean, standard deviation, and differences for the pretest and posttest trait anxiety scores of the two groups. Figure 2 depicts the pretest and posttest trait anxiety scores for the control and experimental groups. An examination of Figure 2 shows little change in any of the scores. The control group did, however, report a slightly higher pretest anxiety score than the experimental group. Table 8 illustrates a comparison of the trait anxiety scores of oncology nurses with a norm group of female freshman undergraduate students (Spielberger et al., 1970) using percentile rank as the criterion measure.

### Summary of Findings

The majority of the subjects in this study was in the 36-55 year age range. They had worked over 24 months and also had worked in oncology nursing for over 24 months. Only one subject was not licensed in Texas.

Table 6  
Percentile Ranks for A-State Scores: Comparison of  
Oncology Nurses with Female Undergraduate  
Students

Group	Mean Score	Percentile Ranks
<u>Control</u> ( <u>n</u> = 9)		
Pretest	37.2	65
Posttest	35.7	63
<u>Experimental</u> ( <u>n</u> = 9)		
Pretest	45.2	86
Posttest	33.3	49

Note. Percentile ranks based on those established by Spielberger, Gorsuch, and Lushene (1970).



Table 7:  
Mean Difference between Pretest and Posttest  
Trait Scores

	Pretest	Posttest	Mean Difference between Pretest and Posttest Trait Scores
<u>Experimental Group</u> ( <u>n</u> = 9)			
Mean	38.0	38.2	-0.2
Standard Deviation	8.8	11.2	
<u>Control Group</u> ( <u>n</u> = 9)			
Mean	39.5	38.0	1.5
Standard Deviation	9.1	4.7	

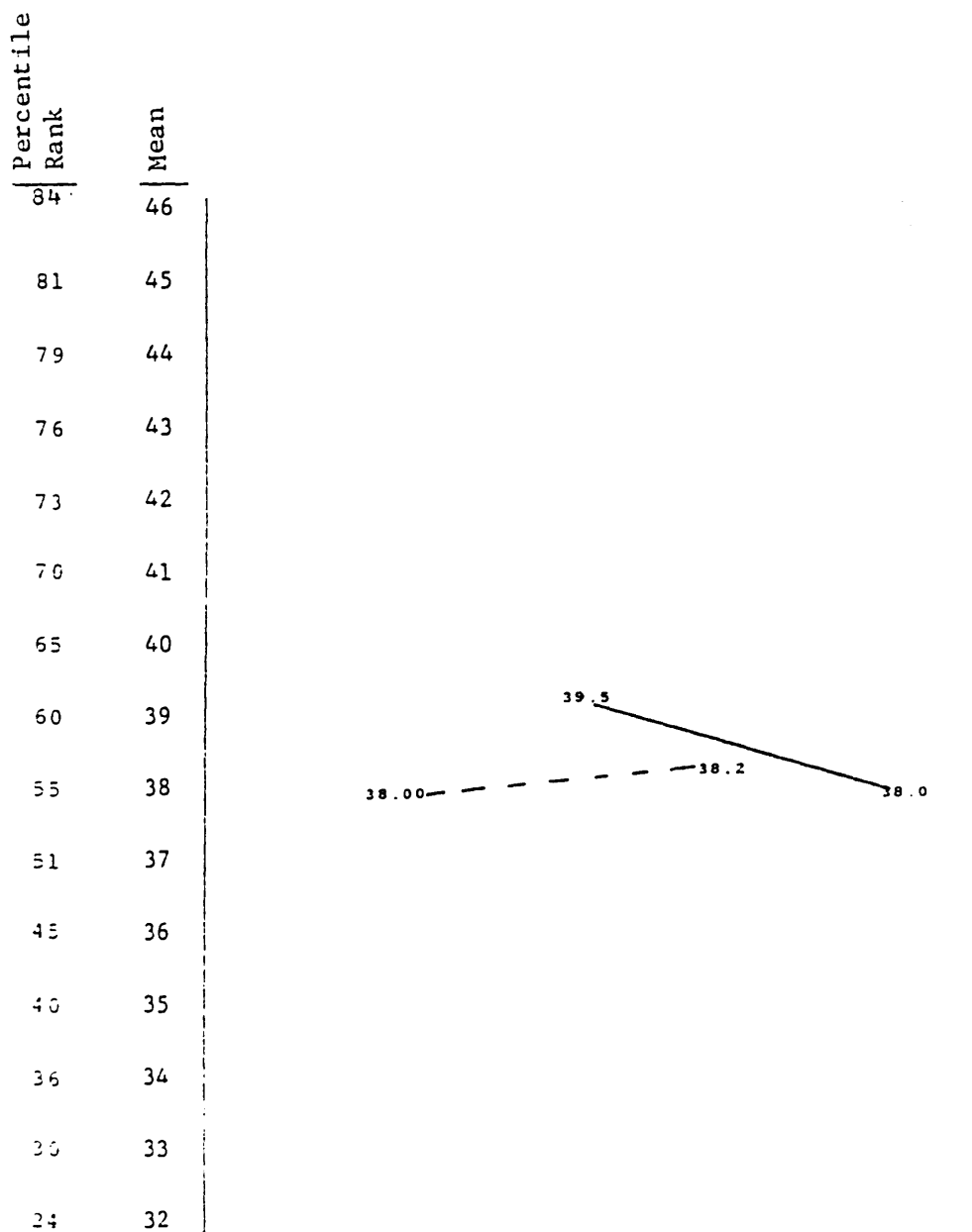


Figure 2. Pretest and Posttest Scores on Spielberger, Gorsuch, and Lushene (1970) Trait Anxiety Scores Compared to Norm Group.

Key. \_\_\_\_\_ (Control Group).

- - - - - (Experimental Group).

Table 8

Percentile Ranks for Trait-State Scores: Comparison  
of Oncology Nurses with Female  
Undergraduate Students

Group	Mean Score	Percentile Ranks
<u>Control</u> ( <u>n</u> = 9)		
Pretest	39.5	62
Posttest	38.0	55
<u>Experimental</u> ( <u>n</u> = 9)		
Pretest	38.0	55
Posttest	38.2	56

Note. Percentile ranks based on those established by Spielberger, Gorsuch, and Lushene (1970).

Hypothesis 1 stated that with state and trait anxiety controlled, there is no significant difference in the state anxiety level of oncology nurses who participate in a 4-week anxiety management course in comparison with oncology nurses who do not participate in the anxiety management course. The analysis of data revealed an  $F$  value of 0.02,  $df = 14$ , and  $p = 0.90$ .

Hypothesis 2 stated that with state and trait anxiety controlled, there is no significant difference in the trait anxiety level of oncology nurses who participate in a 4-week anxiety management course in comparison with oncology nurses who do not participate in an anxiety management course. The analysis of data revealed an  $F$  value of 0.00,  $df = 14$ , and  $p = 0.97$ .

Additionally, a paired  $t$ -test was used to analyze the data. The  $t$  value was 2.389,  $p = 0.025$ . There was a significant change in the scores of the experimental group from 45.2 on the pretest to 33.3 on the posttest. These scores compare with the 86th percentile rank and the 49th percentile rank when compared to a normal group of undergraduate students.

## CHAPTER 5

### SUMMARY OF THE STUDY

This chapter will present a summary of the complete study. A discussion of the statistical findings will be presented. Conclusions will be drawn from this discussion. Utilizing these conclusions, implications of anxiety management training for nurses in oncology settings will be determined. The chapter will conclude with recommendations for further study.

#### Summary

The purposes of this study were to assess the anxiety level of oncology nurses and to determine if an anxiety management course in the work setting would significantly decrease the anxiety levels of nurses.

A quasi-experimental design was used to test the two hypotheses. Hypothesis 1 stated that with state and trait anxiety controlled, there is no significant difference in the state anxiety level of oncology nurses who participate in a 4-week anxiety management course in comparison with oncology nurses who do not participate in the anxiety management course. Hypothesis 2

stated that with state and trait anxiety controlled, there is no significant difference in the trait anxiety level of oncology nurses who participate in a 4-week anxiety management course in comparison with oncology nurses who do not participate in an anxiety management course.

In this study, anxiety was the dependent variable examined while the anxiety management course was the independent variable. The theoretical framework used in the study was the anxiety theory of Spielberger and Diaz-Guerrero (1976). Trait anxiety is a personality disposition or tendency toward emotional or physical uneasiness. State anxiety varies in intensity and fluctuates over time. These authors contended that anxiety could cause an individual to become helpless or a stronger self.

A review of the literature was presented in three areas of discussion. These areas were: (a) stress and anxiety, (b) stress and anxiety associated with care of the dying patient, and (c) strategies for decreasing stress and anxiety.

The sample for this study consisted of 18 nurses who worked in a cancer and research institute in a large

metropolitan area. Nine nurses volunteered to act as the experimental group. These nurses indicated a need for the anxiety management course. The other nine nurses consented to act as a control group. They agreed to take a pretest and posttest for anxiety at the same time as the experimental group. Compliance with the guidelines for protection of human subjects as outlined by Texas Woman's University was followed.

#### Discussion of Findings

Two hypothesis were tested in this study using the analysis of covariance. Hypothesis 1 stated that with state and trait anxiety controlled, there is no significant difference in the state anxiety level of oncology nurses who participate in a 4-week anxiety management course in comparison with oncology nurses who do not participate in the anxiety management course. To test Hypothesis 1, an analysis of covariance was computed to determine if the groups were different on the posttest state anxiety scores after controlling for pretest state and trait anxiety scores. The  $F$  value was 0.02,  $df = 14$ , and  $p = 0.90$ . Thus, Hypothesis 1 failed to be rejected.

Hypothesis 2 stated that with state and trait anxiety controlled, there is no significant difference in the trait anxiety level of oncology nurses who participate in a 4-week anxiety management course in comparison with oncology nurses who do not participate in an anxiety management course. To test Hypothesis 2, an analysis of covariance was computed to determine if the groups were different on the posttest trait anxiety scores after controlling for pretest state and trait anxiety scores. The  $F$  value was 0.00,  $df = 14$ , and  $p = 0.97$ . Thus, Hypothesis 2 failed to be rejected.

The present study was based on the assumption that the oncology setting is stressful. It was further assumed that nurses working in the oncology setting would have high levels of anxiety. The average state anxiety score for the experimental group (mean = 45.2) was high when compared with a norm group of female undergraduate students (Spielberger et al., 1970). A mean of 45.2 is equivalent to the 86th percentile. However, when the state anxiety scores of subjects in the control group were compared with the norm, only slight differences were found (control group mean = 37.2; norm group mean = 35).



The anxiety levels of the control group were not consistent with studies reported in the literature which indicated that high stress occupations will result in high anxiety levels in individuals in those work situations (Folta, 1965; Quint, 1967a, 1967b, 1969). Studies by Maloney (1982) and Newlin and Wellish (1978) reported that nurses working in high stress occupational settings will have low or only slightly increased anxiety levels. These statements seem to be supported by the results of the control group in the present study.

It is important to compare the trait anxiety level of oncology nurses to the norm group. Both the experimental group and the control group were similar to the norm group of Spielberger et al. (1970) on both the pretest and posttest. Therefore, these findings support those of Maloney (1982) and Newlin and Wellish (1978) which contended that nurses choose to work in these high stress areas and, therefore, are better suited for this work or else they learn to adapt to high stress areas and do not exhibit high anxiety levels when tested. Spielberger and Sarason (1982) proposed that nurses working in intensive care units in oncology settings essentially have lower state anxiety due to the fact that

they seek to work in these areas and are better trained to handle the problems.

Newlin and Wellish (1978) contended that nurses who feel committed to oncology nursing as a career, usually adapt through a maturing process characterized by several changes in the way the nurse relates to the patient.

The nurse adjusts her personal goals so her success as a nurse does not depend on the cure or survival of the patient. The nurse learns to increase her clinical knowledge and experience so that progression of the disease does not cause feelings of failure.

In the present study since the trait anxiety levels of both groups were in the mid-percentile range in comparison to the norm group, an explanation for the high state anxiety levels of the experimental group is necessary. It is possible that some environmental or personal factors were temporarily increasing the anxiety levels of these nurses. It is not possible, therefore, to contend that the reason the experimental group volunteered to take the anxiety management course was due to the high stress environment of the oncology setting.

Since the anxiety levels of the experimental group were high on the STAI state anxiety and decreased much

more than the control group following the anxiety management course. Due to the initial differences, a paired t-test was used to analyze the change in scores from the pretest to the posttest of both groups. Only the experimental group showed a significant change between pretest and posttest scores with  $p = 0.025$ .

### Conclusions and Implications

The assumption that all nurses who work in oncology nursing have high anxiety levels was not supported. The results of the present study revealed that nurses who indicated a need for an anxiety management course had a high anxiety level at the time of the study. Posttest state scores indicated that the experimental group's anxiety level decreased after the anxiety management course. The control group, which did not indicate a need for the anxiety management course, showed only a slight increase in pretest state anxiety scores in comparison with a norm group of female freshman college students in Spielberger et al.'s (1970) study. The nurses in the present study who indicated a need for the anxiety management course showed a decrease in test scores from pretest to posttest (45.2 mean score or 86th percentile to 33.3 mean score or 49th percentile range).

The findings of the present study which indicated that only one-half the sample had high anxiety levels may be explained by the theoretical framework of Spielberger and Diaz-Guerrero (1976). Many of the nurses tested in the present study seem to have adapted to the high stress levels of their occupational setting. Newlin and Wellish (1978) explained that nurses go through a maturing process that enables them to adapt. Spielberger and Diaz-Guerrero (1976) stated that high anxiety could be tolerated if the person learned to adapt.

Maloney (1982) further stated that because the nurse chooses to work in the oncology area, these nurses are trained and will feel more comfortable in this setting (therefore, not perceiving the situation as uncomfortable or threatening). Nurses who exhibit high anxiety levels could perceive some environmental threat or could have exhausted existing coping skills. Newlin and Wellish (1978) supported the fact that nurses can adapt and develop coping skills for working in these highly stressful areas and have only slightly increased anxiety levels when compared with the norm group. The nurses of the present study who experienced increased anxiety levels appeared to recognize these anxiety

levels and sought ways of decreasing their anxiety through participation in the anxiety management course.

Implications drawn from this study indicated an anxiety management course should be made available to help those nurses who show a need for the training. Further studies may be needed to examine what variables are associated with anxiety in the oncology nurse; i.e., variables which might have influenced elevation of the anxiety level of the nurse in the experimental group.

#### Recommendations for Further Study

The following recommendations for further study were made:

1. Retest after a 6-month period to measure anxiety level among both the experimental group and control group.
2. Do a survey study among oncology nurses to determine if they perceive an increased anxiety level and feel a need for an anxiety management course.
3. Use a large random sample of oncology nurses to establish a norm for anxiety level among oncology nurses.

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## APPENDIX A

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## Prospectus for Thesis Approval Form

This proposal for a thesis by Leona Hancock  
and entitled Anxiety Management for  
Oncology Nurses

has been successfully defended and approved by the members of the Thesis Committee.

This research is \_\_\_\_\_ is not X exempt from approval by the Human Subjects Review Committee. If the research is exempt, the reason for its exemption is: \_\_\_\_\_

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To protect individuals we have covered their signatures.

TEXAS WOMAN'S UNIVERSITY  
Box 23717, TWU Station  
Denton, Texas 76204

1810 Inwood Road  
Dallas Inwood Campus

HUMAN SUBJECTS REVIEW COMMITTEE

Name of Investigator: Leona Hughes Hancock Center: Dallas

Address: P.O. Box 2312 Date: 8/10/82

Wichita Falls, Texas 76307

Dear Ms. Hancock:

Your study entitled Anxiety Management for Oncology Nurses

has been reviewed by a committee of the Human Subjects 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 typically require that signatures indicating informed consent be obtained from all human subjects in your studies. These are to be filed with the Human Subjects Review Committee. Any exception to this requirement is noted below. Furthermore, according to DHEW regulations, another review by the Committee is required if your project changes.

Any special provisions pertaining to your study are noted below:

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.

Add to informed consent form: I UNDERSTAND THAT THE RETURN OF MY QUESTIONNAIRE CONSTITUTES MY INFORMED CONSENT TO ACT AS A SUBJECT IN THIS RESEARCH.



The filing of signatures of subjects with the Human Subjects  
Review Committee is not required.

       Other:

XX No special provisions apply.

Signature

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To protect individuals we have covered their signatures.





Texas Woman's University

P.O. Box 22479, Denton, Texas 76204 (817) 383-2302, Metro 434-1757, Tex-An 834-2133

THE GRADUATE SCHOOL

October 11, 1982

Mrs. Leona Hughes Hancock  
P. O. Box 2312  
Wichita Falls, TX 76307

Dear Mrs. Hancock:

Thank you for providing the materials necessary for the final approval of your prospectus in the Graduate Office. I am pleased to approve the prospectus, and I look forward to seeing the results of your study.

If I can be of further assistance, please let me know.

Sincerely yours,

ap

cc Dr. Rose Nieswiadomy  
Dr. Anne Gudmundsen

Dissertation/Theses sig

To protect individuals we have

## APPENDIX C

1. The following information is being provided to you for your information only. It is not intended to be used for any other purpose.

2. The information is being provided to you for your information only. It is not intended to be used for any other purpose.

3. The information is being provided to you for your information only. It is not intended to be used for any other purpose.

4. The information is being provided to you for your information only. It is not intended to be used for any other purpose.

5. The information is being provided to you for your information only. It is not intended to be used for any other purpose.

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7. The information is being provided to you for your information only. It is not intended to be used for any other purpose.

8. The information is being provided to you for your information only. It is not intended to be used for any other purpose.

9. The information is being provided to you for your information only. It is not intended to be used for any other purpose.

10. The information is being provided to you for your information only. It is not intended to be used for any other purpose.

TEXAS WOMAN'S UNIVERSITY  
COLLEGE OF NURSING

AGENCY PERMISSION FOR CONDUCTING STUDY\*

THE G. C. MORTON CANCER AND RESEARCH INSTITUTE

GRANTS TO LEONA HUGHES HANCOCK

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 MANAGEMENT FOR ONCOLOGY NURSES

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 \_\_\_\_\_

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To protect individuals we have covered their signatures.

10/10/1910

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**APPENDIX D**

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### Verbal Explanation to Subjects

My name is Leona Hancock. I am a registered nurse attending the graduate school at Texas Woman's University. I am conducting a study involving the anxiety level of nurses working in the oncology setting.

The Anxiety Management Course will be conducted following each shift once a week for 4 weeks. Each session will last for 1 hour. This course will be offered twice. At the beginning and end of this study, you will be asked to complete a questionnaire related to anxiety. You will also be asked to complete a questionnaire which contains the following demographic data: age, length of time in present position, length of time in oncology nursing, and licensure status in the State of Texas.

Your help in this study is strictly voluntary and your choice to participate (or not) will not affect your employment status in any way. Your anonymity will be protected as the pretest and posttest questionnaires will be coded. Each subject will be assigned a code number. Only the investigator will know the code number and name of the participant. This identity information will be destroyed at the end of the study.

Possible benefits from participation in this study may include lower anxiety level, strengthened coping skills, new problem solving techniques, increased understanding of patient and their families' reactions to stress, and decreased risk of stress related illnesses.

This investigator is experienced and trained in conducting group therapy and I will be happy to answer any questions you may have regarding the study. Your participation will be appreciated.

Thank you,

Leona Hancock



## APPENDIX E

## Consent Form

TEXAS WOMAN'S UNIVERSITY  
COLLEGE OF NURSING

(Form A -- Written presentation to subject)

Consent to Act as Subject for Research and Investigation:

The following information is to be read to or read by the subject. One copy of this form, signed and witnessed, must be given to each subject. A second copy must be retained by the investigator for filing with the Chairman of the Human Subjects Review Committee. A third copy may be made for the investigator's files.

1. I hereby authorize Leona Hancock, R.N., A.D.N.,  
B.S.N.  
(name of person who will perform investigation)

to perform the investigation(s):  
(Describe in detail)

To conduct an Anxiety Management Course in which I will be asked to participate. This course will consist of problem solving, relaxation techniques, and group discussion. This course will be conducted once a week for 4 weeks and each session will last for 1 hour.

At the beginning and conclusion of this study, I will complete a questionnaire related to anxiety.

I will also complete a questionnaire which contains the following demographic data: age, length of time in present position, length of time in oncology nursing, and licensure status in the state of Texas.

2. The procedure or investigation listed in Paragraph 1 has been explained to me by Leona Hancock.

3. (a) I understand that the procedures or investigations described in Paragraph 1 involve the following possible risks or discomforts:
- (1) Nurses may feel pressured to participate in group.
  - (2) Subjects involved could be inconvenienced by the time spent in the anxiety group.
  - (3) Material presented in group discussion could become unknown.
  - (4) Participants could be embarrassed by material presented by other members of the group.
  - (5) Confidential information from the test results could be released accidentally.

Rights and welfare will be protected as follows:

- (1) Subjects will be informed that participation is voluntary and employment status will not be affected. This investigation will present the potential benefit and risk at beginning of shift report on all three shifts 1 week prior to beginning the 4-week Anxiety Management Course. A memorandum from the Director of Nurses will be posted to announce the research project.
- (2) Anxiety Management Course will be made available at different times for nurses working all three shifts. The potential benefits will be explained fully.
- (3) Nurses assigned to the group will be requested prior to entering the Anxiety Management Course to keep material of group discussion confidential to protect the privacy of themselves and others.
- (4) This investigator will serve as a group leader. The investigator has experience as a group therapist.
- (5) The pretest and posttest questionnaire will be coded. Each subject will be assigned a code number. Only this investigator will know the code number and name of the participant. This identity information will be destroyed at the end of the study.

3. (b) I understand that the procedures and investigations described in Paragraph 1 have the following potential benefits to myself and/or others:
- (1) lower anxiety level
  - (2) strengthened coping skills
  - (3) new problem-solving techniques
  - (4) increased understanding of patient and their families' reaction to stress
  - (5) decreased risk of stress-related illnesses.

This investigator, who is experienced and trained in conducting group therapy will direct the Anxiety Management Group, and group discussion. The findings of this study, if significant, will be enlarged and contribute to all oncology nurses. The findings of this research will be made available to you through copies in the Office of Director of Nurses, at your institute, after the completion of the study.

- (c) I understand that -- No medical service or compensation is provided to subjects by the university as a result of injury from participation in research.
4. An offer to answer all of my questions regarding the study has been made. If alternative procedures are more advantageous to me, they have been explained. I understand that I may terminate my participation in the study at any time.

\_\_\_\_\_  
Subject's Signature

\_\_\_\_\_  
Date

The New Hampshire  
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 was the subject  
 of the paper:  
 "The New Hampshire  
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Chapter of 1906.

## APPENDIX F

## DEMOGRAPHIC DATA

Please complete the following by checking the appropriate space or filling in the appropriate information. This information will only be utilized to assess the criteria needed to describe the characteristics of the participants in this study. All information will be kept confidential and only group statistics will be reported.

1. Are you currently registered in the State of Texas?

\_\_\_\_\_ Yes                      \_\_\_\_\_ No

2. Age:

\_\_\_\_\_ 19-25

\_\_\_\_\_ 26-35

\_\_\_\_\_ 36-55

\_\_\_\_\_ over 55

3. Length of time in present position:

\_\_\_\_\_ 1 month-6 months

\_\_\_\_\_ 7 months-11 months

\_\_\_\_\_ 12 months-24 months

\_\_\_\_\_ over 24 months

4. Length of time in oncology:

\_\_\_\_\_ 1 month-6 months

\_\_\_\_\_ 7 months-11 months

\_\_\_\_\_ 12 months-24 months

\_\_\_\_\_ over 24 months

## APPENDIX G

State-Trait Anxiety Inventory

A sample of this copyrighted instrument may be  
obtained from the following company:

Consulting Psychologists Press

577 College Avenue

Palo Alto, CA. 94306



THESE ARE THE  
REMARKS MADE BY  
THESE PERSONS  
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APPENDIX H

THESE ARE THE  
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Bulletin Board Announcement

Dear Colleague:

I am a graduate student completing work on my master's degree in psychiatric nursing at Texas Woman's University.

I am interested in conducting a research project involving the anxiety level of nurses. The oncology setting has many stressful situations that you encounter each day. I feel that an Anxiety Management Course consisting of relaxation techniques, problem solving, and open group discussion could be beneficial to nurses employed in the oncology setting.

The Anxiety Management Course will be conducted following each shift once a week for 4 weeks. Each session will last for 1 hour. This course will be offered twice.

I will be available at the end of each shift (7-3, 3-11, and 11-7 on \_\_\_\_\_) to seek your participation and answer any questions about the study.

Your participation will be greatly appreciated. This course will be strictly voluntary and your employment status will not be affected if you choose not to participate.

This study, if significant, could be enlarged and continue to benefit all oncology nurses.

Yours truly,

Leona Hancock, R.N.

APPENDIX I

THE EFFECTIVE STRATEGIES FOR STRESS  
MANAGEMENT

Course Outline

Method of Presenting Anxiety Management Course: Lecture, Visual Aids, Demonstration, and Participation.

See investigator for detailed information of this course.

Week 1

1. Progressive relaxation (each week)
2. Open group discussion (each week)
3. How to define stress
4. Identify the physiological effects of stress on five systems in the body.

Week 2

1. Recognize the adverse effects of stress on energy level, health, and job performance.
2. Distinguish positive stressors from negative stressors.

Week 3

1. Identify five stressors in the professional work setting and five stressors in the personal life setting and the existing methods used for coping with these stressors.
2. Examine five effective strategies for the management of stress.

Week 4

1. Prepare a plan of action for managing special stressors in the professional work setting.
2. Problem solving and assertiveness training.

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