# NEEDS OF PARENTS SURROUNDING TRANSFER OF THEIR CHILD FROM THE INTENSIVE CARE UNIT

by

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#### CHAPTER I

#### INTRODUCTION

Pediatric intensive care units (PICU) have evolved in response to the critically ill child's needs for specialized medical and nursing care. Much attention has been paid to identifying the needs of children and families during time in the PICU. There is a significant amount of literature about humanization of the PICU, children's developmental problems after discharge from a PICU, sensory deprivation and overstimulation, and psychosocial stresses for family and child. However, there is very little information regarding the transfer process from the PICU to a general pediatric unit.

As an experienced PICU nurse, the researcher often has noticed that transferring a child from the critical care setting to the general pediatric unit caused a great deal of stress and anxiety for the family and consequently for the child. Even after brief PICU stays, transfer could be an anxiety-producing event.

The literature reveals a number of studies about the transfer of adults from an intensive care unit (ICU) to a general medical unit, particularly the transfer of coronary patients. Many of these studies have indicated that transfer may result in increased stress and this may increase the potential for condition deterioration (Minckley et al., 1979; Schwartz and Brennar, 1979; Toth, 1980).

If transfer from the PICU to a general pediatric unit is a stressful and anxiety-producing event, nurses should be aware of this fact. They should understand the needs of parents and children during the transfer process so that they can work with the family to help reduce this stress. If nurses are

to incorporate productive interventions into their transfer plans, the needs of parents and children during the transfer experience should be explored.

## Review of the Literature

A review of the literature related to transfer from a pediatric intensive care unit to a general pediatric unit can be organized into four categories:

Studies related to adult ICU transfer; studies of pediatric intensive care units; the impact of parents' perceptions on their child during hospitalization; and studies related to PICU transfers.

## Studies related to adult ICU transfer

Much has been written regarding transfer from an adult ICU to a general medical unit. A common theme throughout the literature indicates that transfer from an acute ICU setting to a less acute setting can be a source of great stress and anxiety for patients (Dellipiani, 1976; Minckley et al., 1979; Toth, 1980).

A few researchers have identified factors related to this stress and anxiety. These include disruption of relationships between patients and ICU personnel, fear of not being monitored closely, and fear of an unfamiliar setting (Klein, 1968; Minckley et al., 1979; Schwartz and Brennar, 1979).

Toth (1980) studied the effects of structured preparation for transfer on patient anxiety upon leaving the coronary care unit (CCU). She reported a significant decrease in the anxiety level of patients who had structured preparation in the form of patient teaching and open discussion regarding transfer. The structured pretransfer teaching included information about the typical medical course of post myocardial infarction patients, when the transfer would occur, how the decision for transfer was made, and information

about the unit and personnel on the unit where the patient would be transferred.

Minckley and her colleagues (1979), in their varied clinical experiences, noted stress as a major factor in the recovery of myocardial infarction patients. They identified transfer as one of the most stressful events for these patients. The Myocardial Infarction Stress-of-Transfer Inventory (MISTI) was developed to assess the level of stress related to transfer of post MI patients to a general medical unit. The inventory also measured the effectiveness of nursing intervention in the control or improvement of these patients' responses to transfer. These researchers found that when the patient was transferred without preparation from an environment he or she perceived as secure, a stress reaction occurred. When the patient was prepared for transfer using structured teaching aides, stress was less of a factor.

Cassem (1970), Klein (1968), Minckley et al (1979), and Roberts (1976) identified separation anxiety to be a factor in the stress of transfer. The ICU nurse may be valued as a life-saving person and the ICU for a life-saving environment. In a short time the patients and their families can form a strong attachment and a special dependence on the ICU and the personnel. The sense of security that this environment holds is disrupted by the transfer process (Minckley et al., 1979).

These varied studies related to adult transfer indicate that the transfer process can be a stressful event. Many of the researchers found that structured preparation could alleviate some of the stress and anxiety which patients were experiencing.

## Studies of Pediatric Intensive Care Units

The meaning of illness and hospitalization to children has been explored in the literature over the past thirty years. Changes in pediatric care have been made to humanize the hospital experience for children and are increasingly responsive to the child's developmental needs. More recently changes are also beginning to be seen in the critical care settings (Hendenkamp, 1980).

Miles and Carter (1983) studied the impact of hospitalization in the PICU on parents and assessed the stresses experienced by parents during this time. Their study suggested that parents experienced the most stress and anxiety due to the alteration in the parental role which is necessary to provide the needed care. Normal routines are altered, strangers interrupt the parent-child relationship to provide care, unfamiliar equipment is introduced, and painful or unpleasant treatments and procedures must be endured. These concepts are supported by the studies of others (Ingersoll, 1981; Stevens, 1981). Emotional care of the child and family poses a unique problem for the nurse, particularly in a critical care setting.

Miles and Carter's (1983) study also identified environmental stimuli, such as the intense surroundings of the PICU and the sight of their very ill child, to be major stressors. The care administered in the PICU is affected by the unique aspects of the environment. The massive array of sensory stimuli present in the PICU may be overwhelming to the child and the family and may cause a variety of responses to this frightening setting (Stevens, 1981).

The patients and the staff of the unit are also part of the general atmosphere. Most PICU patients have been admitted on an emergency basis which

adds to the urgency of the environment. In comparison to general pediatric units, the nurse to patient ratio is usually small. The staff members move quickly and the communications and actions reflect the seriousness and urgency of the health status of the patients in the unit (Hedenkamp, 1980; Miles and Carter, 1983; Stevens, 1981).

In the midst of the crisis precipitated by the child's critical illness, the family must relinquish control and begin to trust the staff. Parents often grow dependent on the PICU and personnel (Miles and Carter, 1983; Stevens, 1981). The nurse becomes a main resource person for the family in the daily care of their child and dependency can become a major issue both for parents and staff. Finding ways to decrease parents' dependency on the PICU staff in anticipation of transfer, while being sensitive to their needs, fears and strengths, is essential.

In summary, the work of Hedenkamp (1980), Ingersoll (1981), Miles and Carter (1983), and Stevens (1981) indicates that hospitalization, most specifically an admission to the PICU, can be a stressful experience for families and children. Emotional care of the family and the child is of particular importance when working in the intensive care setting.

The impact of parents' perceptions on their child during hospitalization.

Many researchers have studied the impact of parents' perceptions on the hospitalized child. This section will discuss a representative sample of these studies.

The concept of family is basic to working effectively with critically ill children. First, it is important to see the child as a member of a family unit. When the child is sick the whole family is affected (Hendenkamp, 1980).

Secondly, parents are a very important part of caring for a hospitalized child.

Frieberg (1972) studied parents' reaction to their child's hospitalization. She found that all parents in her study group felt a degree of uneasiness, fear, or anxiety while their child was hospitalized. It was felt that this fear or stress was frequently translated to the child. Young children are sensitive to anxiety in their parents and react with fear themselves.

Miles and Carter (1983), in their study, asked the question: Does parental perception of the ICU environment and the stress stimuli differ with the age of the child, type of admission, adequacy of preparation, and differing parental roles, i.e. do mothers perceive things differently than fathers? They studied this by using three instruments: "The Parental Stressor Scale: PICU;" the "State-Trait Anxiety Inventory;" and the "Review of the Life Experience Survey." They found that the parents' perceptions and their stress were affected most by the severity of their child's illness and the preparation of the parents by the staff as to what may be expected during time in PICU. Personal and situational variables did impact on stress levels. Miles and Carter hypothesized that by finding ways to treat or decrease parental stress and anxiety, the child's anxiety in turn be decreased.

Stevens (1981), in her observations of families with hospitalized children, stated:

The client is the "child-family" system in all pediatric settings. Nursing care can be rendered to the child through the family. The nature and severity of the child's illness can affect the parents greatly. Grief,

fear, shock, or guilt may alter the parents' usual ability to respond to the child. Since the child depends on his parents to interpret reality, their altered response may confuse the child. Supporting the parents directly supports the child (p. 624).

Skipper and Leonard's (1968) study supports Steven's (1981) hypothesis that children's stress in hospitals can be reduced indirectly by reducing the stress of the parent. Skipper and Leonard (1968) studied eighty children between the ages of three and nine years of age who were hospitalized for a tonsillectomy. The children in the experimental and control groups received the same procedure, tonsillectomy. In the experimental group, the mothers were encouraged to ask questions and emphasis was placed on communication of information and emotional support to these mothers. In contrast, the control group mothers did not receive special attention, support, or opportunity to discuss fears.

The children of the experimental group had lower blood pressures, lower pulses, recovered more quickly, and showed fewer emotional and psychological disturbances at home post-operatively than did the control group children (Skipper and Leonard, 1968).

These studies support the idea that children's stress in a hospital situation can be reduced indirectly by reducing the mothers' stress. Nursing should seek to discover and help alleviate the parents' fear and anxieties to avoid added stressors to a child already compromised by illness.

## PICU transfer literature

There is very little information in the literature about the transfer from the PICU to a general pediatric unit. Stevens (1981) in her paper

"Humanistic Nursing Care for the Critically Ill Child" spoke briefly about transfer and the stresses this may cause for the child and the family:

One might expect the child and family to be pleased with the news of transfer as this is usually evidence of the child's improving condition. However, transfer to the general pediatric unit (from the PICU) seems to be an anxiety producing event for parents and the child (p. 620).

Although acknowledging that this area has never been formally researched, Stevens (1981) identified possible fears and stressors of parents and children regarding transfer. These include: 1) separation anxiety, i.e., even during brief stays, the child and family may form a strong attachment to the PICU environment and staff; 2) misconception concerning transfer, i.e., often parents will feel that they have not been given all the facts regarding the reasons for transfer; 3) fear the child isn't well enough to warrant transfer; and 4) fear of unknown unit and nursing staff on that unit.

The subject of transfer from the PICU has not been formally researched.

Steven's (1981) paper supports the idea that transfer can be a stressful event for children and their families.

#### Summary

In summary, it seems that transfer anxiety and stress which has been documented in the adult literature may carry through to the pediatric population and their families. As documented by the studies that relate to parents' reactions to their child's hospitalization, addressing the needs of parents can indirectly help the child.

This study attempted to formally identify the needs of parents surrounding the transfer of their child from the PICU setting to a general pediatric unit. A study such as this may help develop nursing interventions

which are data-based and directed at an identified need of a special population.

## Conceptual Framework

The literature on intensive care settings consistently suggests that transfer to a general medical floor from an intensive care unit is likely to be a stressful event. Many researchers have studied stress in relationship to the family. Miles and Carter (1983) proposed a conceptual framework and model based on Selye's theory of stress and Roy's model of nursing practice. Common to both Roy and Selye's theories are two premises. The first premise is that measured stress is affected by the individual's perception of the power of the stressors. The second premise is that the stressors arise from factors within the individual and the environment (Reihl and Roy, 1980; Smith and Selye, 1979).

In Miles and Carter's (1983) conceptual framework, stressors that may affect parents of children in an intensive care unit are categorized as "situational", "personal", or "environmental".

Situational stressors correspond both with Roy's concept of "focal stimuli", stimuli that affect an individual adversely such as pain or fever (Roy, 1976), and with what Selye has labeled "internal stressors" (Selye, 1974). Miles and Carter (1982) have defined situational stressors as "threats experienced by having a seriously ill child, including uncertainty about prognosis, uncertainty about length of hospitalization, fear of unknown and frequent changes" (p. 56).

Personal stressors correspond with Roy's "residual stimuli", which she defines as the makeup or characteristic of the individual that are relevant to the situation but cannot be objectively measured (Roy, 1976). Personal

stressors also correspond with Selye's conditioning factors. Selye defines conditioning factors as the experience an individual brings to a situation. These personal stressors could include past hospitalization experiences, financial or family problems, and other current or recent life stresses, all of which could influence this hospitalization episode (Selye, 1974).

Environmental stressors correspond to Roy's "contextual stimuli", which are defined as all the measurable stimuli of a person's internal and external world that could influence the present situation (Roy, 1976). Selye's physical, psychological and environmental stressors are also related to environmental stressors. For the purpose of this study, environmental stressors were defined as stressors arising from the physical and psychological environment of the intensive care unit.

## Purpose of the Study

The purpose of this study was to identify the needs of parents surrounding the transfer of their child from the pediatric intensive care setting to a general pediatric unit. Through the course of the study stress was seen as a significant factor in how parents perceived their needs surrounding the transfer event. The questionnaire which was used to assess parents' perceptions included examples of situational, personal, and environmental stressors using the definitions from Miles and Carter's (1982) study. These three components, when arranged together, provided a focus and direction for this study in an attempt to answer the questions:

What are the parents' perceptions and concerns about the transfer of their child from a pediatric intensive care unit setting to a general pediatric unit?

- What are parents' perceived needs surrounding the transfer of their child?
- 3) Are parents' perceived needs being met?
- 4) Are parents perceptions of their needs affected by:
  - a) the age of their child;
  - b) previous experience as a patient in the hospital;
  - c) the length of stay in the PICU;
  - d) the PICU nurse's perceptions of the child's readiness for transfer;
  - e) the response of the nurses on the general pediatic unit to the transfer?

#### Operational definitions

For the purpose of this study, "parent" referred to the child's mother, father, or both parents who were involved with the child during his or her time in the PICU and at the time of transfer from the PICU to the general pediatric floor.

"Child" referred to any child who was a patient in the PICU for 24 hours or longer.

#### CHAPTER II

#### METHODOLOGY

## Description of the Study

The purpose of this study was to identify the needs of parents surrounding the transfer of their child from the pediatric intensive care setting to a general pediatric unit. The review of the literature revealed that transfer for adults may be a stressful event. As evidenced by a few studies, transfer may also be a stressful event for children and their families. By understanding the needs of parents, nurses may be able to develop nursing practice which is based more on valid data and less on intuition.

## Setting

The pediatric intensive care unit (PICU) at a health sciences university in the Pacific Northwest was the setting for this study. Total capacity of the unit is five acute care beds and three intermediate care beds. The unit accepts children from newborn to 16 years of age. The admissions for the period July 1981 to July 1982 totaled 517 patients.

Primary care nursing is practiced in the PICU by the staff of 24 nurses. One nurse on each eight-hour shift is assigned to give total care to one or more children, based upon the child's nursing acuity. There is an effort made to keep the nursing staff as consistent as possible during a child's stay in the PICU. The child's primary nurse will maintain contact with the family, providing an important link between the family and the PICU.

The PICU is staffed on the basis of acuity, using a patient classification system which has been devised to measure patient care needs in

terms of nursing contact hours. The patient classification rating is assigned by using an acuity tool. The acuity tool was devised by Administrative Strategies, a consulting firm in Thousand Oaks, California. The tool was finalized in 1982 after an in depth study of patient care needs and the nursing hours required to meet those needs. Each unit has its own acuity tool which is specific for the type of patients on that unit (see Appendix A). Acuity scores were as follows: A score of 1-4 is given to each patient at the beginning of each shift. A score of 1 indicates a requirement of minimal nursing care hours, in most cases not necessitating intensive care. A score of 2 indicates a requirement of a moderate number of patient care hours; some of these patients do not require intensive care. A score of 3 indicates a requirement of a large number of patient care hours, always necessitating intensive care. Finally, a score of 4 indicates a requirement for intense nursing care, occasionally necessitating more than one nurse to care for the patient.

On admission to the PICU a care plan is developed which is specific to the needs of each child and his or her family. An effort is made to meet psychosocial needs of the family while addressing physical needs of the child. Unfortunately, patient care requirements, staffing limitations and other unforeseen factors occasionally reduce the possibility of attaining a consistent plan.

The majority of children are transferred from the PICU to the infanttoddler unit or to the school age unit once intensive care is no longer
required. The decision to transfer a child is made by the nursing-medical
team. There is always an attempt made to plan the transfer. However, there
are times when a child is transferred without much discussion with the family.

This may occur if the family is not available to discuss the plan with the nursing-medical team or if a bed is urgently needed, in which case the least acute child will be transferred.

Prior to or at the time of transfer, the PICU nurse will make contact with the nurse who will assume the primary nursing role on the general pediatric unit. The two will discuss the child's course in the PICU and any special needs of the family or the child. A formal transfer plan which is consistently followed does not exist at this time. The medical staff which followed the patient in the PICU will continue to care for the child on the general pediatric unit to maintain some continuity.

#### Sample

The sample for this study consisted of 25 parents chosen by convenience over a six week period in the Spring of 1983 at the university hospital setting.

The families were approached by the patient's primary nurse in the PICU or the investigator just prior to the transfer of their child from the PICU to a general pediatric care unit. The purpose of the study was explained in a cover letter and it was emphasized that both parents and children would remain anonymous. All parents who were approached agreed to be part of the study. Thirty-two questionnaires were distributed; seven were not returned for unknown reasons. Eighteen mothers, three fathers, and four mother-father combinations participated in the study. There were no guardians involved in the study. Questions referring to race, marital status, educational background, religion, or financial status were not part of the questionnaire.

The children of the participating parents were admitted to the PICU from various places. Six children were admitted from the Emergency Room, five from

the Operating Room, nine children were transported to the hospital from other hospitals, and five were transferred from from one of two general pediatric units within the hospital. The ages of the children ranged from two days of age to twelve years. These children had a variety of diagnoses, including cardiac problems, dehydration, sepsis, respiratory problems, neurological problems, renal problems, need for general postoperative care, gastrointestinal problems, and poisoning. The length of time the child stayed in the PICU ranged from one day (24 hours) to two weeks; the mean length of stay was 2.8 days (SD=2.03). Nine of the children (36%) had previous experience as patients at this hospital. Twenty patients (80%) had an acuity score of 3 at the time of admission. Five patients (20%) had an acuity score of 4. At the time of transfer from the PICU, 14 (56%) had a score of 2 and 11 (44%) had a score of 1.

## Protection of Human Subjects

The proposal for this study was reviewed by the Human Research Committee at the Oregon Health Sciences University. Permission to approach the potential subjects in order to request their participation was obtained from the associate director of Maternal-Child Nursing and the head nurse in the PICU. The investigator explained the study in a printed letter to the participants. This letter emphasized that this study was voluntary and that all participants would remain anonymous (see Appendix B).

## Instrument Development

A review of the literature remealed no standardized instrument which would measure parents' perceptions of their needs surrounding the transfer of their child from an intensive care setting to a general pediatric unit.

Therefore, the investigator developed the "Parent Opinion Survey" (see Appendix C).

A questionnaire format developed by Molter (1976) and utilized by Turecki (1982) was modified and adapted for use in this study. Questions for the Parent Opinion Survey were derived from a literature review of parents' needs, children's needs, the transfer process, and the PICU environment. The relevance of each question was addressed and documented (see Appendix D).

The questionnaire consisted of six sections. Section one (questions 1-8) and section two (questions 9-20) were answered by using a six-point Likert scale which ranged from 1 (strongly disagree) to (strongly agree). Section one was designed to assess the feelings and concerns of parents surrounding the transfer of their child. An example of this section's questions is:

"Transfer indicates to me that my child's condition is improving." Section 2 was designed to assess the parents' perceived needs regarding transfer of their child. An example of this section's question is: "I needed to have warning about my child's transfer." When analyzing the data, a score of 1-3 was considered to be disagreement and a score of 4-6 was considered to be agreement.

The questions in section three were answered with a "yes" or "no". This is a factual scale which was designed to assess whether or not parents perceived that their needs were being met. An example of this section's question is: "I did have warning about the transfer of my child". Section 4 (question 33) was designed to assess parents' overall satisfaction level with the transfer process. This question, as with section one and two, was answered by using the six-point Likert scale.

Section 5 (questions 34-37) contained four open-ended questions designed to give parents the opportunity to freely relate their experiences in their own words. These questions included: What was the best part about your child's stay in the PICU? What was the worst part about your child's stay in the PICU?; What was the best part of the transfer process?; What was the worst part of the transfer process?

Section 6 (13 questions) was designed to provide background information about the patient and was directed to the PICU nurse. This information included the following: patient age, date of hospitalization, date of admission to the PICU to establish whether or not the patient had been a patient in the hospital prior to admission to the PICU; reason for admission to the PICU, medical diagnosis, place from where the patient was admitted, length of stay in PICU, reason for transfer from the PICU, acuity at the time of admission and acuity at the time of discharge, unit to which patient was transferred, nurses' perception of the floor's response to the transfer, and establishing previous hospital experience.

Content validity for this questionnaire was supported by both the literature review described above and by a review of the instrument by a doctorally-prepared psychometrician, a research methodologist, a doctorally-prepared Family Nursing researcher and three experienced PICU nurses.

A pilot study of three parents whose children were patients in the PICU was obtained. Revisions in the instrument were made by the investigator based on the recommendations of the reviewers and the results of the pilot study. For example, the questions were rearranged into subsections as described and open-ended questions were added.

Internal consistency for each of the three sections (subscales) of the questionnaire was examined using the results of the total study population of 25 parents. Using the Cronbach alpha formula, internal consistency for subscale 1 calculated to be 0.84791 (see Table 1). Item to subscale correlation ranged from 0.26426 (item 8) to 0.78349 (item 7) with an average of 0.44244. Item 8 of this subscale had a low item to subscale correlation and might be deleted in future studies. For subscale 2 the total reliality estimate was 0.76905 (see Table 2). The item to subscale correlations ranged from 0.26379 (item 18) to 0.71068 (item 13) with an average of 0.29956. The Cronbach alpha for subscale 3 was calculated to be 0.74545, with subscale correlations ranging from 0.29831 (item 29) to 0.61052 (item 28) (see Table 3). The average for subscale 3 was 0.21490. Item 27 had zero variance, and therefore was not included in subscale 3 calculations.

## Procedure

Data were collected over a six week period in Spring 1983. There was an inservice for all nurses in the PICU to explain the study and the questionnaire procedure. This gave staff the opportunity to clarify any questions they may have had regarding this study prior to data collection.

Questionnaires were labelled with a family number in the right upper-hand corner of the questionnaire and were matched to the number in the right upper-hand corner of the background information sheet. An introduction letter and self-addressed envelope were also attached to the questionnaire.

The nurses were asked to attach a questionnaire packet to each patient's bedside clipboard as they were admitted to the PICU. The questionnaire cover letter and envelope were given to the parent within the first hour after the transfer or as soon as the parent arrived on the new unit. The PICU nurse

completed the background information sheet and placed it in a large envelope which was available on the unit.

One parent or guardian for each child was asked to complete the questionnaire. After answering the questions the parents were instructed to seal the questionnaire in the envelope that was provided and return this to the nurses in the PICU. The envelopes were placed in the same large envelope that background information sheets were placed. The researcher gathered the questionnaires daily. The background sheets and the questionnaires were combined by using the family number. The researcher was available during the day to answer any questions the family or the PICU nurse may have had.

At the end of the six weeks all questionnaires were gathered and analyzed by the researcher. Results will be made available to the PICU staff and families who had indicated an interest. These families have left their names and addresses with the researcher so that results may be forwarded to them.

#### Data Analysis

For the purpose of this study, t-tests and Pearson R correlations were used to analyze the data. These statistical tests provide the opportunity to correlate background information with the questions that were asked in the questionnaire. Descriptive statistics and content analysis were used to evaluate the open-ended questions included in the questionnaire.

For the purpose of this study, the .05 level of significance was used to evaluate the statistical findings. Directional hypotheses were not predicted and thus cannot be concluded.

Table 1

Item to Subscale Correlations and Internal Consistancy Estimates

Subscale 1: Parents' Per	ceptions (Items 1-8)	
Items	Item to Subscale	Coefficient alpha if
	correlation	item deleted (total
	(x = 0.44244)	reliability = 0.84791)
<ol> <li>I have fears or anxieties about transfer</li> </ol>	0.58294	0.83305
2. I feel transfer indicates improvement	0.45386	0.84517
3. I feel nurses won't understand child's ne	0.78159 eeds	0.80161
4. I feel child will not be watched closely	0.75888	0.80775
<ol><li>I feel child is emotionally ready for transfer</li></ol>	0.57173 r	0.83559
<ol><li>I feel child is physically ready for transfer</li></ol>	0.73997	0.82280
7. I feel good about neunit	w 0.78349	0.81057
8. I feel close to PICU personnel	0.26426	0.86744

Table 2

Item to Subscale Correlations and Internal Consistency Estimates

Subscale 2	: Parents' Perceive	d Needs (Items 9-20)
Items	Item to Subscale	Coefficient alpha if
	correlation	item deleted (total
	(x = 0.29956)	reliability = 0.76905
Parents need:		
9. to talk with Dr. each day	0.27277	0.76901
<ol> <li>to have warning about transfer</li> </ol>	0.38010	0.75640
<pre>11. to see unit at     transfer</pre>	0.59113	0.72911
12. to meet nurse who wil care for child	0.55522	0.73696
13. to be told about transfer plans	0.71068	0.71865
14. to feel accepted by PICU personnel	0.59149	0.74024
15. to feel PICU personne cares about child	0.41766	0.75534
16. to know what will be done after transfer	0.53442	0.75113
<ol> <li>clear, understandable explanations</li> </ol>	0.26608	0.76723
18. to talk with same RN every day	0.26379	0.78743
19. reassurance of best possible care	+4251 =	0.75760
20. to know child is being watched closely	ng 0.53003	0.75803

Table 3

Item to Subscale Correlations and Internal Consistency Estimates

Subscale 3:	Were perceived need	s met? (Items 21-30)
Items	Item to Subscale	Coefficient alpha if
	correlation	item deleted (total
	(x=0.21490)	reliability = 0.74545
21. A doctor talked to me about transfer	0.29972	0.74031
22. I had warning about transfer	0.47061	0.71575
23. I saw the new unit before transfer	0.36000	0.73152
24. I met the new RN before transfer	0.35355	0.73174
25. I was told about transfer plans	0.47061	0.71575
26. I felt accepted by PICU personnel	0.39194	0.73560
27. I felt PICU cared about my child*	0.0000	0.0000
28. I felt I knew what would be done during transfer	0.61052	0.69358
<ol> <li>I was given clear, understandable explanations</li> </ol>	0.29831	0.73786
30. I talked with same nurse each day	0.29972	0.74031

<sup>\*</sup> zero variance

## CHAPTER 3

#### RESULTS AND DISCUSSION

## Results

The results of this study are discussed in this chapter. In addressing each research question the results will be presented in the following order:

- What are the parents' perceptions and concerns about the transfer of their child from a pediatric intensive care unit setting to a general pediatric unit?
- What are parents' perceived needs surrounding the transfer of their child?
- 3) Are parents' perceived needs being met?
- 4) Are parents' perceptions of their needs affected by
  - a) the ages of their child;
  - their child's previous experience as a patient in the hospital;
  - c) the length of the child's stay in the PICU;
  - d) the PICU nurses'perceptions of the child's readiness for transfer; and/or
  - e) the response of the nurses on the general pediatric unit to the child's transfer?

The results of the open-ended questions will be discussed last.

What are parents' perceptions and concerns surrounding the transfer of their child?

Questions 1-8 address parent: perceptions and concerns surrounding the transfer of their child from the PICU to the general pediatric floor (see Table 4). Sixteen (64%) of the parent participants had some fears or

anxieties about the transfer of their child although 23 (96%) felt that transfer indicated that their child was improving. Thirteen (52%) of the participants felt that the nurses on the general pediatric unit would understand their child's needs, although 15 (60%) were worried that their child would not be watched as closely on the general unit. Eighteen (72%) and 19 (76%) respectively felt their children were emotionally and physically ready for transfer. Twenty-two (88%) of the parents felt good about the unit to which their child was being transferred and 23 (92%) felt close to the PICU staff.

<u>Table 4: Subscale 1 - Parents' Percer</u> Item	Par Agr	Pa	Parental Disagreement			
	n	8		n	ફ	_
I have fears or anxietes     about transfer	16	64		9	36	
2. Transfer indicates improvement	23	96		2	8	
<ol> <li>Nurses won't understand child's needs</li> </ol>	13	52		12	48	
4. Child will not be watched closely	15	60		10	40	
<ol><li>Child is emotionally ready for transfer</li></ol>	18	72		7	28	
6. Child is physically ready for transfer	19	76		6	24	
7. I feel good about new unit	22	88		3	12	
8. I feel close to the PICU personnel	23	92		2	8	

# What are parents' perceived needs surrounding the transfer of their child?

Questions 9-20 measured parents perceived needs surrounding the transfer of their child (see Table 5). As may have been predicted by the review of the literature, most participants felt all the listed needs were important.

Twenty-five (100%) of the participants perceived a need for warning prior to the transfer, to feel accepted by the PICU personnel, to feel the PICU staff cared about their child, to know what would be done for their child after the transfer, clear explanations, reassurance that their child would receive the best care with the transfer and to know their child would be watched closely once they were on the general pediatric unit. Twenty-four (96%) perceived the need to talk to a physician about the transfer plan and to know about the transfer plans as they were being made. Twenty-three (92%) perceived the need to see the unit where their child was being transferred prior to the transfer and to meet the nurse who would be their child's primary nurse on the general unit prior to the transfer. Finally, 22 (88%) felt it was important to speak with the same RN every day.

# Are parents' perceived needs being met?

The previous twelve questions established that all the listed needs were important to parents. In establishing their needs it seems the real question is whether these needs are being met. This is best indicated by the figures in Table 6. It appears that overall needs were being met 64% of the time (Range 24% to 100%).

Table 5

Subscale 2: Parents' Perceived Needs Regarding the Transfer Process

Them Parental Agreement Parental Disagreement

-	Item		Agreement		Disagreement
Pa	rents need:				
9	. to talk with physician about transfer plans	24	96	1	4
10	. plenty of warning prior to transfer	25	100	0	0
11	. to see the unit to which their child is being transferred	23	92	2	8
12	. to meet the primary nurse on the general unit prior to transfer		92	2	8
13	. to know about transfer plans as they are being made	24	96	1	4
14	. to feel accepted by the PICU staff	25	100	0	0.
15	. to feel the PICU staff cared about their child	25	100	0	0
16	to know what would be done for their child after transfer	25	100	0	0
17	. clear and understandable explanations	25	100	0	0
18	. to speak with the same nurse each day	22	88	3	12
19	. reassurance that their child would receive the best care after transfer	25	100	0	0
20	to know that their child would be watched closely on the general unit	25	100	0	0

Table 6

	<u>le 6: Subscale 3 - Parents' Perceptio</u> Item		Yes		No		
		n	-8	<u>n</u>	-8		
1.	A doctor talked with me about transfer	14	56	11	44		
2.	I had warning about transfer	17	68	8	32		
3.	I saw the new unit before transfer	16	64	9	36		
24.	I met the new nurse before transfer	6	24	19	76		
25.	I was told about transfer plans	16	64	9	36		
26.	I felt accepted by PICU personnel	23	92	2	8		
27.	I felt PICU personnel cared about my child	24	96	1	4		
28.	I felt I knew what would be done after transfer	11	44	14	56		
29.	I was given clear, understandable explanations	21	84	4	16		
30.	I talked with the same nurse each day	11	44	14	56		
31.	I was reassured that my child would get best care	15	60	10	40		
32	I believe child is being watched	16	64	9	36		

Are parents' perceptions, needs, or whether the needs are being met, affected by: a) age of the child; b) previous experience as a patient in the hospital; c) the length of stay in the PICU; d) the nurse's perceptions of the child's readiness for transfer; and/or e) the response of the nurses on the general pediatric unit prior to the transfer?

Parents perceived needs were not related to the by age of their child, although there was a significant positive correlation between the age of their child and whether the parents' needs were perceived as met. Previous experience as a patient did not correlate with any of the parents' responses, although the length of time the child was in the PICU did relate to parents perceptions. Nurses' perceptions of the child's readiness for transfer did significantly relate to parents' perceptions. Finally, the response of the nurses on the general unit significantly correlated with whether or not parents needs were met. (see Table 7)

In correlating overall satisfaction with the previous criteria, previous hospital experience, whether or not parents needs were met and perceptions of their needs correlated with the overall satisfaction score. Also, in correlating parents' perceptions with whether their needs were met, it was found that whether or not needs are met is significantly correlated with parents' own perceptions.

## Open ended questions

In response to the question "What was the best part of your child's stay in the PICU?", the majority (92%) of parents wrote that the nursing skill and expertise combined with the special caring that the nurses gave was the best part of their child's stay in the PICU. In response to the question, "What was the worst part of your child's stay in the PICU?", 14 (56%) spoke of the rigid

visiting hours and 6 (24%) spoke of the overwhelming noise and urgency of the environment. Five (20%) of the respondents did not answer.

In responding to questions about the transfer process there were a variety of answers. Eight parents (32%) wrote that being able to be with their child during the transfer was helpful as was having the PICU nurse assist in the actual move. Seven parents (28%) commented on the difficulty they felt when arriving on the general pediatric floor and not having the new nurse available to meet them. Five (20%) parents commented specifically that it was stressful to not have a heart monitor on the new floor. Five (20%) felt that not being with their child at the time of transfer was the worst part. Four (16%) did not answer the question.

Table 7

Pearson Correlation Coefficients

<u>n</u>=25

1 = age of child	i	5 = previous	experiences as
2 = length of st	tay in PICU	patient	at this hospital
3 = nurse's perc	ception of child's	6 = percepti	ons of the
readiness fo	or transfer	transfer	process
4 = general unit	t's response to	7 = perceive	d needs
transfer		8 = whether	needs were met
1 2	3 4	5 6	7 8
-0.2466	-0.0014 0.8894	0.2718 0.1109	-0.0722 0.4543
1 p=0.117	p=0.477 p=0.000**	p=0.094 p=0.299	p=0.366 p=0.011*
	0.4610 -0.2031	0.4969 -0.4836	-0.0697 -0.2395
2	p=0.010* p=0.165	p=0.006* p=0.007*	p=0.370 p=0.124
	0.1612	-0.3425 0.3798	0.2343 -0.0787
3	p=0.221	p=0.047* p=0.031*	p=0.130 p=0.354
		0.3056 0.1955	0.0433 0.5776
4		p=0069 p=0.174	p=0.419 p=0.001**
		0.6459	-0.1131 0.6714
5		p=0.000	p=0.295 p=0.000**
			-0.2478 0.5911
6			p=0.116 p=0.001**
			0.1002
7			p=0.317
8			-
* p < .05;	** p < .001		

## Discussion

The results of this study were examined and compared to the studies, concerns and findings of others who have addressed the issues of patient transfer from an ICU setting, hospitalization of children, and, most specifically, transfer of children from an ICU setting. The discussion of the results will be presented by addressing the research question in appropriate groupings.

What are parents' perceptions and concerns about the transfer of their child from a pediatric ICU setting to a general pediatric unit? and What are parents' perceived needs surrounding the transfer of their child?

In the literature discussing the transfer of adults from an ICU setting (Dellipiani, 1976; Minckley, et al 1979; Toth, 1980), and in the literature discussing pediatric transfer (Hedenkamp, 1980; Miles and Carter, 1983; Stevens, 1981), it was suggested that transfer could be a stressful and anxiety provoking event. In this study 16 (64%) of the parent participants reported fear or anxieties regarding the transfer process.

The adult and pediatric literature identified common factors that could be responsible for creating the stress that families and/or patients may experience. These factors included: separation and disruption of nursepatient relationship. It was found in these previous studies that the patient/family became quite close and dependent on the PICU staff. All participants felt a need to be accepted by the nursing staff and to feel that the PICU staff cared about their child. This study supported this concept. Twenty-three (92%) of the participants indicated that they felt close to the PICU staff.

Dependency of families and patients appeared to be a consistent issue throughout the literature. It would seem that this dependency may be fostered by the nursing staff. The nurses can seem like the only link with stability and control. Families and patients are vulnerable and needy and the nurses are in a position to step in and take control.

The dependency issue can be both positive and negative. It is positive in that nurses ability to organize or control what may seem to be a chaotic and uncontrollable situation can help a family and patient move through this stressful time. The negative aspect revolves around fostering that dependence. Families and patients may become too dependent and consequently be unable to move to the next phase which in this study is represented by transfer out of the ICU.

The study of Minckley et al. (1979) found that stress and anxiety could also be caused by fear of leaving the security of the monitor and ICU personnel to move to an unfamiliar unit with unfamiliar personnel. Stevens (1981), in her observations of the hospitalized child in an ICU setting, supported the idea that separation from the ICU, fear of the unknown, (i.e. new unit, new nurses), fear that the child was not well enough for transfer and feelings of being relatively uninformed created family stress, and in turn, could affect the child.

This study supports both Minckley et al.'s (1979) adult study and the concerns of Stevens (1981). Fifteen (60%) of the parents worried that their child would not be watched as closely on the general unit and 23 (92%) felt the need to tour the general unit and to meet the new nurse prior to transfer. The need to meet the new nurse prior to transfer was perceived as met by only 6 (24%) participants. All participants needed reassurance that their child

would receive the best possible care and would be watched closely after transfer. All participants also identified the need to speak with a physician and have clear explanantions about the child's condition and transfer plans prior to the transfer.

# Are parents' perceived needs being met?

Minckley, et al. (1979) and Miles and Carter (1983) in their respective studies found that the feelings of stress and anxiety that the transfer process may cause could be relieved by addressing the patients'and/or families' needs. The PICU where the present study was conducted should be commended in that the majority of all parent participants felt their needs were being met (Table 5) and their overall satisfaction level which was found to be affected by whether or not needs were met was positive which would indicate that the nurses care and style may help to decrease parents stress and anxiety.

Care plans can be a useful tool to identify specific patient or family needs. In the ICU setting, care plans frequently are physiologically based and don't give much attention to the psychosocial needs of patients and families. It is natural that in the urgency of the technical and intense ICU the physiologic needs of patients are met first, but this cannot negate the other needs that may exist. This is a major reason that standard care plans that are prewritten should be carefully individualized to each patient.

Are parents' perceived needs affected by: a) the age of their child; b)

Previous experience as a patient in the hospital; c) the length of stay in the

PICU; d) the PICU nurse and parents' perception of the child's readiness for

transfer; and/or e) the response of the nurses on the general pediatric unit to the transfer?

Miles and Carter (1983), in their study of "Parental Stressors and the PICU," asked the question: Does parental perception of the ICU environment and the stress stimuli differ with the age of the child? They found that the parents' perceptions and their stress were not significantly affected by the child's age. The results of this study support Miles and Carter's (1983) finding. Age did not significantly affect parents' perceived needs. It is surprising that age was not a significant factor. It would seem that parents of a younger child, especially an infant, would have more perceived needs, anxieties and fears. From this data it would seem that the needs, anxieties and fears are not changed by age, parents have concerns that are manifested in this way regardless of their child's age.

This study also found that length of stay in the PICU, previous hospital experience, parents, PICU nurses perceptions of the childs readiness and the response of the nurses on the general pediatric unit significantly affected parents perceptions. Whether parents' perceptions were affected positively or negatively was not predicted prior to this study, although it can be hypothesized at this point that previous hospital experience would remove some of the stress of the unknown and be perceived as a positive factor. If the parents and nurses felt the patient was ready for transfer, again, the perceptions may be positive. Length of stay could be variable although it could be hypothesized that a shorter stay would indicate that the child was improving quicker than a long stay and would be perceived as a positive factor.

Stevens (1981) felt that transfer, although stressful and anxiety producing, could also have a positive impact on patients and families as it usually is an indication that the patient's condition was improving. In addition, if the patient/family was emotionally as well as physically ready to leave the ICU, the process might be less stressful. In this study it was found that 24 (96%) of the participants felt that transfer indicated that their child's condition was improving and the majority felt their child was emotionally (72%) and physically (76%) ready to be transferred to the general pediatric unit. So, it would seem that these factors would have a positive impact on parents' perceptions and needs.

#### CHAPTER IV

## LIMITATIONS, CONCLUSIONS AND IMPLICATIONS

#### Limitations

This study had some inherent limitations. The instrument developed for this study may not have been as clear and understandable to the participants as the investigator would have liked. There were disadvantages to using a convenience sample in that generalizability of findings is limited to the population studied. Further studies with other samples would be of benefit.

# Conclusions and Implications

As supported in the literature and as can be concluded from the results of this study, parents do have concerns, fears, and anxieties related to their childs transfer from the Pediatric Intensive Care Unit to the general pediatric unit. These stressors may be alleviated in part by identifying specific needs of parents and an attempt made to meet these needs.

Implications for nursing include investigation of the Parent's Opinion Survey as a clinical instrument to identify needs of parents prior to transfer. Identifying needs may help nurses develop care plans that are sensitive to parents' concerns and open channels of communication between nursing and families. Care plans should be written in anticipation of transfer and individualized to each patient and family situation. A care plan such as this could include involvement of parents in their child's care when it is appropriate. This could decrease some of the dependency that parents feel and in turn psychologically ready them for transfer. As noted in the open-ended questions, restricted visiting hours create stress for families. The visiting policy should be investigated and changes should reflect parents'

need to be with their child as much time as possible. Another major implication for nursing is for PICU nurses to introduce families to the new unit and new primary nurse of that unit prior to the transfer. This may not always be possible, but integration of this procedure into the routine transfer could certainly benefit families.

It seems that by finding means of decreasing family stress through nursing interventions, benefits will be realized by the parent, the family and the nurses. This is an area that warrants further investigation. Future studies should examine communication strategies between patients, families and nurses, both in the PICU and on the general pediatric unit. In addition, future studies should further explore the issues of dependency between the staff, the patient and their families. Studies such as these may help develop nursing intervention which is data-based and directed at an identified need of a special population.

In addition, the questionnaire developed for this study could be used in future work to obtain further information both about parents' needs and the instrument itself.

# Summary

This descriptive study identified the needs of 25 parents at a university hospital in the Pacific Northwest surrounding the transfer of their child from the pediatric intensive care unit (PICU) to a general pediatric unit.

Parents were asked to complete "The Parent's Opinion Survey," an instrument which was developed by the researcher and organized into three subscales which assessed: 1) parents' perceptions about the transfer process, 2) parents' perceived needs regarding the transfer process, and 3) parents' perceptions of whether or not their needs were being met. Reliability

coefficients using the Chronbach Alpha formula are as follows: Subscale 1, 0.84791, subscale 2, 0.76905, subscale 3, 0.74545. Background information regarding patient age, length of stay in the PICU, previous hospital experience, nurse's perceptions of child's readiness for transfer, and the general pediatric unit's response to the transfer was obtained. Intercorrelations between subject's responses and background information were made using a t-test and Pearson's correlation coefficients. Findings indicated that parents have many fears, anxieties and needs surrounding the transfer of their child from the PICU to the general pediatric unit which were generally perceived as being met with the exception of parents' need to meet the nurse on the general pediatric floor prior to transfer. This need was only perceived as met by 24% of the participants. Significant correlations were found among the following variables: Age of child was strongly correlated with general pediatric unit's response to the transfer and whether parental needs were perceived as met; length of stay in the PICU was significantly correlated with nurse's perception of child's readiness for transfer, previous hospital experience and parental perceptions of the transfer process; nurses perception of child's readiness for transfer was significantly correlated with previous hospital experience and parental perceptions of the transfer process; general pediatric unit's response was significantly correlated with whether or not perceived needs were met; parents' perceptions of the transfer process were significantly correlated with whether or not perceived needs were met; and finally, previous hospital experience was significantly correlated with parents' perceptions of the transfer process.

This study has identified specific concerns and needs of parents which can help guide related nursing care in the future. Implications for nursing research and practice include investigation of the questionnaire as a clinical instrument to help identify and plan for the needs of parents prior to transfer.

#### REFERENCES

- Cassem, N. H. (1980). Reactions of coronary patients to the CCU nurse.

  American Journal of Nursing, 10, 319.
- Delliapiani, A. (1976). Anxiety after a heart attack. New England Journal of Medicine, 38, 752-757.
- Frieberg, K. (1972). How parents react when their child is hospitalized.

  American Journal of Nursing, 7, 1270-1274.
- Green, M. (1979). Parent care in the ICU. <u>Disabled Child</u>, <u>133</u>, 1119-1120.
- Hedenkamp, E. (1980). Humanizing the ICU for children. <u>Critical Care</u>

  <u>Quarterly</u>, 3, 63-73.
- Ingersoll, G. (1981). When the child is hospitalized. <u>Family Centered Care</u>
  of Children and Adolescents, Philadelphia: Saunders.
- Klein, R. F. (1968). Transfer from coronary care. <u>Archives of Internal</u>
  <u>Medicine</u>, <u>122</u>, 104-108.
- Legbarger, P. (1979). The intensive care environment and it's effect on the child and parents. <u>Issues in Comprehensive Pediatric Nursing</u>, <u>6</u>, 50-58.
- Miles, M. S. & Carter, M. C. (1982). <u>Parental stressors in pediatric</u> intensive care units. Unpublished manuscript.
- Miles, M. S. & Carter, M. C. (1983). Assessing parental stress in intensive care units. <u>American Journal of Maternal-Child Nursing</u>, <u>8</u>, 354-359.
- Minckley, B.B., Burrows, D., Ehrat, K., Harper L., Jenkin, S.A., Minckley, W.F., Page, B., Schramm, D.E., & Wood, C. (1979). Myocardial infarct stress of transfer inventory: Development of a research tool. <u>Nursing Research</u>, 28, 4-10.
- Molter, N.C. (1979). Needs of relatives of critically ill patietns: a descriptive study. Heart & Lung, 8, 332-339.

- Pearson, J. (1980). Pediatric ICU patients. Critical Care Medicine, 8, 54-56.
- Rasie, S. (1980). Meeting families' needs helps you meet patient needs.

  Nursing, 7, 32-35.
- Riehl, J. P. & Roy, C. (1980). <u>Conceptual Models for Nursing Practice</u>. 2nd ed. New York: Appleton-Century-Crofts.
- Roy, C. Sr. (1976). <u>Introduction to Nursing: An Adaptation Model</u>. Englewood Cliffs, N. J.: Prentice-Hall.
- Roberts, S. L. (1976). Transfer anxiety. <u>Behavioral Concepts and the Critically Ill Patient</u>. (pp 224-252). New Jersey: Prentice-Hall.
- Schwartz, L. & Brennar Z. (1979). Critical care unit transfer. Heart and Lung, 8, 540-546.
- Selye, H. (1974). Stress Without Distress. Philadelphia: Lippincott.
- Skipper J. K., & Leonard R. (1967). Children, stress and hospitalization, a field study. <u>Journal of Health and Social Behavior</u>, 9, 274-287.
- Smith, M. J. & Selye, H. (1979). Stress: reducing the negative effects of stress. American Journal of Nursing, 79, 1953-1955.
- Stevens, K. (1981). Humanistic care for critically ill children. <u>Nursing</u>

  <u>Clinics of North America</u>, <u>16</u>, 611-618.
- Stevens, K. (1981). Psychological care. <u>Pediatric Critical Care Nursing</u>, New York. John Wiley and Sons.
- Toth, J. (1980). Effect of structured preparation for transfer on patient anxiety on leaving CCU. <u>Nursing Research</u>, 29, 28-34.
- Turecki, P. J. (1982). The needs and concerns of parents with dying neonates:

  Comparison of the viewpoints of nurses and parents. Unpublished

  master's thesis, Oregon Health Sciences University, Portland, OR

Appendix A

PEDIATRIC INTENSIVE CARE ACUITY STAFFING

#### PEDIATRIC INTENSIVE CARE ACUITY STAFFING

Staffing by acuity is a methodology for continual analysis for staffing needs with formulas for developing staffing guides utilizing developed time standards.

Six identified needs were cited for the nursing department's master staffing plan:

- Develop a patient classification system to effectively measure patient care needs by category levels of nursing care to meet JCAH requirements;
- Provide nursing service management with an organized method of assignment of nursing personnel by shift based on patient workload;
- Develop staff scheduling patterns and position controls to maximize staff utilization;
- 4. Provide fiscal reporting and monitoring systems to give nursing administration control of staff assignment and utilization within the budget;
- 5. Design a methodology for monitoring quality levels of care delivery in relationship to staffing patterns;
- Develop a variable patient day rate based on patient acuityneeds and amount of care hours provided;

Utilizing the below acuity tool, the charge nurse is responsible for the staffing needs for the next shift. Completion of the tool for each patient will produce a quatified build-up of nursing activities and patient dependency needs to effectively classify patients for staff assignments.

Once a tool is completed and the patient and the patient classification number is obtained, the staffing guide sheet is filled out for the next shift.

The staffing guide sheet includes census of patients per their classification, staff scheduled for the shift and number of people required to take care of patients. On duty staff and staffing guide requirement should be approximately equal. If the staff required is greater than staff scheduled, floats or staff nurses from other units may be utilized if available to help. If the staff required is less than staff scheduled, extra staff are given the option of time off.

# ACUITY STAFFING SCALE

CLASSIFICATIONS: I - 0-8 III - 19-28

NOURISHMENT	0	Feeds self	-	Bottle Feed	٣	Force Fluids		
				Tube Feed		Slow Feeder Frequent Feeding		
				323		(q2 hours) Restrict Fluids		
EMOTIONAL SUPPORT TEACHING	0	Routine explanation with routine care.	-	Routine teaching	6	Special teaching	4	Extraordinary Factors
						for complications (Patient/Parent)		Sensory Deficits Life threatenting
								problems Language barriers
5								Isolation
AGE DEPENDENCY	0	G&D WNL	2	G&D Mildly delayed	4	G&D greatly delayed	9	G&D Grossly delayed
<b>1</b> 20		Adequate/appropriate for situation		Inadequate/inappropriate for situation		Inadequate for age		Inadequate/inappropriate
								ioi sicuación
ELIMINATION	0	Continent - self	-	Diaper-routine	2	Incontinent-frequently	c	Output with fluid
		care						replacement
MEDS/IV's	0	N/G or PO meds	2	3 IV meds / shift	2	2 meds/lhour	80	3 or more IV's infusing
		Heparin lock				HA 1 or 2 1Vs		recuiring frequent
						Cont. med infusion		manipulations.
						Pressors		
Monitoring	0	Every 4 hours	4	Every 2 hours	80	Every 1 hour	10	More than q 1 hour
TREATMENTS	0	3 or less	-	4/ shift	,	5/ chift	,	Mana than Clabit

Appendix B

PARENTS' COVER LETTER

Dear Participant,

I am a pediatric nurse practitioner and graduate student at the Oregon Health Sciences University. I am conducting a study of parents who have had a child transferred from the Pediatric Intensive Care Unit (PICU) to a general pediatric unit. I am interested in what parents identify as their needs and concerns about the transfer process. In addition, I want to assess if any of these needs are being met.

I am hopeful that learning what parents identify as their needs surrounding transfer of their child will enable health professionals to give assistance and support to families in the future.

Your participation in this study is voluntary. Participation or nonparticipation will in no way affect the care your child receives. Your answer sheet will have a "family number" on it, and neither your name nor your child's name will appear on this questionnaire or on any list or in any document.

Participation in this study will involve 10-15 minutes of your time. It is requested that your name not be put on the questionnaire. When you are answering the questions please remember that there are no "right" answers; I am interested in your experiences and beliefs.

After answering each question, please place the questionnaire in the attached envelope and seal the envelope. The nurses on the unit will return the questionnaire to me.

Should you have any questions about this questionnaire or this study please feel free to contact me at 225-8311.

Thank you for your participation.

Jan Freitas-Nichols, PNP

Appendix C
PARENT OPINION SURVEY

Mother\_\_\_\_

Please indicate your relationship to the child.

				Father			_		
				Guardi	an				
I.	Concerns	about trans	sferring your child						
Di	rections:	check (\)	d each of the following st the column which most acc l=Strongly Disagree 2=Moderately Disagree 3=Slightly Disagree	urately 4=Sligh	descr	ibes y aree	our		
	·			Strong	Moderat Moderat	Slight!	Slighti	Moderate?	Strong)
Sta	atements			1	2	3	4	5	6
1.	child be	ing transfer e Care Unit	anxieties about my red from the Pediatric (PICU) to the general						
2.		indicates t n is improvi	o me that my child's ng.						‡
3.			e nurses on the new stand my child's		e regio agginta. e a que de pr				
4.	watched		child will not be loor as closely as CU.				- L - L - L - L - L - L - L - L - L - L		ř
5.		y child is e ferred from	motionally ready to the PICU.				2		
6.	I feel m transfer	y child is p red from the	hysically ready to be PICU.					1	#
7.	I feel go	ood about th being trans	e new unit where my ferred.						
8.	I feel c	lose to the	PICU personnel.	ì				N.	1
	111								

Directions: First, read each of the following statements. Then, please check (\(\circ\'\)) the column which most accurately describes your beliefs. 1=Strongly Disagree 4=Slightly Agree 2=Moderately Disagree 5=Moderately Agree 3= Slightly Disagree 6=Strongly Agree

Charle		7	VIGUOTA	Moderately		Stight	Moderatez	
	ements		1	2	3	4	5	6_
⊞9. —	Parents need to have a doctor talk with them about transfer plans.							
10.	Parents need to have warning about the transfer of their child.					-		
11.	Parents need to see the unit where their child will be transferred before the actual transfer.					authority of a season of the s	19 10 10 10 10 10 10 10 10 10 10 10 10 10	
12.	Parents need to meet the nurse who will be caring for their child on the new floor before the actual transfer.	To produce the second s						1
13.	Parents need to be told about transfer plans as the plans are being made.	+1				·	4	
14.	Parents need to feel accepted by the PICU personnel.	. Vijitali, di malausa				response to the contract of		1
15.	Parents need to feel that the PICU personnel care about their child.	-						
16.	Parents need to know exactly what will be done for their child after transfer.		And in second the					
17.	Parents need to have explanations that are clear and understandable.						1	
18.	Parents need to talk to the same nurse each day about their child's condition.	I.						
19.	Parents need to be reassured that their child will receive the best possible care after transfer.		A THEORY OF THE PARTY OF THE PA					1
20.	Parents need to know that there will be someone watching their child when they cannot be with them.	Ì	and the state of t			*	1	

Directions: First read each of the following statements. Then, please check ( ) the column which most accurately describes what happened surrounding your child's transfer. 1=YES 2=NO

tate	ments	YES	NO
21.	A doctor talked with me about transfer plans.		
22.	I had plenty of warning about my child's transfer.		
23.	I had a chance to see the unit where my child was transferred before the actual transfer.		
24.	I met the nurse who would be caring for my child on the new floor before the actual transfer.		
25.	I was told about transfer plans as they were being made.		
26.	I felt accepted by the PICU personnel.		-
27.	I felt that the PICU personnel cared about my child.		
28.	I felt I knew exactly what would be done for my child after transfer.		1
29.	I was given explanations which were clear and understandable.		
30.	I talked with the same nurse each day about my child's condition.		
31.	I was reassured that the best possible care would be given to my child after transfer.		
32.	I believe that someone is watching my child closely when I cannot be there.		

ID #	
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# Background Information

To be gathered by the PICU nurses.

- 1. Age of patient.
- 2. Date of hospitalization.
- 3. Date of PICU admission.
- 4. Reason for admission.
- 5. Medical diagnosis.
- 6. From where was the patient admitted?
- 7. How long was the patient in the PICU?
- 8. Reason for transfer.
- 9. What was the patient's acuity score at the time of admission?
- 10. What was the patient's acuity score at the time of transfer?
- 11. To what unit was the patient transferred?
- 12. What was the PICU nurse's perception of the floor's response to the transfer?
- 13. Has the child been a patient at Doernbecher in the past?

Appendix D

RATIONALE FOR QUESTIONS

<u>Questions</u> 1,2,8,14,17,18,19,20 Rationale for Questions

Rationale Source
Minckley, et al, and Stevens Minckley, et al.,
in their studies found that (1979) and Stevens
families and patients in ICUs (1981)

form a bond or attachment with the unit and unit personnel. Disruption or anticipated disruption of the relationship that has been formed can result in stress for the patients and their families

3,4,5,6,7,9,10,11,12 13,15,16 Toth and Minckley, et al, in their studies found that patients have many fears and anxieties about transfer from the ICU to a general medical unit. They describe fear of unknown unit and personnel, fear of not being closely monitored, and fear of separation from a life-saving environment. These studies also revealed that pretransfer teaching and planning decreased the fear and anxiety these patients felt.

Toth (1980) and Minckley et al, (1979) Appendix E

ABSTRACT

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# AN ABSTRACT OF THE THESIS OF Janice Freitas-Nichols

For the MASTERS OF NURSING

Date of receiving the degree: June 9, 1986

Title: NEEDS OF PARENTS SURROUNDING THE TRANSFER OF THEIR CHILD FROM THE PEDIATRIC INTENSIVE CARE UNIT

Approved:	

Sheila Kodadek, Ph.D., Thesis Advisor

This descriptive study identified the needs of 25 parents at a university hospital in the Pacific Northwest surrounding the transfer of their child from the pediatric intensive care unit (PICU) to a general pediatric unit.

Parents were asked to complete "The Parent's Opinion Survey," an instrument which was developed by the researcher and organized into three subscales which assessed: 1) parents' perceptions about the transfer process, 2) parents' perceived needs regarding the transfer process, and 3) parents' perceptions of whether or not their needs were being met. Reliability coefficients using the Chronbach Alpha formula are as follows: Subscale 1, 0.84791, subscale 2, 0.76905, subscale 3, 0.74545. Background information regarding patient age, length of stay in the PICU, previous hospital experience, nurse's perceptions of child's readiness for transfer, and the general pediatric unit's response to the transfer was obtained.

Intercorrelations between subject's responses and background information were made using a t-test and Pearson's correlation coefficients. Findings indicated that parents have many fears, anxieties and needs surrounding the transfer of their child from the PICU to the general pediatric unit which were

generally perceived as being met with the exception of parents' need to meet the nurse on the general pediatric floor prior to transfer. This need was only perceived as met by 24% of the participants. Significant correlations were found among the following variables: Age of child was significantly correlated with general pediatric unit's response to the transfer and whether parental needs were perceived as met; length of stay in the PICU was significantly correlated with nurse's perception of child's readiness for transfer, previous hospital experience and parental perceptions of the transfer process; nurses perception of child's readiness for transfer was significantly correlated with previous hospital experience and parental perceptions of the transfer process; general pediatric unit's response was significantly correlated with whether or not perceived needs were met; parents' perceptions of the transfer process were significantly correlated with whether or not perceived needs were met; and finally, previous hospital experience was significantly correlated with parents' perceptions of the transfer process.

This study has identified specific concerns and needs of parents which can help guide related nursing care in the future. Implications for nursing research and practice include investigation of the questionnaire as a clinical instrument to help identify and plan for the needs of parents prior to transfer.