PARENTAL ANXIETY THROUGHOUT THEIR CHILD'S SURGERY

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CHAPTER I

INTRODUCTION

Most parents experience some degree of tension or anxiety when their child has surgery. In some instances this emotional condition creates a "crisis" situation for the parents. This crisis may develop rapidly for the parents in relation to threats of separation from their child. Apprehension can interfere with the parents' ability to lend support to the child. The goal of the health care team in these situations will be to alleviate, as much as possible, the conditions which may be harmful to the parent-child relationship.

The major source of parental anxiety is concern for the child's recovery. A second source of discomfort for parents is the hospital atmosphere. Other sources are ". . . subordination of parents, particularly the mother, to the nurses" (Scipien et al. 1975, p. 359), behavioral regression of the child, parental guilt for having allowed the child to become ill, concern for other members of the family at home, and the stress of additional financial responsibilities.

Anxiety may cause distortion in how an individual perceives his environment. An anxious person can misunderstand events and more importantly misinterpret verbal communication. The anxious person generally appears to be tense and irritable. These symptoms together can be detrimental in the relations between families and health care professionals in the hospital setting.

Two steps to consider in reducing anxiety are identification of the condition and finding the direct cause. A person exhibits anxiety in his own unique way. "The meaning of an event to a person determines what his reaction will be . . . ." (Mitchell and Witt 1973, p. 189). What is perceived as threatening is different with each person. After the causes have been identified, steps can be taken to allay these reactions.

In recent years it has been recognized that parents want to be more actively involved in the care of their hospitalized child. Care of the child by the parents can help to reduce anxiety in the child which, in turn, may lead to a reduction of the parents' anxiety. Health care professionals, as they increase their abilities to identify the symptoms of anxiety in parents, can work with parents to possibly prevent a crisis situation.

Statement of Problem

The problem of this study was the identification of parental anxiety states at two critical points during their child's day surgery.

Purposes

The purposes of this study were:

1. To measure parental state anxiety preoperatively
2. To measure parental state anxiety postoperatively
3. To compare the parental state anxiety levels preoperatively and postoperatively
4. To compare the state anxiety level of the mother with the state anxiety level of the father
5. To determine if the child's age was a factor in the parental state anxiety level

Background and Significance

Stress and crisis theory form the theoretical framework for this study. Literature and research by several authors were utilized. Selye (1974) was cited for his theory of stress. Aquilera and Messick (1978) were utilized for their intensive study of crisis and crisis intervention. Caplan's (1974) crisis theory and his views on preventive

mental health was also utilized. The writings by May (1977), Lindemann (1956), and Peplau (1952), along with other authors are used to support and strengthen the theories of the above mentioned.

"Stress is often considered the common foe in modern society. . . ." (Selye 1977, p. 35). The word "stress" means different things to different people. Everyone does not react in the same way while under stress, yet everyone experiences stress at some point in their life. "The stress-producing factors--technically called stressors--are different, yet they all elicit essentially the same biological stress response" (Selye 1974, p. 27). "Anxiety is how the individual relates to stress, accepts it, interprets it. Stress is a halfway station on the way to anxiety. Anxiety is how we handle stress" (May 1977, p. 113).

Anxiety is defined as a "feeling tone of anticipation, generally unpleasant" (Neylan 1962, p. 110). Each person will experience anxiety to some extent at some point in their lifetime. Anxiety occurs when one faces the unknown, the untried, a new situation, or a new role. Anxiety is a normal response to an unknown danger. When anxiety is kept within acceptable limits, it can be useful. Anxiety is experienced as discomfort, and it

helps the individual put all his resources together in meeting the problem (Aquilera and Messick 1978). If a solution is not found, the discomfort becomes more severe. The ability to understand what is happening disappears, and the concentration is on the discomfort itself (Peplau 1952).

Anxiety affects people in many ways. One important affect is that it decreases ". . . the individual's ability to perceive, to think, to judge, to decide, and to learn. It affects the total individual in body, mind, and spirit" (Travelbee 1973, p. 191). These manifestations of anxiety make effective communication difficult (Bright 1965). An important way of reducing these manifestations of anxiety or stress is thought to be through communication of accurate information. "Supplying information allows one to organize his thoughts, actions, and relationship to the event causing stress" (Skipper, Leonard, and Rhymes 1968, p. 497).

Wolfer and Visintainer (1975) identified that accurate information, given to both parents and children, about events, procedures, role expectation, etc., helped bring about less upset behavior in the child during hospitalization. This information enabled the child to cope more effectively and adjust easier to various stresses. This also resulted in less anxiety and greater satisfaction

for parents (Wolfer and Visintainer 1975). Lack of information about an impending surgical procedure creates anxiety. "Generally, the less an individual knows about an experience, the more he will supply in fantasy the knowledge he lacks in reality" (Travelbee 1973, p. 192).

In Lindemann's (1956) study of grief reactions, the author described certain inevitable events in the course of the life cycle as hazardous situations. These situations are marriage, the birth of a child, hospitalization, and similar events. In each of these situations stress might be experienced. Through several adaptive mechanisms either mastery of the situation or failure will be the outcome (Aquilera and Messick 1978).

> Although such situations create stress from all people who are exposed to them, they become crisis for those individuals who by personality, previous experience, or other factors in the present situation are especially vulnerable to this stress and whose emotional resources are taxed beyond their usual adaptive resources (Aquilera and Messick 1978, p. 5).

According to Caplan (1964) a man is constantly faced with a need to solve problems, in order to maintain equilibrium. When his problem is greater than his available coping skills, a crisis may occur (Aquilera and Messick 1978). Caplan (1974) stated that the outcome of a crisis is influenced by the nature of the stress and by the current ego strength of the individual.

> . . . but most important, by the quality of the emotional support and task oriented assistance provided by the social network within which that individual grapples with the crisis event (Caplan 1964, p. 4).

Several attempts to develop methods of alleviating children's anxiety during hospitalization and surgery have been reported in the literature (Jessner and Kaplan 1949, Prugh et al. 1953). The usual focus is on the child, with the parents receiving only secondary attention. "Yet, there is ample evidence that parents, especially mothers, may also suffer extreme anxiety while the child is undergoing hospitalization and surgery" (Skipper, Leonard, and Rhymes 1968, p. 496).

Authors generally agree that a major source of anxiety in the child is parental anxiety. Most parents are naturally protective. If their child is ill the parents will become anxious about him. Parents naturally feel guilt and anxiety about their child if they cannot protect him from pain and unhappiness (Mason 1965). Parents who are burdened with anxiety about the child's illness may affect their child's behavior by increasing his anxiety. Parental anxiety must be dealt with, not only for the parents' sake but also for the child's sake (Bright 1965).

"The admission of any child to the hospital represents a crisis in the life of both the child and his

parents" (Oremland and Oremland 1973, p. 53). The anxiety induced by this crisis can interfere with the parents' ability to give support to the child (Bright 1965). Hospitalization causes a child to move from familiar into unfamiliar surroundings. The child's usual patterns of behavior are not adequate to cope in a strange situation (Murray and Zentner 1975).

Godfrey (1955) hypothesized that separation of parents and child during hospitalization could be made less traumatic. This could be accomplished if a nurse, prepared to assist in separation, was in attendance during the visiting period and stayed with the child thirty minutes after the departure of the parents. Godfrey (1955) also found that the age of the child, the number of children in the hospital room, and the number of days the child had been hospitalized were factors which influenced the emotional adjustment for both the child and the parents.

A study of parental anxiety by Skipper, Leonard, and Rhymes (1968) denoted that a high percentage of mothers suffer anxiety because of their child's hospitalization and surgery. "Their relationship to their child at this time plays an important role in the child's social and psychological adjustment to the hospital experience" (Skipper, Leonard, and Rhymes 1968, p. 496). In general, these

authors contended that parents felt the stress to be greatest during the admission procedure and during surgery.

The purpose of Mahaffey's experimental study was "to investigate the possibility of improving the hospital care for children by involving the parents" (1965, p. 12). The author assumed that participation of parents in the care of their child is feasible because of their knowledge of their child's individuality. A mother must feel comfortable and secure in order for her to meet the child's needs. Parents, many times, are the ones left out of the child health care team. Yet, the parents know their child better than anyone else. Children require the affection of their mothers in order to tolerate their anxiety (Mahaffey 1965).

A study by Prugh et al. (1953) showed children that made the most successful adjustment to hospitalization were those with a satisfying relationship with their parents. How well the parents made the adaption themselves to the experience of the child's hospitalization and illness was also an influencing factor. Prugh et al. (1953) supported the investigations of Jessner and Kaplan (1949), who identified that children three years and younger are most susceptible to the circumstances surrounding hospital care.

Hospitalization and illness of children have been shown to affect the parents as well as the child. Theories of Selye (1974), Aquilera and Messick (1978), Caplan (1974), and others proposed that anxiety can and does occur in this critical situation. The coping mechanisms of the individual or family, the support system, the emotional and problem-solving abilities will affect whether the outcome of this potential "crisis" situation will be successful. Successful means no long-term detrimental effects of the surgery for either the child, parents, or family as a whole. The knowledge of parental anxiety by health care professionals is a step in helping to alleviate this condition. Knowledge of what is happening to their child will help parents cope with their own feelings and lend support to the child. All people working together will help make hospitalization a period of emotional growth for both parent and child.

Hypotheses

The following hypotheses were tested in this study:

1. There will be no significant difference in the amount of parental state anxiety exhibited during the child's preoperative and postoperative stages

2. There will be no significant difference in the amount of state anxiety exhibited by the mother compared to the amount of state anxiety exhibited by the father during the child's preoperative and postoperative stages

3. There will be no significant difference in the amount of state anxiety exhibited by the parents considering different age ranges of the child

Definition of Terms

For the purpose of this study, the following definitions were formulated.

1. Parents--persons who take parental responsibility for the child and identify on the demographic sheet that they are the parents of the child having surgery

2. State anxiety--"A complex, relatively unique emotional condition or reaction that may vary in intensity and fluctuates over time" (Speilberger 1972, p. 29)

3. Day surgery--includes surgeries such as hernia repair, circumcision, myringotomy, tonsillectomy, adenoidectomy, eye muscle defects, and dental surgery. Does not require overnight hospitalization of the child

4. Preoperative--includes the period of time after the child has gone to the surgery suite and the parents are in the Day Surgery waiting room

5. Postoperative--includes the period of time during which the child is admitted to the recovery room from surgery and the parents are informed that their child's surgery is finished

Limitations

For the purpose of this study, the following limitations were identified.

1. The amount of information given to parents regarding hospitalization and surgery of their child may vary

2. Parental attitudes and emotions concerning the child's impending surgery may vary

3. Any individual differences of the parents in experiencing anxiety

4. Parents' previous experience with hospitalization or surgery of their child or their children

5. Age, race, socioeconomic background, or educational level of the parents and child

6. Transference of information may occur because of the short amount of time between the two administrations of the questionnaire

Delimitations

For the purpose of this study, the following delimitations were controlled.

1. Two parents for each child were included in this study

2. Children of ages one month to twelve years of age were included in this study

3. The type of surgery was day surgery

4. Excluded were those parents of children who developed postoperative complications

5. Parents were able to read and write English

Assumptions

For the purposes of this study, it was assumed that:

1. Hospitalization and surgery represent a potentially anxiety-producing experience for both parents and children

2. The tool used in this study was reliable for this study and population

Summary

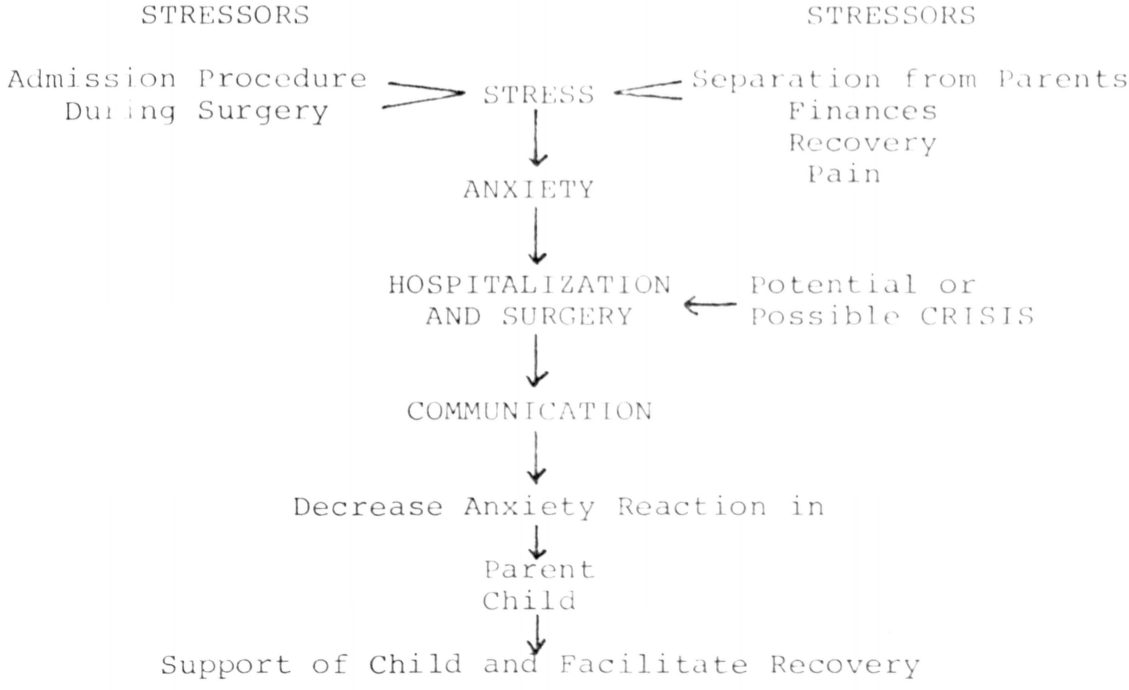
This chapter has outlined a brief description of the stress, anxiety, and possible crisis that parents may go through during their child's surgery. Stress, anxiety,

and how these topics relate to parents of children having surgery will be discussed in greater detail in chapter II through a review of the literature. Procedures for the collection and treatment of data in this study will be described in chapter III; the findings and their interpretation will be presented in chapter IV. Chapter V gives direction for future study based on findings from this investigation.

CHAPTER II

REVIEW OF LITERATURE

The following schematic drawing, which was developed by this investigator in conjunction with one of the thesis committee members, served as a guide to the development of the conceptual framework of parental state anxiety exhibited when their child has surgery. The arrows indicate the relationship of each topic discussed.



Stressors

In recent years, an extensive amount of literature has been published concerning the psychological upset experienced by hospitalized children when separated from their parents (Bowlby 1951). Little concern, however, has been shown for the anxiety that parents experience when they are separated from their child. Separation

> . . . takes on great importance when a child is hospitalized for it is a two-edged sword: on the one hand the child is coping with his separation anxiety and on the other hand the parents are coping with theirs(Issner 1972, p. 9).

Klinzing and Klinzing (1977) indicated that parental separation anxiety should be acknowledged because it can reduce the parents' ability to cope with the hospitalization of their child.

Prugh et al. (1953), Levy (1943), and Jessner and Kaplan (1949) described in their studies of hospitalized children, that the child of three years and under is the most susceptible to the circumstances surrounding hospital care. Separation, especially from the mother, is often interpreted by the child as punishment or desertion (Prugh et al. 1953). According to Bowlby (1969) no form of behavior is accompanied by stronger feeling than attachment behavior. "Attachment behavior has been defined as seeking and maintaining proximity to another individual" (Bowlby

1969, p. 194). After the age of three years, most children become increasingly able to feel secure in a strong place and proximity to mother becomes less urgent (Bowlby 1969). According to Prugh et al. (1953), separation anxiety appears to occur to some degree in children up through the latency period.

"The impact of hospitalization upon the child and family appears to carry with it many and varied complications" (Prugh et al. 1953, p. 101). When an individual family member becomes ill, every other member of the family suffers with him in some respect. The family should function as a whole system, and when part of that system changes, it requires the other parts in the system to make modifications to continue functioning (Mitchell and Witt 1973). "Parents' emotions, attitudes, fears, and concerns are easily transmitted to their children" (Smitherman 1979, p. 1423). If a parent is anxious and fearful about the welfare of his child, in his interaction with the child, his feelings may be communicated to the child (Skipper, Leonard, and Rhymes 1968). Mason (1965) stated that parents naturally feel anxiety and guilt for their child if they cannot protect him from pain.

> When a child is hospitalized, the parents and the child are stripped of the familiar routines of home and family life. The aspect of the parental role remaining, as seen by the parents, is that of

> protecting their child. Information, support and reassurance from the nurse at stressful peaks in the hospitalization can maximize normal emotional coping and facilitate the continuation of healthy family relationships (Gohsman and Yunck 1979, p. 35).

Hospitalization is usually a new and sometimes bewildering experience for a child. "The process of being admitted to the hospital creates the threat of the strange, the unknown, the possibility of surprise" (Gohsman and Yunck 1979, p. 32). "Before admission, it is important that the child be told why he or she is going to the hospital and what is likely to happen while he is there" (Petrillo and Sanger 1972, p. 70). "Knowing that he is going to the operating room invokes fear of the unknown, fear of separation and fear of bodily harm" (Gohsman and Yunck 1979, p. 35). Careful preparation helps the child understand and better accept necessary procedures associated with hospitalization and surgery (Petrillo and Sanger 1972). A child's perception of the hospital, his parents' understanding of the reason for hospitalization, and the number of times a child has been hospitalized were identified in a three-year study at U.C.L.A. as the critical variables in the development of hospitalization stresses (Johnston and Salazer 1979).

Parents need help understanding how preschoolers fear mutilation and death. They also need to understand

the magical thinking of the three-, four-, and five-year-old who believes that he can make things happen just by thinking. Children learn to trust the hospital staff if they see their parents trusting the staff. The parents must have sufficient knowledge themselves to trust the health care professionals in order to impart trust in their child. Parent participation in the child's care is also a way to help the child continue his trust in the parents (Gohsman and Yunck 1979).

A major source of parental anxiety complicating the feelings associated with hospitalization are financial strains because of medical care costs (Smitherman 1979). Many people today have health insurance which helps defer some of the expenses, but there are frequently costs that are not covered. Some of these additional costs might be parking, eating out, babysitters to care for the children at home, missing work (either one or both parents). Parents want their child to get the best care, but the fact remains that most cannot really afford it. Therefore, these additional financial responsibilities are potential stressors for the parents.

Stress

Stress has become an important theme in society, as man adapts to his constantly changing environment (Bell

1977). ". . . stimulation or challenge--some form of stress--is necessary for our very survival" (Anderson 1978, p. 26). Stress is defined as "any stimulus, real or imagined, which requires an individual to be or to do anything different from the way he is or the way he behaves at a given moment" (Anderson 1978, p. 18). The individual that faces stress must develop methods of coping in order to maintain his well-being (Selye 1977). Selye (1976) referred to "stress" as the response occurring within an organism as the result of a life event. Selye (1974) stated the word "stress" means different things to different people. Each person reacts to stress differently. Usually, when the word "stress" is used, one means excessive stress or distress. Not all stress is bad. To avoid stress one would have to do absolutely nothing at all. In fact, stress cannot be avoided completely (Selye 1974).

A certain amount of stress is needed to produce the necessary energy required to maintain life, to resist aggression, and adapt to change (Selye 1974). What is stressful for one person may not be stressful for another. Many factors determine what will "stress" a person (Selye 1974). The following events have been identified by Volicer (1973) to be experienced as stressed by hospitalized patients: (1) admission for surgery, (2) change

of amount of interaction with other people, (3) major change in sleeping and eating habits, (4) change in amount of physical activity, (5) being cared for by an unfamiliar physician, and (6) prior hospitalization. Previous reaction patterns and coping mechanisms are a few of the factors that will determine if the above stresses will actually become "stress".

"The stress producing factors--technically called stressors--are different, yet they all elicit essentially the same biological stress response" (Selye 1974, p. 27). Selye (1974) postulated that it is immaterial whether the stressor is pleasant or unpleasant. ". . . all that counts is the intensity of the demand for adjustment or adaption" (Selye 1974, p. 28). All stressors have some specific effects, but they cannot always elicit the same response. ". . . even the same stimulus will act differently in different individuals, depending upon the internal and external conditioning factors which determine how each will react" (Selye 1974, p. 45). Bryne and Thompson (1972) suggested four major factors which determine an individual's response to a stressor or which determine the manifestation of the stress state: (1) the nature of the stressors, (2) the number of stresses to be coped with simultaneously, (3) duration of exposure

to the stressor, and (4) past experiences with a comparable stressor.

Selye (1976) identified certain responses to stress and classified them as the General Adaptive Syndrome (G.A.S.). The G.A.S., through our various internal organs (endocrine glands and nervous system) helps us to adjust to the constant changes which occur in and around us (May 1977). Symptoms such as palpitation, tachycardia, diaphoresis, pallor, urinary frequency, vertigo, syncope, headache, chest pain, etc., are part of the G.A.S.

> . . . any kind of activity sets our stress mechanism in motion, though it will largely depend upon the accidental conditioning factors whether heart, kidney, GI tract, or brain will suffer most. In the body, as in a chain, the weakest link breaks down under stress although all parts are equally exposed (Selye 1974, p. 35).

The G.A.S. consists of three parts: (1) alarm reaction, (2) state of resistance, and (3) state of exhaustion. In the alarm reaction the body shows the changes characteristic of the first exposure to a stressor. Resistance ensures if continued exposure to the stressor is compatible with adaptation. During the last stage, the state of exhaustion, the individual dies if his adaptive energy is exhausted (Selye 1974). Complete freedom from tension is attainable only with death (Anderson 1978).

When an organism perceives a stressor, the alarm reaction occurs and the adrenal cortex discharges the cortical hormones. In the state of resistance, the adrenal cortex manufactures more corticoids and puts them into the blood. In the state of exhaustion, all of the adrenal cortex's capacity to produce corticoids to continue fighting the stressor is exhausted. The initial reaction, or alarm reaction, causes a drop in the general resistance of the organism to the stressor, and then, as the adrenal cortex begins to produce more corticoids, the level of resistance increases and maintains a high level until the state of exhaustion is reached (Selye 1976).

Bryne and Thompson (1972) suggested six categories that represent behavioral changes occurring in response to stress: (1) accentuated use of one mode or pattern of behavior, (2) alteration in the variety of activities undertaken, (3) behavior is less organized or at a lower level of behavioral organization, (4) demonstration of greater sensitivity to the environment, (5) presence of behavior reflecting alteration in usual physiologic activity, and (6) distortion of reality. These behavioral changes can appear singly or in different combinations. The type of stress and one's ability to adapt to the stress will contribute to the behavioral changes that take

place. The effects of stress may linger even after the stressor has been removed (Selye 1974).

Anxiety

> The importance of anxiety as a fundamental human emotion is widely recognized by behavioral and medical scientists, and many regard anxiety as a basic condition of human existence (Speilberger 1972, Preface xi).

Anxiety has been a central theme for many years in the literary works, art, and music as well as in psychiatry and psychology (Speilberger 1972). Freud (1935) came to regard anxiety as the fundamental problem in all neurotic symptom formation.

Anxiety is broadly defined as ". . . a subjective experience characterized by tension, restlessness and apprehension prompted by real or imaged threats to need gratification" (Travelbee 1973, p. 190). Basowitz et al. (1955) defined anxiety as "an unpleasant phenomenological quality associated with anxiety states consciously experienced" (p. 3). These thoughts are very similar to what Freud (1935) thought years earlier. Anxiety has emerged as a predominant thems of modern life (Speilberger 1972).

Each person will, to some extent during his life-time experience anxiety. What is perceived as threatening varies with each person and is dependent on several factors.

". . . the meaning of an event determines what the reaction will be" (Mitchell and Witt 1973, p. 158). The behavioral physiological manifestations will depend on the degree of anxiety experienced by the individual and the efficiency of his coping mechanisms (Travelbee 1973). A certain amount of anxiety may be useful by increasing learning abilities (Mitchell and Witt 1973). Peplau (1963) described four levels of anxiety: (1) mild--where perception and learning abilities increase, (2) moderate--where perception decreases as anxiety increases, (3) severe--where increased emotional and physical discomfort occurs, and (4) panic--where perception decreases and becomes distorted.

When a person is anxious about a situation the body responds with the "fight or flight reaction" (Mitchell and Witt 1973). During the "fight" response, a person becomes angry towards oneself, an object, or the situation causing the anxiety. The "flight" behavior is usually in the form of a psychological withdrawal--the person retreats from the threatening event--helpless or hopeless. The body responds the same whether the anxiety is caused by psychosocial or physiological reasons through this reaction (Mitchell and Witt 1973). "Behaviorally, the anxious person appears to be tense, and he is rather irritable. There may be indications of circular thinking" (Bright 1965, p. 33).

He tends to see only his viewpoint which can be detrimental in interpersonal relationships (Bright 1965).

Speilberger (1972) described anxiety as being one of two types--state or trait. State anxiety is

> . . . used to refer to the complex emotional reactions that are evoked in individuals who interpret specific situations as personally threatening. This type of anxiety is characterized by feelings of tension and apprehension and by heightened automatic nervous system activity (Speilberger 1972, p. 30).
>
> The central notion of the state-trait model is that persons high in A-Trait have a greater tendency to perceive situations as dangerous or threatening than persons who are low in A-Trait, and thus they are expected to respond to threatening situations with state anxiety elevations of greater intensity (Kendal 1978, p. 280).

If a person feels anxious and reports this, he is said to be in an anxiety state. Trait anxiety is "interpreted as measuring stable individual differences in a unitary, relatively permanent personality characteristic" (Speilberger, 1966, p. 13). A person with trait anxiety has a higher level of anxiety all the time and is not a reaction to any one specific event.

May (1977) defined anxiety as ". . . the apprehension cued off by a threat to some values that the individual holds essential to his existence as a personality" (p. 205). The author also proposed that "the capacity for anxiety is

not learned, but the quantities and forms of anxiety in a given individual are learned" (p. 218).

Hospitalization and Surgery

"Over the past three decades, many professionals and hospital administrations have sought to reduce the psychological impact of hospitalization on children" (Mason 1978, p. 153). Also, in recent years ample evidence reveals that parents, especially mothers, suffer anxiety while their child is undergoing hospitalization and surgery. Parents are normally anxious. "It would be abnormal if they showed no anxiety" (Pickett 1969, p. 536). Any operation is associated with some risk, however small (Pickett 1969). The parents' relationship to their child at this time plays an important role in the child's psychological adjustment to the hospital experience (Skipper, Leonard, and Rhymes 1968).

There are at least three reasons for supporting parental involvement in pediatric hospital care. The first is that parental care results in better physical care of the child (Hardgrove and Dawson 1972). Second, a parent may provide ego support during this period (Bothe and Galdston 1972). The child is most likely to turn to the mother during this time, and she has the greatest potential

for meeting his needs (Skipper, Leonard, and Rhymes 1968). "The object is not to eliminate stress, but to keep it within manageable limits by loaning an adult ego to the child when necessary" (Mason 1978, p. 154). The third reason for parent participation is to maintain and support the parent-child relationship by fostering trust (Hardgrove and Dawson 1972).

> It has been well established in both the psychological and psychiatric literature that the absence of the parent, or a suitable parent substitute, when a child is hospitalized, tends to be related to specific emotional difficulties during and following hospitalization (Seidl 1969, p. 41).

The parents' absence removes the child's feelings of security and may lead to despair and detachment (Freiburg 1972). A parent may comfort his child if he knows the facts and is allowed to stay with the child. "Parents may need coaching and support, but they are the child's best hope for making hospitalization a useful experience" (Hardgrove and Dawson 1972, p. 836).

One of the ways in which the negative effects of hospitalization of children can be reduced is to shorten the length of stay. ". . . an increasing number of operations are being performed on an outpatient, one-day, day-care, or day-surgery basis" (Mason 1978, p. 153). "It is becoming increasingly obvious that much of the surgery that is needed does not require that the patient

be hospitalized" (Wright 1978, p. 138). Herzfeld, in 1938, was successfully repairing hernias on infants and sending them home as a means of limiting mother-child separation (Mason 1978). The most frequent surgeries done on an outpatient basis are herniorrhaphy, tonsillectomy and adenoidectomy, dental repair, etc. (Mason 1978).

Many health care professionals and others support the advantages of one-day surgery (Davenport et al. 1972, Morse 1972, Oremland and Oremland 1973). There are reductions in cost, emotional disturbances, and numbers of complications (Mason 1978). The child-parent separation, particularly for the younger child, is an important factor in reducing psychological trauma (Oremland and Oremland 1973, Mason 1978). The second benefit is the reduced risk of infection and other complications (Mason 1978), and third is money savings. "The cost of the operative procedure is significantly reduced, and beds and nursing personnel are freed to serve patients with more complex problems" (Morse 1972, p. 283). Health care providers must work cooperatively with the families and not force the decision of outpatient surgery on them. For some families outpatient surgery may not be the best choice. "Parents must be willing and prepared to watch for complications that might arise" (Mason 1978, p. 156). Each case must

be decided on individually, but the choice is usually available for those that it will work for (Mason 1978).

Crisis

According to Lindemann (1956), certain inevitable events in the course of life can be described as hazardous situations, for example, bereavement, marriage, birth, hospitalization, etc. Not all persons facing the same hazardous situations react the same. A crisis situation for one person may not be a crisis situation for another (Murray and Zentner 1975).

> Crisis is any transient situation that necessitates reorganization of one's psychological structure and behavior, that causes a sudden alteration in the person's usual coping mechanisms (Murray and Zentner 1975, p. 207).

Aquilera and Messick (1978) stated that depending on the past experiences related to the immediate problems, some people will be more adept at finding solutions than others.

There are two major types of crisis--developmental (maturational) and situational (accidental) (Erikson 1965). Developmental crisis are transition points. Everyone experiences developmental crisis through the processes of biological, psychological, and social growth (Murray and Zentner 1975). "Puberty, courtship, marriage, pregnancy, and menopause are examples of developmental times of

increased susceptibility to crisis" (Brose 1979, p. 76). A situational crisis is an external event or situation, not necessarily a part of normal living (Murray and Zentner 1975). This event is often sudden or unexpected and unfortunate and may render the individual's coping abilities useless (Hall and Weaver 1974). This situation usually demands a change in behavior (Murray and Zentner 1975).

> Although such situational crises create stress for all people who are exposed to them, they become crises for those individuals who by personality, previous experience, or other factors in the present situation are especially vulnerable to this stress and whose emotional resources are taxed beyond their usual adaptive resources (Aquilera and Messick 1978, p. 5).

Developmental and situational crisis may occur simultaneously, as in the case of the adolescent facing hospitalization (Brose 1979).

Smith (1970) postulated that those individuals who experience stress as an inability on their part to control their environment are more likely to experience a crisis. A person in a crisis is at a turning point. Murray and Zentner (1975) identified that a person in crisis faces a problem that cannot be solved by using the coping mechanisms that have worked before. As a result the tension and anxiety increase and the person becomes less able to find a solution.

Murray and Zentner (1975) listed seven factors influencing the outcome of crisis. These factors are (1) the person's perception of the event--emphasizing that the perception rather than the actual event determines his behavior, (2) the physical and emotional status of the person, (3) the coping techniques or mechanisms and the level of personal maturity, (4) previous experiences with similar situations, (5) the objectively realistic aspects of the situation, (6) cultural influences, and (7) the availability and response of family and close friends or other helping resources. Caplan (1974) presented that

> . . . the individual responses during crisis which repeatedly demonstrate that the outcome is influenced not only by the nature and vicissitudes of the stress and by the current ego strength of the individual, but most important by the quality of the emotional support and task oriented assistance provided by the social network within which that individual grapples with the crisis event (p. 4).

> The time of crisis serves as a catalyst or opportunity for growth emotionally. This is a realignment of behavior that, if all goes well, will lead to a state of equilibrium or behavior that is more mature than the previous status. On the other hand, because of the stress involved and the felt threat to equilibrium, the person is also more vulnerable to regression and mental or physical illness. The outcome--either increased maturity or illness--depends on how the person handles the situation and on the help others give (Murray and Zentner 1975, p. 207).

Caplan (1964) described crisis as an "upset in the steady state" (p. 40). Crisis is self-limiting, lasting

from four to six weeks (Baird 1976). During this four- to six-weeks period there are four characteristic phases, as identified by Caplan (1974): Phase 1--there is an initial rise in tension as the impact of the stimulus calls forth habitual coping responses of homeostasis; Phase 2--increasing tension results from lack of success of the response and continuation of the stimulus; Phase 3--mobilization of resources--the problem may be solved; and Phase 4--if the problem continues and cannot be solved results in major disorganization of the person.

Crisis theory (Caplan 1974) postulated that various stresses provide pivotal points for mental health. ". . . whether a person emerges stronger or weaker as a result of crisis is not based so much on previous character makeup as on the kind of help received during the actual crisis" (Caplan 1964, p. 53). People also become suggestable and open to help during the actual crisis (Caplan 1964). ". . . with the onset of a crisis situation old memories of past crisis may be evoked. If maladaptive behavior was used before, the same behavior may be repeated in the face of the new crisis" (Brose 1979, p. 85). If the crisis or stressful life event is managed by effective coping, the individual learns new coping behaviors and strengthens his emotional and

problem-solving ability. "Encountering and resolving crisis is a normal process that each person faces many times during his life" (Murray and Zentner 1975, p. 208).

Communication

Lack of information regarding procedures in the hospital has been identified as a major cause of anxiety for parents of hospitalized children (Freiburg 1972).

> Supplying information allows the individual to organize his thoughts, actions, and relationships to the event. It provides a cognitive framework to appraise the potentially frightening and disturbing perceptions which one might actually experience (Skipper, Leonard, and Rhymes 1968, p. 497).

The control group of Skipper, Leonard, and Rhymes' (1968) study received no information about preoperative care, admission procedure, surgical procedure, or recovery and discharge procedure. The experimental group received information from a special nurse about all the areas mentioned above. The authors stated that in a stressful situation (such as surgery) it was more difficult for a mother to actively meet her child's needs. More than 60 percent of the mothers interviewed in this study remembered their anxiety to be intense on the day before the surgery. Stress was high for both groups during the child's surgery, but the degree of stress was lower among the experimental group (Skipper, Leonard, and Rhymes 1968).

> Both the control and the experimental group mothers were conscious of a much lower level of stress during the first two hours after the operation than either the day before the operation or during the operation (Skipper, Leonard, and Rhymes 1968, p. 500).

This feeling of fear may be communicated to the child and increase the stress on him (Skipper, Leonard, and Rhymes 1968).

Wolfer and Visintainer (1975) supported the idea of preparatory communication for hospitalized children and their parents. The basis for this study was the social interaction theory, the emotional contagion hypothesis (VanderVeer 1949, Campbell 1957), which holds that a parent's emotional state may be transmitted to a young child. Also, through clinical observation, Wolfer and Visintainer (1975) stated that emotionally-upset parents are often unable to help their child cope with the stress of hospitalization.

> Apparently, the treatment condition which consists of preparatory communication designed to import accurate information about events, procedures, sensations, and role expectations combined with supportive care in the form of encouragement, reassurance, and reinforcement from a single care-giver who attends to the child and the parents throughout the hospitalization, and especially at critical points, enables children to cope more effectively with and adjust to various stresses encountered. The treatment condition seems also to result in less anxiety and greater satisfaction for parents (Wolfer and Visintainer 1975, p. 254).

> It has been well demonstrated that children get well faster, and parents are relieved of greater anxiety when they are included in the process of taking their child through hospitalization and given a positive role to play (Oremland and Oremland 1973, p. 57).

Smitherman (1979) identified four needs of parents that may help in alleviating parents' fears and concerns when their child is hospitalized. The needs are as follows: (1) parents need to see that their child is receiving competent physical care, (2) parents need to understand the medical condition and treatment of their child, (3) parents need to feel important to their child and capable as parents, and (4) parents need a chance to discuss their feelings about their child's hospitalization.

Mahaffey (1965) undertook a study to investigate parental involvement in hospital care of children.

> The participation by parents in their child's care, within the limits of their capability, is practically feasible because of the parents' knowledge of their child's individuality (Mahaffey 1965, p. 12).

Children need their mother's affection in order to tolerate anxiety. Mahaffey (1965) also observed that a lack of understanding on the part of the hospital staff resulted in the parents' becoming unhappy towards the nursing staff. The author affirmed this parental distress could be reduced by an experimental nurse who would encourage

and listen to the parents' expressions of their feelings and beliefs concerning their child's hospitalization.

> The experimental nurse, besides carrying out the routine nursing admission procedure, tried to determine the parent's (mother's) needs and to provide her with the help and information that would meet her needs and enable her to cope with the immediate situation. The research nurse helped the mother by supplying needed information, answering her questions, or discussing anything which caused the mother to be confused or unhappy (Mahaffey 1965, p. 14).

In Mahaffey's (1965) study the "critical periods" identified by the parents were: (1) the time of admission, (2) 6:00 p.m. and 8:00 p.m. the evening of admission, (3) on the child's return from the recovery room, (4) 6:00 p.m. and 8:00 p.m. that evening after surgery, and (5) at the time of discharge because ". . . they were the times the writer believed to be the periods of greatest emotional tension for the mother because of what was happening to her child" (Mahaffey 1965, p. 14). The results supported the researcher's contention that the added information and attention contributed to a better hospital stay with a better and shorter recovery period (Mahaffey 1965).

Blake (1954) pointed out that how parents cope with their child's hospitalization depends on (1) the seriousness of the threat to their child, (2) the medical procedure involved, (3) parents' ego strengths, (4) the

parents' and child's previous experiences with illness or hospitalization, (5) cultural and religious beliefs, and (6) individual adaptive behavior.

> If the mother of a hospitalized child was able to manage her own anxiety, and be calm, confident, and relaxed, this might be communicated to the child in her interaction with him, alleviating the tension he feels (Skipper, Leonard, and Rhymes 1968, p. 497).

Young children cannot reason well so they rely on familiar faces to help them understand what is happening to them. The older child, through his capacity to relate to new adult figures, test reality, to verbalize, and to act out in play, can master his anxiety (Prugh et al. 1953). The parents at the child's side performing their usual parental duties, help the child through difficult times (Lee and Greene 1969).

All of the studies cited as supporting evidence that parents do exhibit anxiety deal only with the mother's reaction.

> Researchers frequently explain that their studies are mother centered because the father was not available for interview as a result of his work schedule or obligations outside the home (Phillips and Anzalone 1978, Preface viii).

The traditional father role in the United States is that of bread-winner. Through the years the father has spent more and more time away from home making it necessary for the mother to inherit some of his past transitional

functions, such as discipline (Phillips and Anzalone 1978).

> Since many men in our society have been raised in an atmosphere of antifathering, most people think that it is unmanly for a man to overtly and spontaneously express his emotions, break down in tears, and generally be open emotionally. A man . . . has had to repress his feelings of tenderness and gentleness, causing him to deemphasize his role as father, thus making fatherhood a social obligation and motherood a biological obligation (Phillips and Anzalone 1978, p. 5).
>
> . . . it is ironical that in reality the role of the father is tremendously important for the mental health of the family. Study after study indicates emotional disturbances in children can be traced to the detachment or lack of involvement of a father with his children (Robischon and Scott 1969, p. 52).

Mellish (1969) identified that "the well-organized family with both parents sharing responsibility for major decisions . . . provides a child who can cope well with the proposed hospital visit" (p. 547). Parents on their own, for whatever reason, are likely to show more anxiety and require more signs of support and encouragement from the health care personnel (Mellish 1969).

Summary

This study was concerned with parental anxiety exhibited during surgery of their child. Hospitalizzation clearly constitutes a crisis event for children and families (Volicer 1973).

> A parent deserves to know (in fact needs to know) the condition of the patient, why and how procedures are carried out, how the child can be expected to react to the procedure, what medications are being given, and why (Condon 1972, p. 1433).

Preparatory instructions that produce accurate expectations about the nature and sequence of events will give both the child and the parents a sense of control and capability (Wolfer and Visintainer 1975). Health care providers should encourage parents to give care to their sick child and assist in promoting trust in the parent-child relationship, thus, helping to decrease both parental and child anxiety.

CHAPTER III

PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

The collection of data for this study was done by the investigator. This study was designed to evaluate and compare anxiety levels of parents of children having day surgery. An attempt was made to measure the state anxiety level of parents while their child was in surgery and again after the child's surgery was completed. The review of literature indicated that anxiety of the child can be directly related to the anxiety of the parents. This study has aided in determining if anxiety states do exist in parents of children having day surgery.

Setting

The most common location of nonexperimental research is the natural setting in which the phenomena under study occurs (Abdellah and Levine 1965). The setting for this study was in the Day Surgery unit of a private, 117-bed non-profit children's hospital and medical facility located in a large metropolitan area of greater than one million persons. The hospital has five floors of

inpatient housing plus a large outpatient clinic area which serves local and regional clients.

Permission was obtained from the agency for the investigator to collect data in the Day Surgery unit in the following manner. First, a copy of the proposal was given to an administrative person to read. Second, an appointment was made with that person to discuss the proposal. Third, the proposal was read, at the administrator's request, by the Chief-of-Surgery. It was requested that the word "minor" be struck from the title. The change was made and a signed consent was obtained from the agency (appendix A).

The Day Surgery unit is located on the second floor of the hospital, along with the surgical suite, a special procedures lab, laboratory facilities, and several clinics. The Day Surgery program is designed to meet the needs of basically healthy children who require minor surgery such as hernia repair, circumcision, myringotomy, tonsillectomy, adenoidectomy, eye muscle defect repair, or dental surgery. Between ten to twenty surgeries are performed each day on an outpatient basis. The day before the scheduled surgery, the child checks into the day surgery area for a preoperative history, physical examination, and laboratory tests. At that time

the child is also psychologically prepared (according to age) by the day surgery nurses. The parents are given preoperative instructions at this time also. On the operative day, the child and his parents return to the Day Surgery waiting room approximately forty-five minutes prior to the scheduled surgery for last minute reassessment of the child's health status and the administration of the preoperative medication. The parents remain in the waiting room until their child is discharged for home. The child goes from surgery to the recovery room when the surgery is completed. Some member of the hospital staff informs the parents when their child goes to the recovery room. Patients having day surgery without complications stay approximately one hour in the recovery room, and they are then discharged to their parents with postoperative instructions for home.

The parents were introduced to the investigator and to the purposes and procedure for the study by the investigator in the Day Surgery waiting room while their child was in surgery. The investigator verbally explained the study to the parents, and they also received a written explanation (appendix B). Permission from the parents (appendix C) was obtained in the Day Surgery waiting room. The questionnaire, Multiple Affect Adjective

Check List, was administered to the parents by the investigator in the Day Surgery waiting room while their child was in surgery and again while their child was in the recovery room.

Population and Sample

All parents included in the study read and wrote English. All subjects were the parents of the child having surgery. Only one pediatric hospital was utilized. The children having surgery ranged in age from eleven months to eleven years of age. The children were having a surgical procedure that did not require overnight hospitalization. Data acquired from parents were excluded from the study if their child developed postoperative complications. This involved only one case.

The subjects were chosen by convenience sampling, which, although it is not a true random sample, is a common type of non-probability sampling and contains an element of randomness in the entry of subjects into the study (Abdellah and Levine 1965). Twenty pairs of parents were chosen for this study. The subject's participation was voluntary after the explanation of the study (appendix B) and the consent forms (appendix C) had been signed.

The Multiple Affect Adjective Check List was given to the subjects while their child was in surgery. The tool was administered again after some hospital personnel informed the subjects that their child was in the recovery room. There was at least one hour that lapsed between times that the subjects first filled out the checklist and when they completed the checklist the second time. Subjects were given careful directions by the investigator. An opportunity for the subjects to ask questions was given by the investigator before and during the administration of the tool. The subjects were then requested to complete the checklist.

A code number was assigned to each pair of subjects on a separate sheet of paper, and the same code number was written on the first test sheet. The same number was used for the second testing. Anonymity was assured by asking the subjects not to sign their name on the tool.

Tool

The Today Form of the Multiple Affect Adjective Check List was used to measure the state anxiety level of each parent subject at two intervals during their child's surgery. The Multiple Affect Adjective Check List was developed by Zuckerman and Lubin in 1965. This tool correlates with other anxiety scales such as the Taylor

Manifest Anxiety Scale and the Minnesota Multiphasic Personal Inventory and also has the added benefit of measuring state anxiety. Correlations of the Multiple Affect Adjective Check List and the Minnesota Multiphasic Personal Inventory range between .01 and .4 (Zuckerman and Lubin 1965).

This tool was used because of ease of administration and construct validity (Zuckerman and Lubin 1965). There are two forms of the test--The General and the Today form. The Today form was used because of the reliability in measuring fluctuations in anxiety. The tool is specifically designed to assess changes in anxiety and is sensitive to individual mood or situation reactions (Zuckerman and Lubin 1960). The validity of the Today form has been established through demonstrated sensitivity to such situations as exams, fear of childbirth, and horror picture stimuli. Validity was established by administering the instrument in conjunction with other measures of anxiety (Zuckerman and Lubin 1965).

The Multiple Affective Adjective Check List contains 132 adjectives alphabetically arranged in three columns. Twenty-one of these adjectives indicate the presence or absence of verbalizable anxiety. The checklist has been purposely made as simple as possible. No

adjectives were included that require more than an eighth-grade reading ability. "Adjectives which are of low frequency in the written language are excluded so that subjects of less than average intelligence can understand each item" (Zuckerman and Lubin 1965, p. 4). The subjects were instructed to check from the list of adjectives those which best described their feelings or mood at the present time.

The checklist provides a numerical score which gives quantitative data about the level of anxiety. In scoring the test, plus items are scored if the subject checks them, and minus items are scored if the subject omits them. The anxiety plus words, such as afraid, fearful, and tense, are checked more frequently by psychiatric patients rated high in anxiety than by normal patients rated low in anxiety. The anxiety minus words, such as calm, cheerful, and secure, are checked more frequently by normal subjects than by psychiatric patients (Zuckerman and Lubin 1965).

Normal anxiety is consistent with raw scores up to 7. Mild anxiety is consistent with raw scores of 8 to 11. Moderate anxiety is found in scores of 12 to 15, and severe anxiety in raw scores of 16 to 21 (Zuckerman and Lubin 1965).

Method of Data Collection

The investigator collected the data for this study. The investigator administered the Multiple Affect Adjective Check List to the subjects at two different times.

This study attempted the identification of anxiety in parents of children having day surgery at critical times during the child's surgical course. The children were outpatients in a private children's hospital outpatient setting. After the study was approved by the Human Rights Committee of Texas Woman's University (appendix D), permission was obtained from the children's hospital (appendix A) to use the Day Surgery unit. First, a copy of the proposal was given to an administrative person. Second, an appointment was made with the administrative person to discuss the proposal and last, a signed consent (appendix A) from the agency was obtained.

Each subject received an oral and a written explanation (appendix B) of the study from the investigator in the Day Surgery waiting room after their child had been taken to surgery. Subjects were given time before and during administration of the checklist to ask questions for further clarification. No questions were asked. If the subjects verbally agreed to participate in this study, the permission form (appendix C) was signed by each subject

and witnessed by another individual. The parents (subjects) were informed that they would be asked to complete the questionnaire two different times. The first was to be administered preoperatively. The second was to be administered postoperatively. Each subject was requested to answer the questionnaires independently. The subjects were informed that they could consent or refuse to participate or withdraw from the study at any time and this consent, refusal, or withdrawal would not affect the care of their child.

If the parents agreed to participate, demographic data (appendix E) were obtained. Questions were answered at that time and the Multiple Affect Adjective Check List was then administered by the investigator. The subjects were asked to check those words that best described their feelings or mood at that time. The checklist takes approximately five minutes to complete. When the subjects completed the first checklist, they were reminded that the questionnaire would be administered again after their child was admitted to the recovery room. This was at least one hour after the first administration of the tool. After the subjects completed the second list, they were told that the investigation was complete, and they were then asked if they had any further questions. Some

parents asked what would become of the results of the study. Their questions were answered by the investigator, and they were then thanked again for participating in the study.

Human Rights

The rights of the individuals were respected in this study in the following considerations.

1. An objective critique and approval of this study was made to consider the protection of each parent by the Human Rights Committee of Texas Woman's University (appendix D)

2. The parents had the option of volunteering or refusing to participate in the study after receiving a verbal as well as written explanation of the study from the investigator (appendix B). The written explanation described the problem to be investigated and the significance of the study. The investigator identified herself to the parents and her reason for attempting the study

3. Permission forms were signed by each participant who volunteered to participate in the study (appendix C)

4. Administrative personnel of the agency to be involved in the study also gave their written permission

for the study to be investigated in their facility (appendix A)

5. Each participant's right to privacy was respected by providing anonymity in acquisition of data and presentation of the study's results

6. Results of the study were made available to the participants per their request

Treatment of Data

State anxiety level scores were measured and analyzed to determine whether or not any significant relationship between preoperative and postoperative anxiety existed. Raw scores were computed with the anxiety key of the Multiple Affect Adjective Check List.

The study population (twenty pairs of parents) was divided by the sex of the parent, age of the child, type of surgery that the child was having, and if the subjects had had previous experience with surgery. These demographic data were categorized to further determine if these factors contributed to the state anxiety level.

For the purpose of analyzing the data, the anxiety scores were divided into eight groups and analyzed. The groups were as follows: (1) mothers' scores preoperative minus postoperative, (2) fathers' scores preoperative minus postoperative, (3) mothers' scores minus fathers'

scores preoperatively, (4) mothers' scores minus fathers' scores postoperatively, (5) mothers' scores of children less than or equal to three years of age preoperative minus postoperative, (6) mothers' scores of children greater than three years of age preoperative minus postoperative, (7) fathers' scores of children less than or equal to three years of age preoperative minus postoperative, and (8) fathers' scores of children greater than three years of age preoperative minus postoperative. The Wilcoxon Paired Signed-Rank Test was used for this study. The .05 level of significance was used to determine any differences in the categories.

Summary

The study was to determine whether or not there is a change in the level of anxiety experienced by parents of children having surgery preoperatively and postoperatively. The tool used was the Multiple Affect Adjective Check List developed by Zuckerman and Lubin in 1965 to measure state anxiety.

The hypotheses of this study were (1) there will be no significant difference in the amount of parental state anxiety exhibited during the child's preoperative and postoperative stages, (2) there will be no significant

difference in the amount of state anxiety exhibited by the mother compared to the amount of state anxiety exhibited by the father during the child's preoperative and postoperative stages, and (3) there will be no significant difference in the amount of state anxiety exhibited by the parents considering different age ranges of the child.

Twenty pairs of parents were used as subjects. The investigation took place in the Day Surgery unit at a children's hospital in a large metropolitan area in the Southwestern United States. The subjects were given the checklist at two critical points during their child's surgical course. The scores obtained from the anxiety tool were subjected to the Wilcoxon Paired Signed-Rank Test.

CHAPTER IV

ANALYSIS OF DATA

Chapter IV presents the results of the treatment and analysis of the data. To interpret the data collected during this study, each subject's raw scores were figured using the anxiety key of the Multiple Affect Adjective Check List. The Wilcoxon Matched Pairs Signed-Rank Test was used to determine if there was any significant differences between the variables.

Description of the Sample

Each pair of subjects was selected according to the criteria previously given in chapter III. A total of twenty pairs of subjects comprised the study group. The demographic data sheet (appendix E) completed for each subject requested information concerning the child's birthdate, type of surgery the child was undergoing, number of children in the family, the parents' previous experience with surgery of the child or other children in the family, and if they were the child's parent. Other demographic data were obtained from the front of the Multiple Affect Adjective Check List. All of the data obtained are presented in appendix F.

Table 1 presents the age distribution of the parents. The median age of the fathers was thirty-two years. The median age of the mothers was thirty-one years. Three of the mothers did not state their age.

TABLE 1

AGE DISTRIBUTION OF PARENT SUBJECTS

Age Interval In Years	Males		Females	
	Number	Percent	Number	Percent
No response	0	0	3	15
25 - 29	7	35	7	35
30 - 34	7	35	8	40
35 - 39	5	25	1	5
40 - 44	0	0	1	5
45 - 49	1	5	0	0
Total	20	100	20	100

N = 40.

Table 2 presents the educational level of the parents. All but one of the fathers that responded had at least a high school education. Eight had at least a college education or higher. Two mothers did not state their educational level. All others had at least a high school education and six had at least a college education.

TABLE 2

EDUCATIONAL LEVEL OF PARENT SUBJECTS

Level of Education	Males		Females	
	Number	Percent	Number	Percent
No response	1	5	2	10
Less than 12 years	1	5	0	0
High school graduate	7	35	9	45
Some college	3	15	3	15
College graduate	7	35	4	20
Graduate school	1	5	2	10
Total	20	100	20	100

N = 40.

The ages of the children having surgery ranged from eleven months to eleven years of age. These children were categorized into two groups for data analysis purposes: (1) less than and equal to three years of age and (2) greater than three years of age. The types of surgery represented were orchiopexy, myringotomy, eye muscle surgery, and removal of a skin lesion. One child had an orchiopexy and dental surgery the same day. This was the parents' first experience for surgery with their child in 30 percent of the cases surveyed. In 50 percent of the cases, the children in this sample had surgery

previously. The parents had previous experience with surgery of other children in the family in 40 percent of the cases surveyed. The data described above are listed in appendix F.

Presentation of Analysis

> When samples are obtained which are measured under similar conditions and controlled variables nonparametric methods present advantages which increase the generality of the findings (Siegel 1956, p. 160).

Nonparametric measures are used when the sample is small and normality cannot be assumed. They are also used for data measured on an ordinal scale (Polit and Hungler 1978).

The Wilcoxon Matched Pairs Signed-Rank Test was selected for analysis of the data. The .05 level of significance was chosen.

Hypothesis 1

The null hypothesis was: There will be no significant difference in the amount of parental state anxiety exhibited during the child's preoperative and postoperative stages. There were twenty mothers in the sample. The preoperative mean score was 9.7. The postoperative mean score was 5.0. Analysis of the data resulted in a significant difference (number of untied pairs is 17, Wilcoxon T = 1.5). The actual probability

was $p < .01$. Generally, the mothers were mildly anxious preoperatively and had normal anxiety postoperatively. There were twenty fathers in the sample. The preoperative mean score for fathers was 8.7. The postoperative mean score was 5.2. Analysis of data resulted in a significant difference (number of untied pairs is 18, Wilcoxon $T = 16.5$). The observed probability was $p < .01$. Generally the fathers were mildly anxious preoperatively and were normally anxious postoperatively. Therefore, the null hypothesis was rejected for both mothers and fathers in favor of the alternate hypothesis, that there is a difference in the amount of parental state anxiety exhibited preoperatively and postoperatively. The anxiety indicated are shown in table 3.

Hypothesis 2

The null hypothesis was: There will be no significant difference in the amount of state anxiety exhibited by the mother compared to the amount of state anxiety exhibited by the father during the preoperative and postoperative stages. The two periods were considered separately. The mean state anxiety score of the mother preoperatively was 8.1. The mean state anxiety score of the father was 10.3. The mean difference was -2.2.

TABLE 3

PARENTS' ANXIETY SCORES*

Subject	Mother's Scores		Father's Scores	
	Pre-operative	Post-operative	Pre-operative	Post-operative
1	12	2	7	3
2	7	7	7	5
3	16	10	9	9
4	15	3	8	6
5	9	1	9	8
6	16	14	11	10
7	6	1	10	0
8	13	3	5	0
9	10	4	9	7
10	15	10	13	7
11	10	10	9	10
12	14	4	11	7
13	5	2	4	6
14	3	3	9	2
15	4	1	7	7
16	14	10	7	8
17	6	1	10	0
18	6	1	8	9
19	6	1	10	0
20	9	10	11	10

N = 40.

*Anxiety Scale: 0-7 = Normal; 8-11 = Mild; 12-15 = Moderate; 16-21 = Severe.

Analysis of data resulted in a significant difference (number of untied pairs is 18, Wilcoxon T = 34.5). The observed probability was $p < .05$. The mean state anxiety score of the mother postoperatively was 5.7. The mean state anxiety score of the father postoperatively was 5. The mean difference was 0.7. Analysis of data supported no significant difference (number of untied pairs is 18, Wilcoxon T = 69.0). The probability was $p > .10$. One is unable to reject the null hypothesis completely. There was a significant difference in the amount of state anxiety of the mothers compared to the fathers' state anxiety preoperatively, but no significant difference was shown postoperatively.

Hypothesis 3

The null hypothesis was: There will be no significant difference in the amount of state anxiety exhibited by the parents considering different age ranges of the child. The analysis for this hypothesis was divided into four parts: (1) mothers of children less than or equal to three years of age, (2) mothers of children greater than three years of age, (3) fathers of children less than or equal to three years of age, and (4) fathers of children greater than three years. The subjects were

categorized into these groups because research supports the idea that children of three years and less are more susceptible to circumstances surrounding hospital care (Prugh et al. 1953).

The preoperative mean state anxiety score for mothers of children less than or equal to three years was 10.73. The postoperative score was 5.18. The mean difference was 5.545. Analysis of data reflected a significant difference (number of untied pairs is 10, Wilcoxon T = 1.0). The observed probability was $p < .01$. Mothers of the younger children showed mild anxiety preoperatively and normal anxiety postoperatively.

The mothers of children greater than three years had a preoperative anxiety mean score of 8.44. The postoperative mean score was 4.78. The mean difference was 3.67. Analysis of data indicated a significant difference (number of untied pairs is 7, Wilcoxon T = 0). The probabiility was $p < .02$. The mothers preoperatively showed mild anxiety on the average and postoperatively were back to normal.

Fathers of children less than or equal to three years of age had a mean score preoperatively of 9.0. The postoperative mean score was 6.55. The mean difference was 2.45. The analysis of data reflected a significant

difference (number of untied pairs is 9, Wilcoxon T = 0.0). The probability was $p < .01$. Mild anxiety was exhibited preoperatively and normal anxiety postoperatively for the fathers of the younger children.

The preoperative mean anxiety score for fathers of children greater than three years was 8.33. Postoperatively the mean score was 4.67. The mean difference was 3.67. Analysis of data indicated no significant difference (number of untied pairs is 9, Wilcoxon T = 10.0). The probability was $p < .10$.

The null hypothesis cannot be completely rejected. The mothers showed mild anxiety preoperatively and normal anxiety postoperatively regardless of their child's age. The fathers showed mild anxiety preoperatively and postoperatively if their child was in the younger age group, but there was no significant difference in the preoperative and postoperative anxiety in the fathers of the older children.

Summary

The subjects' scores were divided by sex, preoperative and postoperative state anxiety scores, and by the age of the child (less than or equal to three years and children over three years). The results of the

statistical analysis indicated that there is a significant difference in preoperative state anxiety scores. Preoperatively the scores were generally in the mildly anxious range and dropped to within normal range preoperatively. Fathers of children greater than three years of age did not appear as anxious postoperatively as did the mothers of this age group.

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Summary

The purposes of this study were (1) to measure parental state anxiety preoperatively, (2) to measure parental anxiety postoperatively, (3) to compare the parental state anxiety levels preoperatively and postoperatively, (4) to compare the state anxiety level of the mother with the state anxiety level of the father, and (5) to determine if the child's age was a factor in the parental state anxiety level. The tool used was the Multiple Affect Adjective Check List developed by Zuckerman and Lubin in 1965 to measure state anxiety. The tool was administered to parents at two critical times during their child's surgical course.

The hypotheses tested in this study were (1) there will be no significant difference in the amount of parental state anxiety exhibited during the child's preoperative and postoperative stages, (2) there will be no significant difference in the amount of state anxiety exhibited by the mother compared to the amount of state anxiety

exhibited by the father during the child's preoperative and postoperative stages, and (3) there will be no significant difference in the amount of state anxiety exhibited by the parents considering different age ranges of the child.

The subjects were parents of a child between the ages of eleven months and eleven years of age having day surgery. The study was conducted in the Day Surgery department of a private, non-profit children's hospital in a large metropolitan area in the Southwestern United States.

Conclusions

The parents' anxiety scores during their child's preoperative stage were significantly higher than the scores exhibited during the child's postoperative stage. Null hypothesis number one was rejected. Null hypothesis number two could not be rejected completely because the fathers' state anxiety compared to the mothers' state anxiety reflected no significant difference postoperatively. Null hypothesis number three could not be completely rejected because fathers of the children greater than three years of age indicated no significant difference between state anxiety preoperatively and postoperatively. This study indicated that for the twenty

pairs of parents surveyed mild anxiety generally was exhibited during the child's preoperative state and normal anxiety was exhibited during the child's postoperative stage. The findings of this study foster the idea that a child going to surgery can cause some degree of anxiety in the parent and that knowing the child is out of surgery and in the recovery room is usually enough reassurance to decrease the parent's anxiety level to within normal range.

Implications

The implications for this study are based upon concepts concerned with increased anxiety states of parents of children having day surgery. The implications are discussed by hypotheses findings:

1. There was a significant difference in the amount of parental state anxiety exhibited preoperatively and postoperatively. Preoperatively the anxiety measured in the mild anxiety range and in the normal range post-operatively. This follows the study of Skipper, Leonard, and Rhymes (1968) that anxiety is highest before and during the actual surgery. The implications are that mothers and fathers may be equally concerned about their child when their child is ill. Additional implications for this finding are that accurate information needs to be given

to the parents prior to surgery about what to expect from the time the child comes to the hospital until discharge. Information also needs to be given on how to care for the child at home after discharge. Reassurance needs to be given to the parents continuously by health care personnel to reduce anxiety about the situation at hand. Additional data gathered by the investigator by talking with the subjects after the study was completed indicated that diversional activities would be appreciated during the waiting period such as reading materials, coffee, and additional time from the nurses explaining the postoperative care of the child.

2. There was found to be a significant difference in the amount of state anxiety of the mothers as compared to the fathers' state anxiety preoperatively, but no significant difference was shown postoperatively. Preoperatively, the anxiety measured in the mild anxiety range and in the normal range postoperatively. The implications for this hypothesis is that health care personnel need to assess anxiety levels of parents so that appropriate intervention can be instigated. This study indicated that parents are less anxious after the surgery is over so the efforts of intervention should focus on

the period of time when the surgery is in progress. Further study in this area is indicated.

3. In hypothesis three, the mothers showed mild anxiety preoperatively and postoperatively regardless of their child's age. The fathers showed mild anxiety preoperatively and postoperatively if their child was in the younger age group. There was no significant difference in the preoperative and postoperative anxiety in the fathers of the older children. Fathers could be utilized to help the mothers reduce their anxiety by being more supportive during periods of greater anxiety--especially when the child having surgery is greater than three years old. The review of literature revealed no study reporting fathers' anxiety relating to their hospitalized child. This indicated that further study needs to be done in this area.

Recommendations

Based on the findings of this study and realizing that more understanding can be acquired from systematic investigation of patient situations, the following recommendations are made to replicate the study:

1. With a larger sample group
2. Controlling for ethnic group

3. Using only single parents who have no support from a significant other

4. Acquiring a larger sample group using several different Day Surgery settings

5. Using children having Day Surgery that requires postoperative hospitalization due to complications

6. Using children who are inpatients

7. Using a larger sample with each age group of children having Day Surgery

8. Using different critical periods

9. Using an additional anxiety tool

APPENDIX A

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING
DENTON, TEXAS 76204

DALLAS INWOOD CENTER
1810 INWOOD ROAD
DALLAS, TEXAS 75235

DALLAS PRESBYTERIAN CENTER
8194 WALNUT HILL LANE
DALLAS, TEXAS 75231

HOUSTON CENTER
1130 M.D. ANDERSON BLVD.
HOUSTON, TEXAS 77025

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE Children's Medical Center - Department of Day Surgery

GRANTS TO Vickie L. Keck, R.N.
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.

The problem of this study will be the identification of parental anxiety states at two critical points during their child's surgery.

The conditions mutually agreed upon are as follows:

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

Date: August 3, 1979

Vickie L. Keck
Signature of Student

Signature of Agency Personnel

Lemmie Wallace / Beth C Vachon
Signature of Faculty Advisor

* Fill out and sign three copies to be distributed as follows: Original - Student; First copy - agency; Second copy - TWU College of Nursing.

GP:GEN 13
07026074 cd

APPENDIX B

EXPLANATION TO PARENTS

Dear Parent,

My name is Vickie Keck, and I am a Registered Nurse and a graduate nursing student at Texas Woman's University. I am conducting a study regarding parents' feelings while their child is having surgery. This is in partial fulfillment of the requirements for the degree of Master of Science from Texas Woman's University College of Nursing.

Requirements for participation are that you be the parent of the child having surgery and your child be between the ages of one month and twelve years old.

Your participation in this study would be helpful in determining needs of parents in regard to their child's surgery. Parents' feelings are very important while their child is in the hospital for any reason. Parents want to be able to provide for their child while in the hospital. If parents' needs are not met, then they may be unable to give the needed support to their child. Hopefully, with this study we will gain new insight into how to better meet these needs.

You will be asked to fill out a demographic data form and to complete a questionnaire that will identify

your mood or feelings while your child is in surgery and again after your child goes to the recovery room (at least one hour between the two questionnaires). The questionnaire takes approximately five minutes to complete. You may ask questions regarding this study at any time.

Risks involved in participating in this study are minimum. An objective committee selected to determine that the study is not against your rights gives approval. The small possibility that data would be accidently lost is controlled by no name on the questionnaires. You might be embarrassed if there are improper releases of these data. Also, you may feel some discomfort while filling out the questionnaire.

Neither your name nor the name of your child will be used in any release of the research results. All data sheets will be given numbers in order to guarantee anonymity. The data results are screened by a committee to insure the proper release of the findings of this study.

Your participation is on a volunteer basis. You may withdraw from the study at any time. Your consent or refusal to participate will not affect the care of your child. Thank you for your assistance in this study. You

may obtain a copy of the results of this study by writing to the investigator at the address below.

Sincerely,

Vickie L. Keck, R.N.
Texas Woman's University
Parkland Campus College of Nursing
1810 Inwood Road
Dallas, Texas

APPENDIX C

Consent Form
TEXAS WOMAN'S UNIVERSITY
HUMAN RESEARCH REVIEW COMMITTEE

(Form A--Written presentation to subject)

Consent to Act as a Subject for Research and Investigation:

(The following information is to be read to or read by the subject):

1. I hereby authorize Vickie L. Keck
(Name of person(s) who will perform procedure(s) or investigation(s)

to perform the following procedure(s) or investigation(s): (Describe in detail)

(See attached Parents Letter)

2. The procedure or investigation listed in Paragraph 1 has been explained to me by Vickie L. Keck
(Name)

3. (a) I understand that the procedures or investigations described in Paragraph 1 involve the following possible risks or discomforts: (Describe in detail)

Loss of anonymity
Embarrassment from improper release of data
Discomfort from filling out questionnaire

(b) I understand that the procedures and investigations described in Paragraph 1 have the following potential benefits to myself and/or others:

(a) Knowledge of parental anxiety by health care professionals is the first step in helping to alleviate this condition
(b) Giving correct information to parents regarding their child's surgery.
(c) Helping parents lend support to their child, by helping them feel secure in this situation.

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

APPENDIX D

TEXAS WOMAN'S UNIVERSITY

Human Research Committee

Name of Investigator: Vickie L. Keck Center: Dallas

Address: 9737 Amberton Parkway, #2022 Date: 7/9/79

Dallas, Texas 75243

Dear Ms. Keck:

Your study entitled "Parental Anxiety During Their Child's Minor Day Surgery" 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,

Estelle D. Kurtz

Chairman, Human Research
Review Committee

at Dallas.

APPENDIX E

DEMOGRAPHIC DATA SHEET

Number_____

Date_____

Time_____

Are you the parents of this child?

Yes_____ No_____

Birthdate of the child having surgery_____

Type of surgery your child is having_____

Is this your first experience with surgery of this child?

Yes_____ No_____

Number of children in your family_____

Have any of your other children been hospitalized for surgery?

Yes_____ No_____

APPENDIX F

TABLE 4

INDIVIDUAL SUBJECTS' DEMOGRAPHIC DATA

	Parent Subject Pairs	Age of Parents	Educational Level of Parents (Years)	Number of Children in Family	Parents' First Experience with Surgery of This Child	Parents' Experience with Surgery of Other Children in Family	Parental Anxiety Score Preoperatively	Parental Anxiety Score Postoperatively	Age of Child	Type of Child's Surgery
1.	Female Male	25 32	12 16	2	No	No	12 7	2 3	3 years	Myringotomy with tubes
2	Female Male	36 38	15 14	2	Yes	No	7 7	7 5	3 years	Eye muscle
3	Female Male	36	15	4	No	Yes	16 9	10 9	3 years	Eye muscle
4	Female Male	28 30	17 17	1	Yes	No	15 8	3 6	2 years	Left orchiopexy
5	Female Male	26 27	12	2	No	No	9 9	1 8	2 years	Dental
6	Female Male	25	8	1	No	No	16 11	14 10	11 months	Eye muscle
7	Female Male	26 29	12 12	3	No	Yes	6 10	1 0	6 years	Myringotomy with tubes
8	Female Male	42 46	16 16	2	Yes	No	13 5	3 0	6 years	Myringotomy with tubes
9	Female Male	34 35	16 16	3	No	No	10 9	4 7	1 year	Eye muscle
10	Female Male	31	12 12	4	Yes	No	15 13	10 7	11 months	Myringotomy with tubes
11	Female Male	29 33	12 12	2	No	Yes	10 9	10 10	5 years	Eye muscle
12	Female Male	31 32	17 16	1	Yes	No	14 11	4 7	2 years	Eye muscle
13	Female Male	31 32	14 16	2	No	Yes	5 4	2 6	9 years	Dental & orchiopexy
14	Female Male	31 36	12 12	2	Yes	Yes	3 9	3 2	5 years	Eye muscle
15	Female Male	30 31	16 16	3	No	No	4 7	1 7	1 year	Eye muscle
16	Female Male	31 36	12 12	2	Yes	Yes	14 7	10 8	4 years	Cystoscopy
17	Female Male	26 29	12 12	3	Yes	Yes	6 10	1 0	5 years	Myringotomy with tubes
18	Female Male	31 33	15 16	4	Yes	No	4 8	3 9	8 years	Skin lesion removal
19	Female Male	26 29	12 12	3	Yes	Yes	6 10	1 0	3 years	Myringotomy with tubes
20	Female Male	31 30	16 14	1	No	No	9 11	10 10	2 years	Myringotomy with tubes

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