A CHILD'S EYE-VIEW OF THE EMERGENCY DEPARTMENT

by

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Dedicated to my parents. Without their love, I could never have come this far.
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iv
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>LIST OF TABLES</th>
<th>vii</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>viii</td>
</tr>
<tr>
<td>CHAPTER</td>
<td></td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Conceptual Framework</td>
<td>2</td>
</tr>
<tr>
<td>Problem, Purpose, and Significance</td>
<td>12</td>
</tr>
<tr>
<td>Conclusion</td>
<td>15</td>
</tr>
<tr>
<td>2. REVIEW OF THE LITERATURE</td>
<td>16</td>
</tr>
<tr>
<td>3. RESEARCH DESIGN</td>
<td>26</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>26</td>
</tr>
<tr>
<td>The Sample</td>
<td>27</td>
</tr>
<tr>
<td>The Method</td>
<td>28</td>
</tr>
<tr>
<td>Pilot Study</td>
<td>30</td>
</tr>
<tr>
<td>Problems Encountered</td>
<td>31</td>
</tr>
<tr>
<td>Limitations</td>
<td>33</td>
</tr>
<tr>
<td>Analysis of the Data</td>
<td>33</td>
</tr>
<tr>
<td>Summary</td>
<td>34</td>
</tr>
<tr>
<td>4. REPORT OF THE FINDINGS</td>
<td>35</td>
</tr>
<tr>
<td>The Sample</td>
<td>35</td>
</tr>
<tr>
<td>Response to the Tool</td>
<td>38</td>
</tr>
<tr>
<td>Themes</td>
<td>40</td>
</tr>
<tr>
<td>People</td>
<td>41</td>
</tr>
<tr>
<td>Equipment</td>
<td>41</td>
</tr>
<tr>
<td>Activity</td>
<td>43</td>
</tr>
<tr>
<td>Procedures</td>
<td>43</td>
</tr>
<tr>
<td>Pain</td>
<td>44</td>
</tr>
<tr>
<td>Exits</td>
<td>45</td>
</tr>
<tr>
<td>Reason for Going</td>
<td>45</td>
</tr>
<tr>
<td>Facial Expression</td>
<td>45</td>
</tr>
<tr>
<td>Summary</td>
<td>46</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS—Continued

5. DISCUSSION ........................................... 47

The Themes ........................................... 48
People .............................................. 48
Equipment .......................................... 49
Activity ............................................. 49
Procedures .......................................... 50
Pain .................................................. 50
Exits .................................................. 51
Reason for Going ..................................... 51
Facial Expression .................................... 52
Other Characteristics of the Data ................. 52
Conclusions .......................................... 54
Implications for Nursing ............................ 55
Recommendations for Future Study ............... 56

6. SUMMARY .............................................. 58

APPENDIX A. RESEARCH PROPOSAL FOR RESEARCH AT
KINO COMMUNITY HOSPITAL ...................... 61
APPENDIX B. PROCEDURE SHEET ...................... 64
APPENDIX C. PARENTAL CONSENT FORM ............. 66
APPENDIX D. CHILD'S INTERVIEW .................... 68
REFERENCES .......................................... 93
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>A Comparison of Procedures Performed to Procedures Described</td>
<td>37</td>
</tr>
</tbody>
</table>

vii
ABSTRACT

The purpose of this study was to identify and describe the concerns of children who had been treated in the Emergency Room. The sample consisted of ten subjects who had been treated in the Emergency Room of a community hospital.

The concepts of stress, cognitive development, and drawing as a means of communication formed the basis of the conceptual framework. It was found that children in the intuitive phase of cognitive development communicated their concerns about treatment through drawing and storytelling.

Each of the subjects were asked to draw a picture and to tell a story about going to the Emergency Room.

The subjects' responses were examined to identify the various concerns and feelings expressed. Eight themes were identified in this fashion. They were: (1) people, (2) equipment, (3) activity, (4) procedures, (5) pain, (6) exits, (7) reason for going, and (8) facial expression. The researcher found that while the subjects expressed their concerns (as identified from the themes), they did not express their feelings. The results were also examined to determine how often the subjects described the procedures which were done while they were in the Emergency Room.
CHAPTER 1

INTRODUCTION

A parent carrying a child comes into the Emergency Room. You can see and hear the fright. "My child has been injured!" You quickly whisk parent and child off to an examining room to determine the nature and extent of the injuries. You reassure the parent. But what about the child? Injured, in pain, frightened by the parent's fright, frightened by a new and unfamiliar environment. You begin to administer to the child's physical injuries. But what about the emotional and the cognitive person inside the injured body?

The child hears and sees many things in the Emergency Room that arouse curiosity in spite of the pain and the fright. As a nurse working in the Emergency Room I began to wonder, "What impresses the child in the Emergency Room?" "What can I do to alleviate stress?"

In order to provide emotional support and allow for growth during this time the nurse must understand the impact of injury and emergency treatment on the child. The nurse needs to know what to expect of the child. By knowing what to expect and by learning how the child has viewed the experience, the nurse is in a position to guide the child in
the mastering of anxiety, understanding reality, and correcting the interpretation of what has happened. This knowledge gives the nurse direction for intervention and suggests ways of interacting with the child which enhances communication. Greater understanding of the child's view of the Emergency Room and its related events is needed to contribute to and improve patient-centered care and the child's ability to cope with emergency treatment.

**Conceptual Framework**

The major concepts on which this study is based are that emergency treatment is stressful to the child, that certain things the child encounters while in the Emergency Room impress the child, and that these perceptions can be communicated to others based on the child's level of cognitive development.

Emergency treatment is stress producing. "Stress is a force applied to a system sufficient to cause strain or distortion in the system, or when very great, to alter it into a new form" (Rose 1972, p. 119). Stress is great for the child who is likely to have distorted ideas about injury and emergency treatment.

Emergency treatment invariably means an increase in the child's vulnerability to emotional trauma (stress). The child in the Emergency Room is confronted with emotionally traumatic situations basically of the painful
and/or fear producing type, inherent in investigative and remedial procedures. During treatment in the Emergency Room the child is exposed to a variety of routines, procedures, people, and equipment which are unfamiliar, unanticipated, and the purpose of which are not understood. The child may have ideas of punishment, mutilation, and that he (she) may be murdered or abandoned. All of these factors lead to stress (Briggs 1967, Petrillo and Sanger 1972, Vernon et al. 1965).

Even a short visit to the Emergency Room may threaten a child's emotional well-being if attention is aimed only at the physical injury. The child experiencing emergency treatment has had little time to prepare for the trip to the Emergency Room. This too, is a great stress producer (Bellack 1974, Haller 1970, Michele 1974).

The child's response to the Emergency Room depends on what is perceived as happening rather than what is actually taking place. How the child copes with emergency treatment is based on such factors as developmental level, previous experience, parental response, the nature of the injury, and how the child has coped in the past (Dimock 1960, Freilich 1966, Haller 1967).

The child may be affected quite differently than an adult who suffers the same type of injury and will develop an individual notion about what will happen. Therefore, the child in the Emergency Room has special needs resulting from
the physical and emotional stress associated with injury and pain, separation from parents, the unfamiliar environment, and unfamiliar persons assuming caretaking roles.

Physically the child may manifest the signs of what Selye (1956) described as the "Fight or Flight" response. The child under emotional stress may have regressive types of behavior and resort to immature coping patterns. The child will require reassurance that he (she) will be okay. The child will also need physical treatments for the injury, relief from pain, and relief from the symptoms which are the body's physiologic response to stress. Often the child is unable to distinguish between the pain of treatment and the pain of the injury and will require frequent explanations and reassurances (Blom 1958; Haller 1970, 1974; Petrillo and Sanger 1972; Resnick and Hergenroeder 1975).

If the child senses that his (her) parents are anxious and upset, his (her) own fears are enlarged. The child relies on the parent for safety and security and may be especially alarmed that his (her) parents cannot prevent the doctors from hurting him (her). Furthermore, parents are often not allowed to be with their child during treatment. When the parent cannot respond as the child is accustomed the child's security is shaken (Canright and Campbell 1977, Bellack 1974).

The atmosphere of the Emergency Room itself may be a source of anxiety to the child. Emergency Rooms are
notoriously busy and have high levels of activity going on. Children fear the Emergency Room because the environment is different from the one they are familiar with and the roles of caretakers change. The mere size of unfamiliar adults may frighten the child. Strange equipment and procedures may also alarm him (her). The child may misinterpret time when asked to hold or lie still. The child needs frequent explanations of equipment and procedures including information regarding the sensations experienced (Bellack 1974; Canright and Campbell 1977; Haller 1967, 1970, 1974; Resnick and Hergenroeder 1975).

As I mentioned before, the child has an individual notion about what has and will happen to him (her) in the Emergency Room. This notion is based on such factors as developmental level, prior experience, age, intelligence, and maturity. The child is constantly absorbing and interpreting the environment, fitting it into the picture he (she) already has of the world.

"Perception is the most immediate point of contact between the subject and the data provided by its environment" (Piaget 1971, p. 245). It is the process by which the child extracts meaningful information from the stimulants of the world, and functions by protecting the individual from harmful or threatening circumstances. Perception means more than just the visual appearance of an object, it includes an awareness of all the senses. Perceptual experiences are
centralized from moment to moment, the goal being translation into life experiences by matching what is sensed to some cognitive unit (Mussen, Conger, and Kagan 1974; Maier 1969).

Cognition refers to the interpretation of sensory events, their registration and efficient retrieval from memory, the ability to manipulate images, symbols and concepts in thinking, reasoning, and problem solving, and the acquisition of knowledge and beliefs about the environment. Cognitive behavior is a combination of maturation, experience, social transmission, and adaptation. Piaget believes that the child's conception of the world is built in the course of cognitive development and that the meaning of specific concepts are learned (Maier 1969, Mussen et al. 1974, Piaget 1973).

Piaget's theory is built upon the idea that old structures are fitted (assimilated) to new functions and new structures serve (accommodate) old functions under changed circumstances. Adaptation is the cognitive striving of the individual to find an equilibrium between himself (herself) and the environment and depends on assimilation and accommodation (Maier 1969, Beard 1969).

Mental growth involves resolution of the conflict between using old responses for new situations and acquiring new or changing old responses to fit new problems. Intellectual growth occurs as the child adapts to new situations.
The child adapts, based on his (her) level of cognitive development. Piaget has identified the sequence of the child's cognitive development which he views as an inherent, unalterable evolutionary process (Mussen et al. 1974, Maier 1969, Piaget 1971).

Piaget's concept of development can be summarized as

1. There is an absolute continuity of all developmental processes.
2. Development proceeds through a continuous process of generalizations and differentiation.
3. This continuity is achieved by a continuous unfolding, with each level of development finding its roots in a previous phase and continuing into the following one.
4. Each phase entails a repetition of the processes of the previous level in a different form of organization. Previous behavior patterns are sensed as inferior and become part of the new, superior level.
5. The differences of organizational patterns create a hierarchy of experience and action.
6. Individuals achieve different levels within the hierarchy although there is the possibility of all these developments, some of which may not be realized (Maier 1969, p. 102).
Based on these assumptions, the child arrives at the Intuitive Phase at approximately age four, having solved the problems of the previous developmental levels, and continues with the problems of his (her) present level until approximately age seven at which time he (she) moves on to the next series of developmental tasks.

The intuitive phase is a period of transition for the child, characterized by rapid physical growth, a broadening of the social sphere and increasing independence. The child is no longer under constant supervision by mother as he (she) goes to school and engages in such physical activities as bike riding and skating. As a direct result of the increasing amounts of unsupervised physical activities, there is a corresponding increase in the number and kinds of minor physical injuries that often warrant treatment in the Emergency Room (Latham and Heckel 1972, p. 367).

The child in the intuitive phase exhibits the beginnings of cognition as a bridge is formed between the child's passive acceptance of the environment and his (her) ability to react to it realistically. Development entails the generalization of symbols as images of a more encompassing concept when the gaps in knowledge are filled in through questioning and experimentation. The child becomes more imaginative while concentrating on the immediate environment and the immediate present. Judgments are
based on outside appearance and the end product or result (Piaget 1972).

During the intuitive phase there is a widening social interest in the world associated with increased participation. The child pays attention to other points of view, widening his (her) perspective and reducing his (her) egocentricity. The child is now able to focus his (her) attention on a single problem for a sustained period of time resulting in an increase in the quality of the performance (Piaget 1972).

During the intuitive phase the child retains the preconceptual notion that his (her) thoughts and body are one. Life exists for the child in all things which move, things which are still are labelled dead. The child's conception of space is closely related to action, but because the child can see one thing in relation to another he (she) is able to take into account proximity, separation, order, and continuity. The child can also understand the abstract concept of time and can begin to understand separation from parents as a temporary thing (Piaget 1926, 1972).

Age seven is a decisive turning point for the child. It is at this time that new forms of organization appear which mark the beginnings of logical thought, for details and the total process are seen as a related whole with greater understanding of cause and effect (Maier 1969, Beard 1969).
Cognitive development and language development are related intimately. Language is a product of mental activities and emerges as part of the continuum of intellectual development. The part played by language appears most clearly in the way "objects and phenomena are reflected in their (children's) connections and inter-relationships" (Liublinskaya 1957, p. 202). When the child acquires language and learns to use symbols to represent events he (she) launches a whole new world of learning and understanding and becomes able to deal with experiences and the environment in new ways. Language follows a developmental continuum from verbal expression to verbal exchange. This involves internalization of words, thoughts, and mental findings. The structure of language assumes significance and becomes a tool of thinking and of communication (Palermo and Polfese 1972, Maier 1969, Mussen et al. 1974).

During the intuitive phase the child's symbols begin to relate to each other as the words relate in speech patterns. Language begins to operate as a vehicle for thought as the child verbalizes his (her) mental processes. Words are not thought of as having social and mental origins but as having external reality. The child distorts information to fit his (her) point of view while employing appropriate language (Beard 1969, Maier 1969, Richmond 1971).

Language gives the child new power to communicate feelings to others. It also helps to put the child in
touch with the environment. As the child acquires words for needs, wants, pleasures and pains his (her) "experiences become clear and take on common properties with those of other people" (Stone and Church 1957, p. 116). The words a child uses tells us something about what he (she) is aware of and concerned about. The child's concept of the world, his (her) thoughts and feelings find expression in language, action (play) and in art (DiLeo 1970, Piaget and Inhelder 1969).

However, words are an imperfect means of communication for the child. Sensations and experiences find more exact and complete expression in the language of art. "Children's art is like verbal language in that it possesses its own grammar and its own vocabulary" (Stern 1973, p. 51). In fact, children's art is primarily a language, a form of expression, with language ability related to drawing ability (Wieczorek 1974, Piaget and Inhelder 1969).

Language is not wholly suited to the child's expression of needs and wants. Therefore, the child needs a means of self expression. Such is the nature of the drawing which enables the child to "not only picture external reality but to assimilate it" (Piaget and Inhelder 1969, p. 58). The child uses art to express absorbing experiences and preoccupations that he (she) is not yet able to express in words because the experiences are still at a feeling level, or because the child lacks
sufficient vocabulary for the expression of feelings (Adams 1959, Alschuler and Hartwick 1942).

Children's art affords potential insights into the cognitive structure of the child as the drawing reflects concepts, feelings, perceptions, and knowledge. The child draws things which are important to him (her), exaggerating those parts which are most meaningful. Every idea seeks expression in drawing (Gilmore 1966, Omwake 1963).

There are many parts to the art process. It involves the child in perceiving the world, reacting to what is seen and felt, selecting, interpreting and reforming the elements, and communicating emotions and insights. The concept the child draws depends on his (her) understanding of past experiences, recent experiences, and environmental factors. In other words, the child's developmental level.

To summarize: the child faced with emergency treatment undergoes a considerable amount of stress. The child can communicate this stress to others through verbal and pictoral language. The child's language ability is directly related to his (her) cognitive development.

Problem, Purpose, and Significance

The problem being investigated is to identify those things in the Emergency Room and about emergency treatment that most impress the child who is in the intuitive phase. By identifying those things which the child is most impressed
with, it may be determined which elements of the emergency experience has had the most profound effect and caused the greatest stress to the child.

The significance of this study is that by examining the child's expressions (as demonstrated in speech and pictures) we can learn of his (her) degree of awareness of a situation and the related anxieties and fears when facing a stressful circumstance. The nurse, through insights gained by this method will be better able to deal with the fears and anxieties of the child and help him (her) work through the stress.

Emergency treatment of the child not only intensifies the usual stress of hospitalization and health care such as separation from parents, unfamiliar surroundings, and loss of mobility; but might also be expected to engender a host of other harmful factors, such as lack of preparation and high levels of parental anxiety. Children who require treatment in the Emergency Room experience a greater amount of emotional trauma under these circumstances because they are usually subjected to painful procedures and because they receive less support from the adults around them. The child in the Emergency Room is also deprived of his (her) usual technique of mastering anxiety, which is play.

The child in the intuitive phase may feel guilty, anxious, angry, and fearful during emergency treatment.
Emotions such as these are harmful and may retard the child's emotional development if not allowed expression.

The nurse who is engaged in supporting children must have knowledge in addition to compassion, and skill in understanding and interpreting the verbal and non-verbal cues the child gives. The nurse must know what to expect of a child of a given age. The nurse must also know how to recognize the child's level of cognitive development. This will allow the nurse to guide the child in the mastery of anxiety through talking, assisting the child in understanding reality through learning the child's concept of what happened, and correction of his (her) interpretation of what happened. The nurse will also be able to prevent the repression or suppression of the event and the feelings that were aroused by it (Blake 1954; Breckinridge and Vincent 1966; Roskies, Bedard, and Gauvreau-Guilbault 1976).

Greater understanding of the child's eye-view of the Emergency Room is needed in order for the nurse to meet the physical, emotional, and psychological needs of the child. It is the purpose of this study to provide the reader with more information regarding the impact of the Emergency Room and emergency treatment on the child.
Conclusion

This chapter presents the conceptual framework; children who are taken to the Emergency Room with injuries communicate to others, both verbally and pictorally, their stress. The child's ability to communicate is based on his (her) developmental level. Further outlined is the nature and scope of the problem being investigated and several reasons why this problem is significant to nursing.
Children's art has been extensively used as a means to evaluate intellectual maturation, personality factors, values, fantasies, symbolism, and as an adjunct to psychotherapy. The uses of art productions by the child has been largely limited to the testing of children who manifest abnormal behavior tendencies. An understanding of the various tests used to elucidate information from the child regarding childhood experiences is prerequisite in learning how children's toleration and understanding of treatment in the Emergency Room may be evaluated. This chapter provides the reader with a brief view of these various tests and their uses with an emphasis on those studies done by nurses to gain information about hospitalization from children.

The various tests utilized fall into a category of psychological tools known as projective tests. Projective tests are attempts to reveal the private world of meanings, significances, patterns, and feelings of an individual which cannot or will not be expressed verbally, which are accomplished by placing the individual in a specific setting with specific tasks to complete. The basic theory underlying projective tests is that each person unconsciously
"projects" private feelings and attributes into the situation and the materials, giving the person's action symbolic as well as literal meaning (Goodenough 1926, Lindzey 1961, Watson 1959).

The scope of tests which employ these methods is broad and includes such well known tests as Goodenough's (1926) Draw-A-Man Test used for determining mental age; the Rorschach (1942) Ink Blot Test; word association tests (Jung 1910); Machover's (1949) Draw-A-Person Test; and the Thematic Apperception Test—TAT (Murray, Barrett, and Homburger 1938) used for determining personality factors. (Further information regarding these tests may be obtained from the references.)

Drawing and story-telling fall into the broad range of projective tests and are considered both constructive and expressive with an "intimate relation existing between the projective technique and the cognitive nature of the response" (Lindzey 1961, p. 124). The interpretation of such tests involves utilizing the actual end product, the behavior surrounding its production, and any verbalizations associated with it that are not part of the actual response (Frank 1939, Hartley and Goldenson 1957, Silver 1950).

The child will take the drawing materials and breathe a bit of life into them, approaching the materials as he (she) approaches life itself. The child has two tendencies in drawing, the tendency to draw what is seen and the tendency to draw what is known about the subject.
The child does not make a copy, but a representation of what impresses him (her) and these tend to be emphasized according to his (her) own scale of values, usually drawing them first and larger (Bender 1952, DiLeo 1970, Eng 1931, Cohen and Stern 1958).

Palmer (1970) utilized drawing and story-telling in the psychological assessment of the child. He found that the child's need to "engage in motor activity and spontaneous creative activity" (p. 150) led to effective use of the drawing technique. He found that children invest the most energy in this type of activity and in so doing express many unspoken feelings. He also found that by using an open-ended interviewing technique such as story-telling the child will describe his (her) view of the environment, behavior, and reveal attitudes and feelings. This technique enabled him to "follow through" with the subject the child wished to talk about.

In a somewhat different and earlier study Dennis (1966) used drawings produced by eleven, twelve, and thirteen year old children, who he felt drew better, as an indicator of their values. The subjects in his study were asked to draw the human figure. The main premise of his study was that the content of the drawings would reflect the children's attitudes. Dennis studied the attitudes of the group rather than the individual because he felt that this would lead to more valid results. He proposed that
drawing content is a reflection of what is valued by society as the child produces an ideal or desirable person when making the human figure drawing. Dennis found that there was a considerable degree of selectivity on the part of the subjects in regard to their choices of "referents among the many possibilities of subject matter that are available" (p. 168) as the subjects reflected both positive and negative attitudes in their drawings.

Draw-A-Person tests are one of the most frequently used types of drawing tests. Patterned largely after Machover's (1949) D-A-P the subject is given the instruction to "draw a person." Various inferences are then made regarding the drawing. In an earlier form Goodenough (1926) counted body parts as a way of determining a child's mental age. More recently Diller (1964) used the D-A-P to learn about the psychology of the disabled child. McElhaney (1969) finds that the D-A-P can give the interpreter at least a rough estimate of intelligence, self concept, and emotions.

Machover (1949) found that in producing a drawing the individual's total experiential background emerged, that it was a pleasurable form of communication which relieved tension, and that drawing tests were simple to administer due to their simple instructions and lack of required skills necessary to take them. Furthermore, she found that "in a significant proportion of cases, drawings
do permit accurate judgment covering the subject's emotional and psychological maturity, his anxiety, guilt, aggression, and a host of other traits" (p. 23).

Unfortunately, as Schuster (1971, p. 135) points out, in spite of the uses and flexibilities of drawing tests "most children's drawing tests seek to measure and evaluate the personality construct of children who manifest abnormal behavior tendencies." She is particularly interested in developing standardized tools for analyzing the drawings of children. She finds that the response of a child to the request for a drawing will reflect the way in which he (she) organizes experiences and structures perceptions of the nature of the environment. In this manner the drawing paper becomes a screen upon which the child may project his (her) concepts, attitudes, inner feelings, perceptions, interests, preferences, and needs. Additionally, the investigator may gain insight into the nature of the child's drives, ego organization, defenses, emotional expressions, areas of conflict, cognitive style, and value orientations.

Nurses with various objectives in mind, have also utilized the drawing and story-telling technique to gain insights into the child's reaction to hospitalization and health care. Among these is Fleming's (1972) study to determine if drawings could identify differences between hospitalized and non-hospitalized children. She also
attempted to ascertain if there was a difference between groups of hospitalized children related to their types of illness (acute, chronic, physically disabled). She focused her efforts on the child's self image during hospitalization.

Fleming used a combination of projective techniques to gather information from the child. Her basic tool consisted of a set of six pictures which she showed each of the subjects. These pictures depicted various elements of the hospital environment. After the child was shown each picture he (she) was asked to tell what the picture was about and what he (she) thought about it. In her analysis of the drawings Fleming used the categories of affect, activity, relationships (between persons or persons and things), focus, cognition, and health-illness. Her findings included "... effects of long term hospitalization on developmental behavior emphasizes the need for optimum planning and management" (p. 144) of the child's perception of hospitalization. She also found that the child tended to focus his (her) drawing on things rather than persons in picture drawing, and that there were significant differences between the self image of children who had never been hospitalized and the children who had been. Associated with this she found that based on the nature of the illness a significant difference in the self images of the children could be identified.
In another study, Menke (1973) used "tape recorded game playing" which consisted of the child telling a story about a series of pictures in order for her to learn about the child's level of stress during hospitalization. The children's responses were analyzed for the content of their stories with particular attention being directed at those responses which identified hospitalization as being stressful. Her results were inconclusive, but she did recommend that further study was warranted to evaluate the child's perception of stress.

Jones and Wakely (1974) were concerned with the child's perception of hospitalization. Their subjects drew pictures of the hospital. The subjects' experiences were varied, some had never been to the hospital, some had had contact only in the Emergency Room, while others had been admitted for prolonged periods of time. The pictures were evaluated for use of color, pressure (how hard the child had used the drawing implement), the concept drawn, and the object of the child's concern (focus). They found that the outstanding theme in the children's drawings was loss of independence. They also found numerous expressions of immobility, lack of identity, and fear of mutilation. Lastly, they found that many pictures contained emphases on familiar objects such as food, windows and doors, and playthings the child had brought from home.
Barnes (1974, p. 75) focused her attention on the child in the Intensive Care Unit stating, "professionals only speculate about how much and what kinds of things the children see in the ICU and the intensity of feelings involved in their responses to their experiences." She used observations of the child, and the child's drawings and interviews to gain both general impressions and specific responses. Particularly in response to her interview with the children, Barnes found that they described in detail dreams they had, things which were done to other children, and memories of relatives dying. She found that most children were very alert to the surroundings and had vivid recall even though this was often distorted when recalling events regarding themselves. She found that children were both aware of and afraid of death, were confused as to time, and expressed frequent feelings of helplessness. She also found that the children fantasized about the uses of equipment, as the children recalled machines, doctors, and nurses.

Gaffney (1976, p. 16) discusses the effects of the Emergency Room on the child stating that "among the things the young child is faced with are fear of separation from mother, fear of body intrusion, and fear of the unknown." Although she presents no empirical data, she indicated that the child perceived doctors and nurses as being tall, authoritative and threatening, and that the child has guilt
feelings about being in the Emergency Room often thinking that treatments are punishments for bad thoughts and actions.

Lastly, among the body of nursing literature is the 1975 study by Resnick and Hergenroeder who, in a study of children in the Emergency Room, identified the concerns of the child, the parents' reactions, and the nature and extent of injury. They found that the areas of children's concerns were fears of needles, pain and painful procedures, fear of losing a body part or being mutilated, curiosity about equipment and procedures, clarification of medical terms, assumptions that everything and everyone in the Emergency Room had something to do with them (egocentrism), needs for diversion, fear of loss of support from the family, wondering about the need for subsequent visits, and questions about death and dying.

Resnick and Hergenroeder found that parents reacted by attempting to quiet the child, to console the child, to make the child feel guilty or punished, to show concern and affection, to express self guilt, and to express anger at the child or others who had part in the child's being in the Emergency Room (nurses, doctors, the driver of the car that hit the child). Furthermore, Resnick and Hergenroeder (1975, p. 6) found that parents "play an important part in the child's Emergency Room experience in that they passed on or allayed fears and anxieties."
To summarize: The reader has been presented with a broad overview of the use of children's art as a projective test, with a discussion of several types of art tests and their uses. Also discussed was the use of these types of tests in the field of nursing to determine the child's reaction to health and illness, emergency treatment, and hospitalization. Based on this review of the literature, there seems to be a lack of information regarding treatment of the child in the Emergency Room. This points up the need for further study in this area.
CHAPTER 3

RESEARCH DESIGN

This is a study whose purpose is to identify the themes expressed in the drawings and stories of children who have been treated in the Emergency Room. In this chapter I will define the terms used most often in this study. Further is a discussion of the criteria for selection of the sample, the actual selection of the sample, the methods utilized in collecting the data, and a pilot study done prior to the actual data collection. Lastly, is a discussion of the problems encountered during data collection, limitations of the study, and how the data will be analyzed.

Definition of Terms

1. Theme: A theme is either a single idea or concept, or a group of ideas or concepts that are focal points in the subject's drawing and/or story.

2. Drawing: A drawing is the marks made on paper by the subject.

3. Story: A story is the narrative of the subject made during the drawing session and in response to the researcher's request for a story about the drawing.
The Sample

The sample consists of twelve children interviewed during the period ranging from April to October 1978. The subjects were chosen from the total population of children treated in the Emergency Room of a Community Hospital in a large southwestern city.

Criteria for selection were (1) that the subjects were treated for physical injuries which were not the result of suspected child abuse; (2) that the children were between ages five and seven; (3) that the subjects were fluent in English (as the researcher was monolingual); (4) that the subject was treated and released following initial treatment, although a return visit might be required; (5) that the researcher was not the care-giver; and (6) that the subject had a phone.

The sample was obtained by perusal of the Daily Log of the Emergency Room. This log contained information regarding the age and sex of the person treated, the diagnosis and disposition (whether the patient had been admitted, discharged, transferred, or died), in addition to the patient's name and hospital number. The perusal of the log identified potential subjects by diagnosis and age. Following this, the researcher checked the Log Copy of the Emergency Room Record for the remaining criteria, and the procedures performed while the child was in the Emergency
The Method

Parents of potential subjects were contacted by phone the day following the emergency treatment of their child. At this time the parent was given general information regarding the nature and purpose of the study. The researcher then was given (there were no refusals) permission to come to the parents' home for further explanation and discussion of the study.

The researcher attempted, whenever possible, to make this home visit prior to the child's return to the Emergency Room for further treatment. During the home visit the researcher explained the technique for data collection, the potential risks and benefits to the child and the family, and the confidentiality of the information obtained. The researcher also emphasized that while the parent could be present during the interview, the parent was to make no suggestions or encouragements to the child. At this point, if the parent was agreeable, the Parental Consent Form was signed (see Appendix C).

The researcher then became acquainted with the child. The child was given an opportunity to familiarize himself (herself) with the equipment and materials used in data collection. These consisted of 8-1/2 by 11 inch
manila drawing paper, selected crayons, and a tape recorder. All interviews were tape recorded to insure the verbatim recording of the child's story and to eliminate the need for note-taking.

The materials were selected by the researcher to insure the child's familiarity with them. As the children were of school age, the researcher assumed that they would be familiar with the small size (8-1/2 by 11) of the drawing paper. This was selected to make the drawing seem like a school task rather than a play session. Crayons were selected on the basis of their ability to be reproduced by Xeroxing. Those colors which were too light (yellow and white) were removed from the box of crayons.

When the child seemed relaxed and comfortable (generally fifteen minutes) the interview was begun. The interview consisted of the request for a drawing about the child's visit to the Emergency Room. As necessary the child was given further instructions to draw what was known or remembered about going to the Emergency Room. When the child indicated that the drawing was complete, he (she) was asked to tell a story about the picture. (The reader may wish to refer to Appendix D for a diagram of the interview.)

Children who participated in the study gave an implied consent based on their cooperation with the researcher. If the child discontinued drawing or story telling at any point during the interview, or if the child
refused to cooperate with the researcher, it was assumed that consent was revoked.

At the conclusion of the interview, the child was offered an opportunity to draw a second picture on a subject of the child's choice. The researcher then collected the completed picture about the Emergency Room. If the child demonstrated any ill effects or if the child or his (her) parents requested, the researcher assisted the child in dealing with feelings evoked by the recall of the Emergency Room experience. (It should be noted that while the researcher was prepared for this eventuality, the children seemed to have had no ill effects from the recall of the emergency experience, and the researcher did not need to intervene.) The researcher left her name and phone number with the parent in the event that the parent wished for a return visit by the researcher or in case any problems came up that the parent thought the researcher could be helpful with.

Pilot Study

Prior to beginning actual data collection a Pilot Study was done to determine the reliability of the tool (drawing and story-telling). Using the children of friends, the researcher tested the method. Three children were in the Pilot Study.
In the first two cases the researcher asked the child to draw a specific subject, using the same method as described in the previous section. In the first case this was a picture about going to ballet lessons. In the second case the child was asked to draw a picture about going to school.

In the third case the child was asked to draw a picture about going to the Emergency Room. This child had been to an Emergency Room the same week as the interview.

In all cases the children complied with the researcher's request for a drawing and a story. Based on the success of the pilot study the researcher proceeded to the actual data collection.

Problems Encountered

The researcher had several problems during the data collection phase of the study. One of the most frustrating of the problems was frequent breakdowns in the recording apparatus. This often left the researcher with portions of the subjects' story garbled or missing.

Another problem encountered was difficulty in making contact with potential subjects prior to return visits. Many of the children who could normally have been included in the study were excluded on the basis that they had been to the Emergency Room for a return visit before the researcher had access to the log. For example, if the child
had been seen in the Emergency Room on a Monday evening the researcher may not have been aware of the visit until Thursday morning, by which time the child was making a return visit for further treatment. This was due to the researcher's limited access to the log. Along with this problem, many potential subjects were excluded on the basis that the researcher had been the caregiver while the child was a patient.

Further problems encountered were based on the researcher's inability to speak the language of many of the patients who were treated, necessitating their elimination from the study. In addition to this in many instances it was not possible to make contact with the patient as the patient did not have a phone.

Lastly, was the problem of finding subjects who met the age criterion. Prior to actual data collection, and during the time the Pilot Study was conducted, the researcher surveyed the log for patients who met the age criterion. During this time the researcher noted an average of eighteen potential subjects being treated weekly in the Emergency Room. When actual data collection was begun this number decreased markedly, some weeks having one or two potential subjects, and two different one week periods having no potential subjects.
Limitations

Foremost among the limitations of this study is the small number of subjects included. Twelve subjects is not enough to draw any broad conclusions about children in the Emergency Room. Associated with this is the limited age span in which these children were sampled from.

Another limiting factor in this study is that the researcher deliberately misrepresented the average patient by excluding patients who could not speak English. The Emergency Room, from which the sample was selected, services many Indian and Spanish speaking persons. This makes it impossible to generalize the findings of the study cross-culturally.

Analysis of the Data

Analysis of the data began with making typed transcripts from the tape recordings of the stories. Pictures and stories were then compared and the major themes isolated. This was done for each subject.

Following this comparisons were made between the themes identified by each subject to the others. The researcher looked for similar patterns in the themes between the children, and for dissimilar patterns. The researcher also examined the Procedure Sheet (Appendix B) to identify similarities between the chief complaints and treatments to the themes of the pictures and stories. The
Procedure Sheet was also used to determine sex and age characteristics of the sample.

Data were treated both individually and collectively as the researcher examined the data for the aforementioned characteristics. It was from these methods of analysis that the researcher has based her reporting of the data and the subsequent discussion of findings. (See Chapters 4 and 5.)

Summary

Presented in this chapter were the terms used most often in this study, the selection of the sample, the method of data collection, and a pilot study done to test the tool. Also discussed were some of the major problems encountered during data collection and the limitations of the study. In addition the reader was provided with a broad overview of how the data were treated.
CHAPTER 4

REPORT OF THE FINDINGS

This chapter will present the characteristics of the sample. It will also supply the reader with information regarding the subjects' response to the data collection tool. Finally, it will present the various themes which I have identified through the analysis of the data.

The Sample

There were twelve subjects interviewed, five boys and seven girls. Of these twelve subjects, one boy and one girl withdrew from the study. This resulted in ten completed interviews. The reason for the boy's withdrawing was his failure to comply with the researcher's request for a drawing and story. It seems, from information given the researcher by the subject's mother, that he had a bad experience in the Emergency Room since he was taken there by the baby-sitter while his parents were away. At the time of the interview he was walking around the house and had gone to school with his baseball cap on in order to hide his stitches.

The girl who withdrew from the study also refused to comply with the researcher's request for a drawing and a story. In her case, this seemed to be related to her
anticipation of an overnight stay at a friend's house. This resulted in her inability to concentrate on the task, stated as "I can't."

The subjects ranged in age from five years, four months to six years, ten months. The average age of the subjects was six years, one month. The age which occurred most often was five years, ten months.

Of these twelve subjects, ten were treated for minor lacerations, one for abrasions, and one for the removal of cactus thorns. Among these a total of fifty-five different procedures were performed. Each of the subjects experienced no fewer than three or more than seven procedures. The average number of procedures each of the subjects experienced was five. Among the subjects who completed the study forty-four procedures were performed for an average of four procedures per subject. (This is represented in Table 1.) These procedures were described by fifty per cent of the subjects in their drawings and stories. Because of the small sample Chi Square was not calculated.

The children had suturing, local anesthetics, steri-stripping, sedative administration, vital signs, debridement of burns and abrasions, and other miscellaneous procedures performed on them. Seven children had suturing done. Of these, six described this in their pictures and stories. Five of the seven children who had local anesthetics, described this procedure. The child whose
Table 1. A Comparison of Procedures Performed to Procedures Described

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Described</th>
<th>Not Described</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suturing</td>
<td>6</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Local Anesthetic</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Steri-Stripping</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sedative Administration</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Tetanus Prophylaxis</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Analgesic Administration</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>X-Rays</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Casting</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Vital Signs</td>
<td>0</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Debridement of Burns/Abrasions</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Dressings</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>22</td>
<td>44</td>
</tr>
</tbody>
</table>
laceration was steri-stripped, described this procedure. Both children who had sedatives administered described getting shots. None of the nine children who had their vital signs (temperature, blood pressure, pulse) taken described having this done to them. Four children had debridement of burns or abrasions performed. Two of these children described this procedure. Finally, nine children had another, miscellaneous procedure performed. Four of these children described what this other procedure was.

Response to the Tool

The children generally complied with the researcher's request for a drawing. (The withdrawals are discussed in the previous section.) Eight of the children (four male and four female) drew pictures depicting the Emergency Room, while three subjects drew pictures of topics other than the Emergency Room. These other topics included a picture of an ambulance, a picture of a girl with a flower, and a picture of a drunk lady in jail.

Two of the subjects were not familiar with the tape recorder. Of these two, one subject withdrew from the study (the girl who was concerned with the visit to her friend). The second child who was not familiar with the tape recorder drew a picture about a girl and a flower, selecting not to draw a picture about the Emergency Room.

1. One subject drew two pictures on the same page.
Her picture was about more pleasant things such as a warm sun, a pretty flower, and a smiling girl, rather than a painful experience in the Emergency Room (see Subject 3, Appendix E). This child was very concerned with the activity of the tape recorder during the production of the picture, watching the tape go around several times while drawing.

With the exception of the boy who withdrew from the study, all of the children were very anxious to hear their stories played back. In several instances it was necessary to stop in the middle of the interview and play back the recording. When other family members (siblings) were present, it often became necessary to allow each of them an opportunity to say something into the tape recorder and hear it played back, before the interview could take place. One subject had to "fight" with her brother in order to tell her story. In this instance the brother had gone to the Emergency Room and had observed the sister's treatment. He kept attempting to fill in the details of his sister's story. He finally had to be asked to leave in order for the interview to continue.

Several of the subjects felt compelled to use each of the different colors of crayons available. Some of the children found it necessary to get their own crayons to draw with in order to fill in for the colors the researcher had removed (white and yellow). A few children were satisfied to comment on the missing crayons, and draw
without them, using other colors in their place. One child said he could make grey, since neither he nor the researcher had a grey crayon, and proceeded to demonstrate the mixing of black and white to produce grey.

One child produced a one color picture (Subject 7). Another child drew herself and her family in one color and the health provider in a different color (Subject 9). Most of the children made the attempt to accurately depict the colors of objects and clothing worn in their pictures.

Interviews were generally conducted in the early part of the evening after the child had dinner. Most of the families indicated that this time of day was one of quiet activity for the child. In this researcher's opinion, this affected the child's performance positively, in that the child was not called in from other play activities to do the researcher's task.

Themes

In this section I will present the various themes which I have identified through the examination of the pictures and stories. These themes are of my own interpretation. Another person examining the data may identify additional or different themes from the ones I have described.

The pictures and the stories can be found in Appendix E. The stories were edited to protect the
confidentiality of the subject, as well as for eliminating narrations by the subject that had no relationship to the study, such as observations of what the siblings in the room were doing.

People

This theme included all of the kinds of people the subjects drew in their pictures and told stories about.

All of the subjects included people in their drawings and stories. Of the ten subjects who completed the interview, all but one of them drew persons who were identified as "me." Most of the subjects stated "that's me" while drawing their pictures. The one subject who failed to identify a "me" in her picture drew an unidentified person on the top of the ambulance.

Six subjects identified doctors, two identified nurses, and four identified non-specific "theys" in the health provider role.

Two subjects were aware of other patients in the Emergency Room.

Other people included in the data were "kids who were running around," a drunk lady, and what I presumed was an ambulance attendant.

Equipment

This theme includes all the different kinds of emergency equipment included in the drawings and stories.
Of the eight children who drew pictures depicting the Emergency Room, all of them included beds in their pictures. These beds were drawn with varying amounts of detail. This included five children who drew wheels on the beds and two who drew them as red wheels (like the ones in the Emergency Room). One child drew side rails on the bed as well as a blanket, one drew a pillow, and one child drew the armboard which can be attached to the bed (see pictures 7, 5, and 8).

Among the other equipment which was identified were a wheel-chair, footstools, chairs, supply carts and tables, and the light used during treatment. One child who drew a particularly detailed drawing included a partition which is drawn for privacy, stating "these are the wrinkles that are on the curtain" meaning the accordion-like folds in the partition (see picture 6). This child also drew oxygen equipment which was identified as "those things which were hanging down." Another subject, who also paid minute attention to details included the acoustic ceiling tiles, which he depicted as white squares with black dots (see picture 8).

Also identified by two children were bottles which contained medicines. Related to emergency equipment was the drawing by one child of an ambulance with the word EMERGENCY drawn on its side (see picture 4).
Activity

The theme of activity includes all references to motion and position in the drawings and stories.

Children identified various kinds of activity in the Emergency Room. Seven of the eight children who depicted the Emergency Room in their drawings, drew themselves lying on the bed, while one child drew herself sitting on the bed. (This child's treatment in the Emergency Room did not require her to lay down.) One child drew herself as having her arms restrained while the doctor was bending over her legs.

One child identified the nurse as closing the partition, while two children recalled turning on the light. Other activities identified included one description of being pushed in a wheel-chair, "I got in the chair and they took me outside." Another child recalled the nurse setting up for suturing, while a third child recalled being assisted in getting on the bed. Lastly, a child identified in her story the nurse blowing up a surgical glove as a balloon.

Procedures

This theme includes all the types of treatments and procedures which the children described.

Six subjects identified getting stitches as one of the procedures which were performed. They described this as
"a little poke thing, and he had some blue thread, and he sewed in and out," "... then it was sewn," "... putting the stitches in," and "... they're sewing my arm."

Three subjects identified having bandages applied, and one subject told how her cactus spines were removed. Two subjects recalled having soaked their cuts in a solution one of them described as "the burning stuff."

Lastly, six subjects identified themselves as getting shots as part of their treatment. This was described as "getting shots," "having the needle put in," and being "poked."

Pain

This theme includes the various descriptions of experiences of pain and painful things which were done to the child.

Six subjects (as I mentioned in the preceding section) identified needles and getting shots. This was viewed as a pain producing experience. Descriptions of getting injections of local anesthetics included "burning," "stinging," and "hurting."

Some of the children commented on whether particular procedures hurt or not, describing how much they cried, or denying that they cried at all.
Exits

This theme refers to the presence of doors, windows, and other references to being outside of the Emergency Room, or leaving the Emergency Room.

Six subjects included some reference to leaving the Emergency Room or being outside in their drawings and stories. Three subjects also described going home or leaving the Emergency Room.

Reason for Going

This theme includes the references the subjects made to the reason why they had to go to the Emergency Room.

Three subjects gave the reason for going. These reasons were falling off a bike, falling into a cactus, and a drunk lady who caused a car accident.

Facial Expression

This theme refers to the expressions on the faces of the people in the picture and descriptions of affect (emotions).

Six children drew faces which were smiling, two children drew faces with frowns or straight lines for mouths, and one child drew a face without any mouth. One child drew pictures of people which were very crude in drawing style. In this picture (see picture 1) it was not possible to determine facial expression. One child
described the faces as being sad because the "car got all smashed up."

**Summary**

In this chapter I have presented the characteristics of the sample, and discussed the subjects' response to the data collection tool. I have also described possible reasons for the withdrawal of two subjects from the study. I have identified and described the various themes which were identified in the data. These themes were: (1) people, (2) equipment, (3) activity, (4) procedures, (5) pain, (6) exits, (7) reason for going, and (8) facial expression. A further discussion of these themes can be found in Chapter 5.
CHAPTER 5

DISCUSSION

In this chapter I will discuss the meanings that each of the themes which were identified in Chapter 4 have. This will be considered in perspective with the review of literature, and the stress of emergency treatment. It will also be considered in the perspective of the child's level of cognitive development.

The interpretations of the data are based on the researcher's own ideas. Another person may interpret these data in a different way, finding different explanations for the phenomena identified. Although drawing tests have been utilized for the purpose of estimating intelligence and for evaluating psychological factors, this researcher has focused the analysis on the content of the data.

In addition to the interpretation of the themes, I will present the reader with the conclusions drawn from the analysis of the data. Finally, the implications of the conclusions and recommendations for further study will be presented.
The Themes

People

The children tended to focus their drawings and stories on themselves. This was to be expected, as children in the intuitive phase are egocentric. Therefore, their focusing their pictures on themselves can be interpreted as a direct reflection of the child's egocentrism (Piaget 1926).

The other major focus of this theme was on health providers. The children pictured doctors, nurses, and other persons who were labeled "they" in care-giving roles. Generally I interpreted these persons as being a threat to the child as they were often drawn larger than the child and were drawn in poses such as bending over the child (see picture 6). One child drew the doctors with square bodies, while drawing himself round (see picture 7). Another child drew herself and her family in one color and the nurse in a different color (see picture 9). Gaffney (1976) noted that children often find that the unfamiliar persons who have assumed care-giving roles are often perceived by the child as threatening, frightening, or authoritative.

Family members I generally identified as a source of comfort to the child in the stressful Emergency Room situation. Resnick and Hergenroeder (1975) identified one
of the major roles played by the parent in the Emergency Room as being a consoler and support giver.

Equipment

Beds were the major focal point of this theme. The subjects drew elaborate details such as side rails and red wheels. Beds assumed positions of prominence in the pictures, often being drawn largest. Children tend to draw those things which are most meaningful in an exaggerated fashion, often drawing them first and largest (DiLeo 1970). Children also tended to draw the bed first in their pictures, even before drawing themselves. In addition to this, the bed was a familiar object in an unfamiliar environment, one which the child could easily identify. Jones and Wakely (1974) identified the phenomenon of children drawing things which were familiar to them as a coping technique which insulated the child in an otherwise unfamiliar environment.

Activity

Associated with the prominence of the bed and the drawings of "me" was the concept of lying still (drawn as lying on the bed). Children tend to perceive things which move as having life and things which are still as being dead (Stichler 1972, Piaget 1926). Inability to move is viewed as a threat to the self and is anxiety provoking. "The usual response to anxiety is increased activity. If the
child is confined to bed he becomes a victim of his fears and fantasies” (Erickson 1965, p. 49).

Procedures

Most of the children were concerned about what was happening to them. They made statements such as "the doctor had my knee with some scissors and a little poke thing and he had some blue thread and he sewed in and out and I had four stitches." Other statements about procedures which were done to the child included "... then I got a shot and they got the cactus things out," "my hand ... it was sewn," and "they're sewing my arm."

Associated with this is what I have interpreted as a "fear of mutilation" as one child described the doctor using scissors when he was supposed to be fixing her knee. This kind of fear was described by Resnick and Hergenroeder (1975) who noted children asking if parts of their bodies were going to be cut off, and other questions relating to what the doctor was doing when they could not see.

Pain

All of the children expressed their concerns about pain and painful procedures. Associated with this was an idea of "bravery" as children remarked "I only cried a little," "it didn't hurt," and "he didn't hurt me."

One of the greatest causes of stress in the Emergency Room is fear of pain and painful procedures (Briggs 1967).
Children expressed this concern through their discussion of the painful procedures such as getting shots which contained medicines that were described as "burning," "stinging," and "hurting." One child remarked that the doctor had warned her that the medicine was going to burn.

Exits

One way of dealing with stress is the removal of the stressor (Mussen et al. 1974). Children seemed to be aware of this concept which they expressed by drawing doors, windows, and through their descriptions of being outside the Emergency Room. In addition to this, they described (perhaps with relief) leaving the Emergency Room: "then I had to leave," "then I left," and "the lady said they were taking us home."

Reason for Going

Three of the children included the reason for going to the Emergency Room in their stories. This helped to set the tone for the rest of the story as the children explained what was done to treat their injuries in their stories. "I fell in the cactus and they took me to the Emergency Room where they said I look like I'm full of cactus . . . then they give me a shot and they took those cactus things out."
Facial Expression

"Hostility is probably the emotion easiest to project into drawings. This may be done by making frown lines, drawing glaring eyes, jutting chins, bared teeth, and sneering lips on the faces of the pictures" (McElhaney 1969, p. 5). People were depicted as frowning in two of the pictures (see pictures 7 and 9). This tended to give the figure either a sad or frightful countenance. In the case of the care-giver this can be related to the perception of care-givers being threatening to the child (Gaffney 1976).

Other Characteristics of the Data

In the pictures attention was paid to minute details. Children were concerned with the accuracy of their pictures as they attempted to include even the right color shirt.

Children also paid close attention to the details of the Emergency Room as they attempted to put in all the equipment they remembered. Erickson (1965) states that children play out their illnesses in minute detail in order to keep their emotions and fears under control.

Several children were concerned that their pictures were correct and marked out, or attempted to rub out areas which they had drawn incorrectly. One child turned the page over, starting again after making several mistakes.
McElhaney (1969) says that the attempts to make the picture correct are indicators of anxiety.

Another feature of the drawings (notably picture 6) is transparency. What the child knows leads him (her) to draw those parts that are invisible to an objective viewer because they are behind an obstacle (DiLeo 1970). A concern of one of the children was his body integrity as he remarked "and I didn't get any blood" meaning that he didn't bleed.

One thing that did not appear in the data was reference to emotions and feelings. Only one child described emotion when describing the sad faces as being because "the car got all smashed." One of the uses of drawing is to determine feelings which otherwise would not be expressed (see Chapter 2). However, in this study emotions were not expressed by the children in their pictures and stories. Reasons for this may be that the children had already worked through the feelings evoked by the emergency experience, or that they did not have adequate amounts of paper to draw their feelings on. It may also be that the researcher interviewed the children before they were able to express their feeling regarding emergency treatment at all. Whatever the real reason, the researcher did not obtain data of this nature.

A final aspect of the data that warrants discussion is the "That's all" phenomenon. This refers to the child
making the researcher aware that the interview is complete or over by stating "That's all" or "I'm finished." I had anticipated that I would be confronted with this phenomenon in all of the children's stories. Interestingly, the "That's all" phenomenon occurred only three times in the data. In two of these cases the health providers were depicted as threatening (my interpretation). In the third case the child had had a difficult time in the Emergency Room, requiring physical restraint and a sedative. Perhaps the "That's all" phenomenon occurs as a defense mechanism by which the story-teller lets the interviewer know that to continue is too stressful for him (her).

Conclusions

From the data presented in the preceding pages considered in perspective of the review of literature the following conclusions can be drawn:

1. Children do communicate to others those things which impress them about emergency treatment through their drawings and stories.

2. Children focus their drawings on themselves. This reflects the egocentrism of the child.

3. Children perceive health providers (doctors and nurses) as threatening and authoritative.

4. Family members are perceived as a source of security.
5. Children identify objects in the Emergency Room which they are familiar with.

6. Children are concerned about what happens to them in the Emergency Room. The focus of these concerns is on pain and painful procedures. They are also concerned about mutilation and intrusions to their body integrity.

7. Children are concerned with their loss of mobility associated with having to lie still while undergoing treatment. This is related to their understanding of death as being something that has no motion.

Implications for Nursing

Children are aware of and concerned about their treatment in the Emergency Room. By studying their expressions as demonstrated in their drawings and stories we can learn their degree of awareness of the situation and their related anxieties. Through this we may better understand and be prepared to help children deal with their concerns and by recognizing those things which bring discomfort and those which provide comfort to the child.

It is important for the child to know what to expect during emergency treatment. Nurses must repeatedly explain and clarify procedures and conditions to eliminate the child's fears and fantasies. The nurse should further
take time to get feedback from the child so that his (her) misinterpretations can be corrected. The child needs to know what is going to be done and what it will feel like. The nurse needs to have a thorough understanding of growth and development in order to know what to expect from the child at any given age and how to respond to his (her) needs.

**Recommendations for Future Study**

This researcher recommends that this study be replicated using:

1. A larger sample of children.
2. Children who represent various cultural groups.
3. Children who represent phases other than the intuitive phase of cognitive development to allow comparisons of the changing perceptions of health care.
4. Larger sized drawing paper.
5. Information on the physical development of the child to allow for comparison with the development of the child as reflected in the drawing.
6. Using the additional strategy of showing the child pictures about the Emergency Room and asking the child to describe what is happening in the picture and the feelings that the picture evokes.
7. Children who have experienced a variety of procedures (such as X-rays, casting, suturing) in order to evaluate and compare the child's perception of emergency treatment as related to the nature and extent of his (her) injury.
CHAPTER 6

SUMMARY

The purpose of this study was to identify the themes that children expressed about emergency treatment. These themes were identified by examination of pictures and stories children produced in response to the question "Draw me a picture about going to the Emergency Room."

Children in the sample included five boys and seven girls between the ages of five years four months and six years ten months. All of these children were in the intuitive phase of cognition development, as identified by Piaget (1926).

The conceptual framework was based on the ideas that emergency treatment was stressful to the child, and that the child was able to communicate about the stressors to another person. The child's ability to communicate was based on his cognitive level, with children in the intuitive phase communicating both verbally and pictorially.

The literature was reviewed to support the child's use of picture drawing, which is a projective technique, as a way of communicating. The literature was further examined to identify the use of this technique by nurses to determine the child's perceptions of health care. This
review of the literature identified a gap in the area of emergency treatment.

Ten of the twelve subjects completed the interview. Their pictures and stories were analyzed to identify the themes. Eight themes were identified. These are: (1) people, (2) equipment, (3) activity, (4) procedures, (5) pain, (6) exits, (7) reason for going, and (8) facial expression.

This review of the data led the researcher to the conclusion that children in the Emergency Room are impressed by the various phases of their treatment and the things that happen to and about them. Children in the intuitive phase do communicate these concerns through their pictures and stories. The children did not reveal their feelings to this researcher through the data collecting technique.

The researcher was not able to make any generalizations regarding the significance of these concerns to the child, or the level of stress caused by some of the objects of the child's concern. The study is further limited by the small number of subjects who participated in the study, and the lack of cross-cultural representation in the data. A final limitation of this study is that generalizations cannot be made to the whole of childhood as only a small portion of the timespan of childhood was examined.

Further study is indicated in order to validate the themes identified by this researcher and to determine if
the concerns of the children in this study are reflections of the concerns of children in general. Finally further study is indicated to ascertain what feelings emergency treatment evokes in the child.
Submitted by: Michelle Atkins, RN
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College of Nursing
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Title: A Child's-Eye View of the Emergency Department

Purpose and Objectives:

The purpose of this study is to learn if the potential and presumable stress of treatment in the Emergency Department is reflected in the drawings and related stories of children.

The researcher will identify those themes that the child expresses in his (her) drawings and stories about being treated in the Emergency Department. (A theme is best described as ideas or concerns that frequently appear in the data. For example, fear of strange people.)

Need for Investigation:

It is now known that hospitalization is a time of stress to the pediatric patient and his (her) family. This subject has been widely discussed in the literature (Petrillo and Sanger, 1972; Dimock, 1960; Robertson, 1970). There is, however, a dearth of information about the effects of emergency treatment (Gaffney, 1976).
By discovering the Child's-Eye View and identifying those things (themes) which most impress the child the researcher will begin to rectify the omission of the Emergency Department as a site of stressful experiences, learn how children can communicate through their drawings and stories about these experiences, and through this begin to give anticipatory care to children treated in the Emergency Department.

Role of Kino Community Hospital:

Kino Community Hospital, and specifically the Emergency Department, is being asked to provide the researcher with access to the population from which a sample will be selected. The Emergency Department at Kino was chosen because of the researcher's familiarity with the department as an employee and because children who have incurred physical injury rather than having urgent medical problems are treated there.

The population will be selected by the researcher's regular perusal of the Emergency Department Log Sheets for possible subjects to be included in the sample. Following this, the researcher will review the Log Copy of the Emergency Record for information to be included on a Procedure Sheet (see Appendix B).

The sample will be selected by meeting the following criteria: (1) the child was treated for physical
injuries which were not the result of suspected child abuse, (2) the child is between ages five and six and one-half years, (3) the child is fluent in English, and (4) the child was released after initial treatment, although followup may be necessary.

Following the selection of potential subjects they will be contacted at home within four days of treatment. The remainder of the study will be conducted outside of Kino Hospital. Furthermore, the researcher will not be identified as a caretaker at Kino, but as a student-researcher.

Reporting of Data:

Strict confidentiality of the subjects' identities will be maintained. A summary of the findings of the study will be available upon request to the Research Committee, Emergency Department personnel, and other interested persons employed by Kino.
APPENDIX B

PROCEDURE SHEET

ID#_____________________

1. Child's Name:_____________________________________________________

2. Child's Age: _____ years _____ months. 3. DOB_______

4. Parent's Name: _________________________________________________

5. Address: _________________________________________________________

_________________________________________ phone:_____________________

7. Chief Complaint: ________________________________________________


9. Procedures performed:

   ___ a. suturing
   ___ b. administration of local anesthetic
   ___ c. steri-stripping
   ___ d. sedative administration

       ___ 1 oral       ___ 2 parenteral
   ___ e. administration tetanus prophylaxis
   ___ f. administration of analgesics

       ___ 1 oral       ___ 2 parenteral
   ___ g. X-rays
h. casting
i. taking of vital signs
j. debridement of burns/abrasions
k. application of dressings
l. other, describe ____________________________

10. Is followup necessary? If yes, where? __________

11. Method of arrival ____________________________

12. Length of time spent in Emergency Department ______

13. Other pertinent information
APPENDIX C

PARENTAL CONSENT FORM

A Child's-Eye View of the Emergency Department

I understand that my child and I are being asked to participate in a study about children in the Emergency Department. Our participation in this study, which will be conducted in our home, is completely voluntary. My child or I may withdraw from this study at any time without jeopardizing our medical care or incurring ill will.

My child will give an implied consent by cooperation with the researcher. Consent will be considered refused or revoked if, at any time, my child does not wish to cooperate with the researcher.

My child will be asked to draw a picture about his (her) visit to the Emergency Department. Any comments my child makes during the drawing will be tape recorded. Following the drawing of the picture the researcher will ask my child to tell a story about his (her) picture. This story will also be tape recorded.

The researcher has advised me that there will be no financial remuneration for our participation in this study which involves giving about two hours of our time, nor is there a cost to us. Our participation in this study will help nurses and doctors have a better understanding of how children think and feel in the Emergency Department so that they may try to make our experiences more pleasant.

I am aware that recalling an unpleasant experience may be difficult for my child and that the researcher is prepared to help both my child and me deal with our feelings. I may feel free to ask the researcher any questions I may have about this study. I also may be present during the interview with my child; although I may not in any way help or instruct my child while he (she) is drawing or telling a story.

The researcher has informed me that the pictures and tape recorded stories will be kept by her indefinitely.
for possible use at a later time. However, under all circumstances, the identity of my child and me will not be revealed. A summary of the findings of this study will be available to me upon request.

"I have read the above Parental Consent Form. The nature, demands, risks, and benefits have been explained to me. I understand that I may ask questions, be present during the interview, and that I and my child are free to withdraw at any time without incurring ill will or jeopardizing my medical care."

(Parent) (Date)

(Witness) (Date)
Interviewer: I would like you to draw me a picture about going to the Emergency Room.

Subject: (Option A) Complies with request for drawing.

(Option B) Asks for further information or states that he (she) does not know how to do a drawing of the Emergency Room.

Interviewer: I am sure you can draw a picture of the Emergency Room. You can draw what you know or what you remember about going.

Subject: (Option A) Complies with request for drawing.

(Option B) Refuses to participate therefore ending interview.

Interviewer: That is a very nice picture which you have drawn. Now I would like you to tell me a story about what is happening in that picture.

Subject: Tells story about picture.

Interviewer: That was a very good story. Thank you very much.
Subject One

I: I would like you to draw me a picture about going to the Emergency Room.

S: (draws picture)

I: That's very good. Can you tell me the story about that picture?

S: That's me. That's the bed. That's the light, and that's the doctor.

I: Is there anything else about your story.

S: No.
Subject Two

I: I would like you to draw me a picture about going to the Emergency Room.

S: It's a bed.

I: Ummm (urges child to continue)

I: Is there anything else in your picture?

S: No.

I: Okay. Can you tell me a story about your picture?

S: They're sewing my hand. Even when they sewed my hand it didn't hurt. I didn't cry even when they gave me a shot.

I: I see. Is there anything else?

S: Last night when I went to sleep and in the morning this (refers to bandage) was breaking and my mommy fixed it. That's all.

I: Thank you for telling me that story.
Picture 3
Subject Three

I: What I would like you to do is draw me a picture about going to the Emergency Room the other day. Do you remember that?

S: Uh huh. (Starts to draw picture.)

S: Mom? Did have some pants on and a shirt? (Giggles. Family members come up and say things in microphones.)

I: Is that all? Can you tell me a story about your picture?

S: That's me and a flower.

I: Anything else?

S: (draws sky and grass)

I: Well, that's nice. Can you tell me a story about going to the Emergency Room?

S: I got stitches.

I: Anything else?

S: Nope.
Subject Four

I: I would like you to draw me a picture about going to the Emergency Room.

S: Okay. I make a little car. Then I make a tire, and another tire, and another tire. How many tires they got.

I: Four tires.

S: Now I make—would you put Emergency on there?

I: I can spell it for you and you can make the letters. Okay?

S: Okay.

I: (spells out Emergency)

I: Is there anything else in your picture?

S: (draws person sitting on ambulance)

I: Can you tell me the story about going to the Emergency Room?

S: Well—I fell in the cactus and I went to Emergency and they said I look like I'm full of cactus. And then I got a shot and they got the things out and I didn't cry alot, but I just cried a little, and then I didn't cry and then I got a balloon.

I: I see. Anything else?

S: And then I got in the chair and I went home.

I: Oh. And what about the things in your picture. Can you tell me about that?

S: Somebody got hurt and they went in there and the men were driving to Emergency and he got in there and they done something what happened to him.

I: Oh. And who is this?

S: Those are butterflys, and this is the sun and this is (something unintelligible about person on ambulance).

I: Well that's very good. Thank you.
Picture 5
Subject Five

I: I would like you to draw me a picture about going to the Emergency Room.

S: I don't know how to draw that.

I: Can you try to draw a picture about what you remember about the Emergency Room?

S: Do I have to use the same color?

I: You can use whatever color you like.

S: Bed—messed up (scratches over part)—green—I don't want green I have brown eyes.

S: I draw funny—I had pants on—and she had brown hair.

S: Do I have to draw my daddy or sister?

I: You can draw your picture however you like.

S: (mutterings)—tch—sigh—(turns paper over)

I: What are you doing now?

S: I'm doing it over (does drawing).

I: Can you tell me a story about the picture you drew?

S: I don't got no hair (draws line) I didn't give anyone no hair but the doctor. That's me. That's my sister. That's the doctor.

I: What's happening in the picture.

S: First they put my finger in the burning stuff. Second they put my finger in something that feels like water but I don't know what it is. Third they put on some brown stuff. Fourth they put on the bandage.

I: And then what happened?

S: Then I had to leave.

I: Anything else?

S: Yeah, they told me it was going to burn.
Subject Five (continued)

I: I see. Did that help?

S: Yeah.
Subject Six

S: There goes my friend on the bike I was riding. I fell off that bike and on the seat was a point and I cut my knee on the seat.

I: I see. Is that why you went to the Emergency Room?

S: Uh huh.

I: Can you draw me a picture about going to the Emergency Room?

S: First I gotta made the bed but how do I put the doctor right there? I gotta put his head right by the bed, like his head's right through the bed. (giggles) First I want to use this (refers to pen) and then I color it. That's his feet. I'll color his hair brown. His hair is supposed to be white but you ain't got no white so I'll color it brown.

There's the doctor, now I gotta make me. My mommy's holding my arms. This ain't the knee, it was the other one. I'm thinking what I was wearing. I think I was wearing a shirt. I'll color it any color. And this is brown. And shorts. Then the light. Then they shut the curtains. These are the rings on the things. Those are the wrinkles on the curtain but I just draw lines.

Now I gotta make mommy. She gots black hair. Mommy's hand, they were white so I will put—there.

I: That's very good. Now--

S: How do you make the things that the medicines are on? It was right there but I don't think I can make it right, you know the one by the wall that they has all the medicines on.

There. The legs are longer. There's a baby. I can't remember the medicines on the other wall where the other door was. You know, not the door with the red sign on it, where I comed in for emergency.

I: I remember that.

S: I gotta put that door right here. Oh yah, I remember what those things are like (draws loops). That's all I can remember.
Subject Six (continued)

I: Okay. Why don't you tell me a story about that picture?

S: There was a nurse holding my feet (I forget to put her) and the doctor had my knee with some scissors and a little poke thing and he had some blue thread and sew in and out and I had four stitches and my mommy's holding my hands and I was kinda crying and when he says does that hurt and I said no then he poked me and I said OUCH and then he says I'm sorry I can't help it and then he sewed and sewed and he put some of that germ stuff on and then they bandage it up and then they put some tape on and then I left.

I: Well, that was very good. Thank you.
Subject Seven

I: The thing I would like you to draw is a picture about going to the Emergency Room.

S: I only saw kids running around.

I: Did you see anything else. Do you remember--

S: There were lots of kids.

I: I see. Do you think a lot of kids go to the Emergency Room?

S: (Nods yes)

I: Well, you remembered something about the Emergency Room; do you remember anything else?

S: It was stinging. It was stinging a little bit.

I: I see. Where was it stinging?

S: (Points to chin)

I: How come?

S: Because when they put the needle to put the stitches in it hurts a little bit. When they put the needle in.

I: Well you remember a lot. Can you draw it now?

S: That's the bed. Those are the kids running around. Do I have to draw the blanket?

I: You put whatever you remember.

S: There were doctors. There were two doctors by the bed. Do I have to draw me too?

I: What you remember.

S: That was the door.

I: Is there anything else? Can you tell me the story about this picture?

S: Here is me laying on the bed. Here are the two doctors and here are all the kids running around.
Subject Seven (continued)

I: I see, and what happened when you were laying down?
S: They put stitches in.
I: Anything else?
S: No.
I: Can I ask you a question?
S: Yes.
I: Were the sides up when you were on the bed?
S: Just one. The doctor was on the other side.
I: I see. Were the kids running in the Emergency Room?
S: No. They were outside where you wait.
I: I see.
S: That's all.
Subject Eight

I: I would like to have you draw me a picture about going to the Emergency Room.

M: You remember something?

S: I remember the color of the door.

I: Well, just draw what you remember.

S: I remember the color of the bed. You don't got not white? I'll go get my white. You got black. I remember the door--the bed was white--it was a big bed like this--now I'm gonna color it white--I remember something else. Did it got legs ma? I didn't see.

M: Yes.

S: Which color was it?

I: I think they are grey.

S: You don't got no grey. I can make grey (makes grey). There's the legs. Looks like a spider. The board, what color was it? Brown--then I'm making blue.

S: You want me to draw myself right there?


S: Which color--black--I'm gonna draw myself brown, Black eyes--

M: What, no hair?

I: Oh, mommy's helping--

S: You said I got big eyes so I'm drawing big eyes--Which color shirt was I wearing? Blue? Stripes? Brown? Purple? I remember they spilled medicine on my shirt. Brown medicine. I'm gonna make my shirt any color. This is my whole body. With stripes. Striping. Now my legs--My legs are brown and I have brown feet. My arm--Oh yeah, the wheels, the wheels!
Subject Eight (continued)

What else do I do? Were the doors brown. The handle was brown too. Did they get a table out here? The table was white?

I: Grey. I'll--

S: I'll just make it black. Do I draw medicine?

S: What was the color of this?

I: What?

S: The roof. Black, white, the holes in the ceiling. There.

I: Terrific. Now tell me a story about this picture.

S: I remember I was coming through the door here and then a doctor say do you think you can climb up on the bed, and I say I couldn't and he climbed me up. And he asked me why I come and I say I cut my hand. And somebody was sitting down right here, that girl, and then it was sewn. Somebody gets some medicine, the doctor or something. Oh yeah. Then he was taking something over there, then I remember I got something for my hand, and then the doctor is sewing me.

I: Anything else?

S: And the doctor he gave me two shots. And he gave me some medicine. Oh yeah, I forgot the medicine. He put some on my shirt. And I don't remember anything else.
Subject Nine

I: I would like you to draw a picture about going to the Emergency Room.

S: First I gotta draw the drunk lady in jail.

S: I gotta make boards and a head.

I: What's that?

S: Oops, That says we.

I: What's that for?

S: That's for all of us.

I: (family is in process of divorce)

I: What's this here?

S: That's my mom. This is me and this is my brother.

B: Where's daddy?

S: He didn't come with us to the hospital.

I: Okay. This is you and your mom and your brother. What's happening in the picture?

S: Mom's on the bed, and I'm sitting on the chair and my brother he was up on the bed but when he comed back from the bathroom he was just sitting on the stool. And we all saw the doctor.

B: Don't forget to make the car.

S: Not in here. That was the lady who said we could go home. Now I need another paper to make what happened in the car.
Subject Ten

I: I would like you to draw me a picture about going to the Emergency Room.

S: Uh huh (draws picture).

I: Have you finished your picture?

S: Yes.

I: Can you tell me the story about going to the Emergency Room?

S: This is my daddy and this is the nurse and this is me. This is the bed I was on. These are the windows, this is the hospital. This is the sun. This is the sky.

I: That's good. Is there anything else about your picture?

S: (Something not picked up by recorder while brother was fighting to get it.) And when he put the stitches in it didn't hurt me.

B: --but at the Emergency Room she started crying when they said have you had stitches and she said Yeeeeees, and started crying I wanna get out of here. She was really scared. She thought it was gonna hurt. She didn't know she was gonna have novacaine. She thought they were gonna put the needle right in it, she started crying. And I saw the nurse with the towel on her head and the bed and the X-ray thing or whatever it was--

S: My brother when he went to the Emergency Room he had to have stitches. I didn't because he was (laughing) and he had to have novacaine but he really didn't cry and I watched TV while he was in the Operating Room.
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