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Nurses' Beliefs and Perceptions about Children in Pain

Patricia A. Gorney
Grand Valley State University

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NURSES BELIEFS AND PERCEPTIONS ABOUT CHILDREN IN PAIN

By

Patricia A. Gorney

Submitted to

Grand Valley State University
in partial fulfillment of the requirements for the
degree of

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Thesis Committee Members

Linda Bond RNC, PhD

Jean T. Martin DNSc, RNC, PNP

Bonnie Cleland, MSW

Abstract

Nurses Beliefs and Perceptions of
Children in Pain

by

Patricia A. Gorney

The purpose of this study was to examine nurse's beliefs and perceptions of children in pain amongst nursing personnel employed in Northwestern Michigan, and to determine if a relationship existed between nursing education, age and years experience in nursing, and the scores on the Beliefs and Perceptions Scale. The sample consisted of 74 registered and licensed practical nurses in the area working in acute and ambulatory settings. Data collected was analyzed using Pearson's Correlational Coefficient. The Roy Adaptation Model served as a framework for the study.

No significant correlation was found to exist between the participant's age, years of nursing experience, and education and scores on the Beliefs and Perceptions Scale. However, all nurses scored relatively high, suggesting a knowledge of the Department of Health and Human Services (DHHS) Guidelines for Pediatric Pain Management.

DEDICATED TO W. JEAN BURGESS, MANAGER OF THE PEDIATRICS UNIT
AT MUNSON MEDICAL CENTER IN TRAVERSE CITY, MICHIGAN

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CHAPTER ONE

Introduction

Children's pain is a subject of much concern to health care professionals. Undermedication of children's pain is a significant problem. As much of the responsibility for relief of pain rests with the nurse, this is indeed an issue of importance to pediatric nurses.

Misconceptions regarding children's pain continue to exist despite the publication of multiple research studies. One significant misconception is that children do not feel pain. This myth has been disproved as the entire anatomic structure for pain perception is in place as early as the twentieth week of gestation. Children remember painful experiences, they just do not have the language to explain it (McCrory, 1991). Neonates can have a generalized response to pain as documented by changes in vital signs (Page & Halvorsen, 1991).

The misconception that pain is not life-threatening, and that it has no long lasting effect on children because they cannot remember it, has also been shown to be untrue by the fact that neonates have changes in vital signs. Painful procedures can cause excessive and prolonged crying which can increase intracranial pressure. Babies in pain may also have

lower oxygen saturations. Children cry and are often fearful at immunization clinics as early as nine months of age suggesting that they remember unpleasant stimuli. Studies have been done on adults which suggest that those who have had more pain in childhood had greater sensitivity to pain and less tolerance for pain as adults (Eland, 1990; McCaffery & Beebe, 1989). Another misconception regarding pain is that, if a child does not express pain or denies pain, then he or she is not having pain. Children often deny pain to avoid unpleasant interventions such as intramuscular injections or bad tasting oral medications (Burokas, 1985). Children do not necessarily realize that they must report pain or ask for pain relief. Even some parents may not know that pain medication needs to be requested and not given routinely as other medications such as antibiotics (Favalaro & Touzel, 1991). Children may effectively distract themselves by sleep or play to withdraw from painful stimuli. This behavior may lead caregivers to believe that children tolerate pain better than adults. Children probably tolerate pain simply because they cannot pursue pain relief as well as adults (Burokas, 1985).

A common misconception shared by nurses is that narcotics are unsafe for use in children due to potential side effects and fear of addiction in older children. In reality narcotics can be used safely in children of all ages. The most dangerous side effect, respiratory depression, can easily be monitored. Also the effects of narcotics can be reversed by

Naloxone. Children show no more potential for addiction to pain medication than do adults (Broome & Slack, 1990).

Many researchers have reported success with objective means of describing and documenting children's perception of pain. These include numerical scales (correlating a higher number to more pain, a lower number to less pain); as well as pain scales using pictures or drawings of faces ranging from smiles to distress or crying in order to illustrate the child's response to pain. Drawings have also been utilized to pinpoint the location of the pain, with colors to indicate the severity. However, these methods though shown to be effective, have certain drawbacks. They necessitate a certain developmental level for successful interpretation. Children must have developed certain verbal skills to respond. Also they are best introduced to children before the pain experience. Unfortunately the nurse assigned to the care of these children at the time of the procedure or injury may not have been in contact with them before the event (Wong & Baker, 1988).

Physiologic data such as blood pressure, pulse, respirations and other cues have been utilized to detect and measure the presence of pain in infants and children. Variance of vital signs, especially elevations in the blood pressure, pulse and respiratory rate may indicate pain and associated anxiety. Behavioral cues, such as crying, excessive sleeping, withdrawal, refusal of food and changes in

mental status may also indicate pain, and are useful to the nurse in the assessment process (Eland, 1990).

Recent advancements provide a wider scope of pharmacologic interventions for the treatment of pain in children. Methods such as Patient Controlled Analgesia (PCA) and epidural analgesia have been adapted for use in children. The use of intravenous medication and more palatable forms of oral medication have been developed, giving the pain management team more choices for use with children (Gureno & Reising, 1991).

However, even though more sophisticated methods of pain management and age appropriate techniques have become available, much of the literature suggests that these are not always used by nurses (Margolius, Hudson & Michel, 1995). Nursing research has been directed at examining the ways nurses decide if, when, and how much medication is given to the child. Historically nurses administered the amount, dosage and kind of pain medication ordered by the physician. At times there were ranges of doses and intervals ordered, the amount and time determined by the assessment of the nurse. Nurses needed an objective method of assessment in order to quantify their rationale for the dosage given. As more nursing research on the subject of children's pain was reported, nurses brought this newly acquired knowledge into practice. The nurse's feelings and perceptions regarding pain in children may have an important role in the assessment of

pain and medication administration practices. The nurse may be influenced by any number of items including the nurse's age, educational background, years of experience working with children, one's own experience of pain, and actual knowledge of interventions employed in the treatment of pain.

Problem Statement

Given the current state of understanding about pain in children, nurses need a better understanding of their own beliefs and perceptions regarding pain in children and insight or understanding about how these beliefs affect pain medication practices. Nurses also need knowledge of research and recommendations regarding current medication practices. This knowledge can facilitate nursing management of the unpleasant, painful stimuli which can lead to healthier outcomes for the child. More information is needed to clarify the knowledge that exists and to bridge the gap between research findings and nursing practice in order to improve the care of children experiencing pain.

Significance to Nursing

Pain in children is an unpleasant stimuli which accompanies a variety of conditions seen by nurses in both ambulatory and acute care settings. The United States Department of Health and Human Services Agency for Health Care Policy and Research (AHCPR) states that the "obligation to

manage pain and relieve a patient's suffering is a crucial element in the health care professional's commitment. The importance of pain management is further increased when one realizes that the patient benefits from early ambulation, shortened hospital stays and reduced costs" (1992, p. 3). Studies have shown that despite an expanded knowledge of assessment techniques, pain management strategies and pharmacologic interventions, children's pain remains under treated (Miller, 1996). Therefore it is crucial for nurses to understand why these methods are not being used. A number of researchers have shown that pain management is strongly influenced by the beliefs and perceptions of the practitioners (Margolius et al, 1995).

Purpose

The purpose of this research was to examine the beliefs and perceptions of nurses regarding pain in children, how these relate to nursing care, and to note if a relationship existed between education, age, or experience in nursing with scores on the Children and Pain survey.

CHAPTER TWO

Theoretical Framework and Literature Review

The Roy Adaptation Model (RAM), specifically the portion of the model which deals with the assessment of the stimuli within the nursing process, provided the theoretical framework for the study. The major premise of this model is that adaptation is necessary for the individual to attain health. Adaptation level is defined as a "changing point that represents the person's ability to respond positively in a situation" (Roy & Andrews, 1991, p.4). Roy views adaptation both as a process and a product (Lutjens, 1991).

The Roy Adaptation Model focuses on the responses of the adaptive system to a constantly changing environment (Fawcett, 1994). In the RAM the nurse first assesses the patient's behaviors, which are responses evoked by stimuli causing an action of the body (Rambo, 1991). These are called first level assessments. The second level assessments are the causes of the behavior.

Adaptation is manifested through four modes: physiologic, self concept, role function, and interdependence. Stimuli influencing one mode can affect all modes because of a neuronal connection between the cognator and regulator systems

of the individual. The cognator system refers to that part of the individual's being which responds to emotions, learning and judgement. The regulator system responds automatically and refers to the physiologic responses. Stimuli that are processed by the cognator system through information processing and perception provide responses that are part of a feedback loop. These responses then become inputs and are fed back to the cognator and the regulator. Therefore, a response in one mode will become an input stimulus that is processed by another mode, linking the cognator and regulator system and affecting the four adaptive modes (Frederickson, Jackson, Strauman & Strauman, 1991). The physiologic responses to pain are increases in blood pressure, pulse, respirations, and the actual discomfort noted by the patient. Pain can also cause changes in self concept needs when discomfort is severe or prolonged. Role function can be altered if the patient cannot work, go to school, or perform usual tasks of daily living. Interdependence needs can be altered as the patient in pain may have difficulty in relationships with significant others and support systems. The goal of nursing is the promotion of adaptation in each of the four modes. The goal of the nurse is to act as an external regulatory force by manipulating stimuli affecting adaptation (Roy & Andrews, 1991). The nurse, by understanding her own beliefs and perceptions about pain, can make more objective assessments and can intervene more effectively.

Roy describes the recipient of nursing care in terms of a holistic, adaptive system (Roy & Andrews 1991). This adaptive system is affected by the world around and within the individual, called the environment, more specifically known as stimuli. There are three types of stimuli: focal, contextual and residual. The focal stimulus is the most immediate stimulus confronting the individual. The contextual stimuli are present in the situation and affect the focal stimulus. For the purpose of this study the focal stimulus is defined as the nurse's perceived nature of the child's pain and the contextual stimulus is the perceived cause of the pain. Residual stimuli are defined as all the environmental factors whose effects are unclear (Roy & Andrews 1991). The nurse may not be aware of the influence of these factors. These are stimuli which include the nurse's intuitive impressions. It is under this category that the nurse's beliefs and perceptions about children in pain tend to play a role in the nursing interventions. This study deals with the residual stimuli and how they affect nursing interventions.

The focal, contextual and residual stimuli combine to make a nurse's adaptation level. Roy defines adaptation level as the nurse's ability to respond to a situation. The nurse and the environment are in constant interaction (Roy & Andrews, 1991). The individual responds to the environment in effective or ineffective responses. Effective responses are viewed as adaptive. The nurse has a responsibility to aid the

patient in changing ineffective responses to effective responses. Effective, or adaptive responses, are more consistent with the health and well being of the patient (Roy & Andrews 1991).

The child, for the purpose of this study is the recipient of nursing care as defined by Roy, but the subject of the study is the nurse. The nurse who has a greater knowledge and understanding of the residual stimuli, which include her beliefs and perceptions about children's pain, may choose more effective nursing interventions and help in the child's effective adaptation.

Theoretical Definitions

Based on the Roy Adaptation Model (RAM), specifically focusing on the assessment phase of the nursing process; theoretical definitions of the variables include:

Focal stimuli- the nurse's perceived nature of the child's pain.

Contextual stimuli- the nurse's perceived causes of the child's pain.

Residual stimuli-the nurse's beliefs about pain in children.

Nursing Interventions-what the nurse does to relieve the child's pain, the assessment of pain modified by the beliefs of the nurse, and how this influences the interventions.

Literature Review

Pain is a concept which is difficult to describe and measure. Various working definitions of pain exist, alluding to the fact that language is the most effective way to describe pain, and that the assessment of pain necessitates subjective data. Since children often lack the ability to describe pain, health care providers often rely on intuitions, previous experience, assumptions, and personal beliefs in order to assess children's pain (Gadish, Gonzales & Hayes, 1988).

Theoretical Review

A review of literature revealed only one study using the Roy Assessment Model which focused on the nurse as the subject. The study by Lynam & Miller (1991) compared mothers' and nurses' perceptions of the needs of pre-term laboring mothers. It used a descriptive/comparative design. The sample consisted of 4 postpartum mothers and 25 registered nurses. The study used the RAM as a framework to assess the first steps of the nursing process, assessment of behaviors and assessment of influencing factors (focal and contextual stimuli). Nurse's behavior was assessed in the four modes: physiologic, self concept, interdependence and role function as it pertained to a laboring pre-term mother. The purpose of the study was to address the mother's self perceived needs during labor, to identify the nurse's perception of these

needs and to examine any differences between the two. Mothers perceived the need to be informed of how their unborn babies were tolerating the labor process more than the nurses perceived this need. Limitations of the study include a small convenience sample size of volunteers, which may have been not representative of a normal distribution. As patient data were collected retrospectively, confusing anxiety regarding neonate condition with the mother's needs may have been a problem. The authors also felt that the instrument needed further validation. The study did, however suggest that the Roy Adaptation Model was very useful in guiding practice for nurses caring for women in pre-term labor. It was concluded by the authors that advances in the care of such women have mainly focused on physical aspects. The RAM directs nurse's attention to unmet psychosocial needs. The authors concluded that the nursing care goals could be more effectively met if the mother's needs were identified by the nurses. This was based on the evidence that if the nurse is aware of the laboring mother's perceived needs, he/she could be more successful in helping the mother to effectively adapt.

Empirical Review

McCrory (1991) summarized a number of studies which focused on children and pain. Research has challenged misconceptions regarding children's pain. These studies have explained various aspects of pain, nursing assessment and management, pain memory and methods of pain control.

In a study by Read (1991), it was found that pediatric patients in the emergency room underwent certain procedures before pain medication was ordered. This study explored the attitudes and practices of 24 nurses and 21 doctors caring for children in an emergency setting to determine whether pain management practice reflected their perceptions. Research done prior to the study found that nursing judgement factors such as knowledge of pain severity, duration of pain, stage of illness, and type of procedure were used by less than one-third of the respondents. A Premedication Questionnaire was administered to the participants asking questions about pain assessment, knowledge about analgesics, and perceptions regarding administration of analgesics in response to vignettes of children in pain. It was found that there was a lack of knowledge in both the nurses and the doctors groups regarding appropriate dosages of pain medications, and that nurses and physicians need a stronger knowledge base regarding pain management practice. Both nurses and doctors felt uncomfortable medicating infants in pain. The nurses reported giving intramuscular medication even if there was an intravenous infusion in place. Physicians ordered oral medications for severe pain or procedures regardless of the fact that an intravenous line was present. Many of the physicians and nurses listed incorrect dosages of pain medication to be administered. The authors listed no limitations to their study. A convenience sample was used for

this study and the sample size was small (n=45).

In a study which reported differences in the perception of pain as reported by nurses caring for pre-verbal infants, Page and Halvorsen (1991), noted that nurses working in non-critical care areas recognized more behavioral cues than their counterparts in critical care areas. The sample consisted of 108 nurses working in NICU, PICU, and general pediatric care units. The study focused on how nurses caring for pre-verbal infants used physiologic cues and their own expectations of painful stimuli to determine interventions. The researchers developed their own instruments for this exploratory study. Nurses who participated in the study were asked to fill out a Likert scale with questions which elicited responses to various statements regarding goals of pain management. Study subjects were also shown a videotape of babies experiencing varying degrees of pain and were asked to judge if the infants were in no, mild, moderate, or severe pain. They found that nurses who attended pain classes administered more doses of medications, possibly explained by fear reduction and increased knowledge of pharmacokinetics. Nurses attending continuing education classes focusing on pediatric pain recognized a greater number of pain behavior cues than did those attending classes more directed to adult needs. The authors listed no limitations to their study.

Multiple studies have been done using objective pain scales to report and manage pain in children (Ellis, 1988;

Savedra, Holzemar, Tesler & Willis, 1993; Villarreal & Denyes, 1991). The authors' findings provided methods to report valid and reliable estimates of children's self reports of pain by using pain scales. Difficulties reported in using these pain scales to quantify the magnitude of pain include the child's lack of cognitive skills. These pain scales provide a unified approach to assessing pain however personal beliefs, backgrounds and cultural influences affect an individual's assessment of pain (McCrory, 1991).

Interdisciplinary pain management programs address all aspects of the problem of pain. Group collaboration between physicians, nurses, social workers and parents assures that the best options for pain intervention are offered to the patient. Studies have shown that intravenous opiates and patient controlled analgesia can be safely used in young children. Gureno and Reisinger (1991) reported better pain relief with combined continuous and intermittent infusions of Morphine. Epidural analgesia is safe and effective for children (McCrory, 1991). Studies such as these provide information to nurses about different approaches to safe pain management to children.

A study comparing parents' and children's perceptions of pain concluded that mothers may be a valuable source of information in assessment (Miller, 1996). The purpose of this study was to compare pain ratings between children, mothers and nurses. Using a descriptive correlational design with a

convenience sample of 20 post operative children, their mothers and their nurses, each participant was asked to rate pain using a 100mm visual analog scale (VAS). There was a more significant relationship between mother and child than nurse and child, suggesting that mothers may be a valuable source of information in assessing their child's pain. It was also felt by the authors that nurses need to educate mothers regarding the importance of their perceptions and to encourage their participation in the child's pain management. Previous research had revealed that nurses had not considered parental input valuable when assessing the pediatric patient (Bradshaw & Zeanah, 1986; Burokas, 1985). Limitations of this study include a small sample size and a convenience sample. Many children were eliminated from the study if they were developmentally delayed, had no mother in attendance post-operatively or did not speak English. The authors suggested that since there were conflicting results with previous findings further research was recommended.

In a study done to examine the relationship between adolescent and nurses' pain ratings and their perceptions of each other's evaluations, only a moderate relationship was found (Favalaro & Touzel, 1990). Twenty-two adolescents and their nurses participated in this ex post facto, correlational, non-experimental study. A visual analog scale was used to rate pain. At 8 hour intervals the patient and nurse were asked to rate the pain and to rate how they

believed the other would rate the pain. (These were done separately so that they would not influence each other). It was concluded that males recorded lower pain ratings than female adolescents. The significance of the findings was that it is more appropriate to accept the subjective reporting of pain rather than the nurse's observations. The limitations of the demographics in this study was that there were very few nurses on the unit with greater than one year of experience. Nurses were not asked to identify any behavioral indications of pain.

In a review article Broome (1990) describes external factors which influence the nurse's decisions to medicate children, the characteristics and behaviors of children in pain and the environment. This article reviewed prior research. The article inferred that nurses need more education and insight into their feelings. This was based on the results of studies that nurses with more experience actually gave less medication, which may reflect a nurse's desensitization to pain after repeated exposure. Broome noted that due to health care reimbursement policies there is little opportunity for nurses to prepare patients for painful procedures and also suggested that nurses need to dispel their fears of addiction and respiratory depression in children following narcotic administration.

A study of 134 nurses from a children's hospital was done to assess nurses' choices to administer analgesics. A

questionnaire and chart review were used. While nurses reported that they would give the analgesic, chart review revealed that only 2% of the patients received all the narcotics that were ordered (Burokas, 1985). The first part of the study consisted of a survey given to nurses which identified their decisions to medicate post-operative patients. The second part consisted of a chart review of 40 pediatric patients who had undergone abdominal or thoracic surgery. The study concluded that pain needs to be assessed and that nurses need to be taught how to do this. This study did not correlate the education level of the nurses with knowledge of pain relief in children. The author reported that nurses need to internalize the priority of pain relief, and to assess pain in developmentally appropriate ways. It was noted that nurses in critical care areas gave less medication than in non-critical areas.

A replication of this study by Gadish, Gonzales & Hayes, (1988) specifically dealt with nurses' feelings and how nurses chose to medicate children in pain. The results indicated that actual practice was not necessarily congruent with self perception. This study used a questionnaire administered to a convenience sample of 38 nurses who worked with children and a chart review of actual medication administration records. The study concluded that nurses with higher levels of education (BSN and MSN) would tend to medicate more often. However nurses with Advanced Degrees were no longer assigned

to patient care. Baccalaureate nurses, however did also choose more medications and higher doses. Nurses were asked specific questions about factors affecting their decisions to medicate by selecting four factors that were most influential in their decision to medicate post-operative pediatric patients. Responses (ranked from greatest number of responses to lowest) were 1) evaluation of vital signs; 2) severity of pain; 3) response to last medication; 4) type of surgery; 5) non-verbal cues; 6) overall condition; 7) days post-op; 8) complications; 9) side effects of drug; 10) weight of patient; 11) age of patient; 12) activity; and 13) parent's insistence. There was a discrepancy between nurses' responses to the vignettes and their selection of factors they claimed influenced their pain medication practices. Respondents believed work experience is most influential, however basic nursing education appeared to be more significant. In this study nurses chose to medicate their patients rather than to select other interventions. A large number (63%) of the nurses surveyed thought it only appropriate to administer medication to relieve as much pain as possible; 5% aimed at complete pain relief; and 23% sought to relieve only as much pain as possible so the child could function. Vital signs and non-verbal cues were recorded as primary tools for the assessment of pain in critical care areas. When non-pharmacologic interventions were employed, least cited were play, distraction and having a parent present. These findings

suggest a gap between research, knowledge and actual nursing practice.

A study done specifically to examine beliefs and perceptions about pain in children and perceptions of the adequacy of pain management found that nursing education correlated positively with beliefs and perceptions of current practice (Margolius, Hudson & Michel, 1995). The study was done as the authors felt there were few studies which addressed these issues and that it is important that health care providers closely examine beliefs related to pain and perceptions of pain management.

The authors devised their own instrument for the study based on the DHHS Guidelines for Acute Pain Management. The items were reviewed by 10 health care professionals. There were 222 respondents comprising the sample. It was found that nurses with more education scored higher in the belief and perception scores, and that these nurses were no longer involved in direct patient care, suggesting a gap between education, research and nursing practice. It was recommended that these nurses provide education to those at the bedside and develop clinical protocols to guide effective pain management in children. The original purpose of this study was to identify nurses' beliefs and perceptions. Finding the correlation between high scores and education was somewhat of a surprise to the authors.

Summary

Studies have shown that children of all ages experience pain and express pain according to their developmental level. Pain assessment is a difficult task and nurses have the primary responsibility to assess and administer appropriate interventions. The perceptions and beliefs of nurses need further exploration to change behaviors to enable them to adequately treat children in pain. The literature revealed that despite a growing knowledge regarding pain management in children, undermedication of children still exists. Further research is needed to explore and describe the feelings of nurses which influence their medication administration practices. This study will add to the body of knowledge regarding nurses' perceptions and feelings about children in pain and help nurses be more objective in their assessment of children experiencing pain.

Research Questions

1. Is there a relationship between the level of nursing education and scores on the Beliefs and Perceptions Scale?
2. Is there a relationship between a nurse's age and scores on the Beliefs and Perceptions Scale?
3. Is there a relationship between years of nursing experience and scores on the Beliefs and Perceptions Scale?
4. What other factors help nurses make decisions about pain management and medication administration?

CHAPTER THREE

METHODOLOGY

Study Design

A descriptive research design was used to examine nurses' perceptions and beliefs regarding pain in children. Data from participating nurses was obtained through the use of a two part questionnaire.

Sample and Setting

The target population for this study was a convenience sample of nurses who work with children in ambulatory or acute care settings in Northwestern Michigan. Nurses were asked to participate in the study through an introductory letter sent to managers of the selected units. Willingness to participate in the study was assumed by their completion of the questionnaires.

Nurses included in the study were employees of a 21 bed general pediatric unit caring for both medical and surgical patients under the age of 16, the post anaesthesia care unit, emergency department, pain clinic, the newborn intensive care unit and outpatient surgery department of a 374 bed acute care hospital. Ambulatory care settings included in the study

consisted of a walk-in urgent care facility and two private pediatric practices in the area.

Sample Characteristics

Seventy-four nurses who participated in the study were asked three demographic questions; highest level of education, age in years and the number of years employed in nursing. (see Table 1).

Table 1

Description of Sample by Age and Years in Nursing (N=72)

Variable	Range	Mean	SD	n
Age of Participant (yrs)	26-61	43.375	6.992	72
Nursing Experience (yrs)	1-47	21.014	9.32	72

Note: Total missing responses = 2

Educational Preparation

The greatest percentage of the respondents were Associate Degree/ Diploma prepared registered nurses. Nurses with higher degrees, (BSN's and MSN's) followed. Registered nurses with degrees in other disciplines who participated in the study were the smallest group. (See Table 2).

Table 2

Description of Sample by Education (N= 73)

	frequency	percent
LPN	4	5.5
ADN/Diploma	37	50.7
Other Bachelors	4	5.5
BSN	19	26
MSN	7	9.6
Other Masters	2	2.7

Note: Total missing responses = 1

Instrument

A questionnaire developed by Francine R. Margolius, Karen A. Hudson and Yvonne Michel at the College of Nursing at the Medical University of South Carolina was used for the study. Permission for use of the questionnaire was granted by Dr. Margolius (see Appendix A). The instrument, titled "Children and Pain Survey," consists of seventeen items (Appendix F). Respondents were asked to quantify their agreement or disagreement with each of the items using a Likert Scale. Ten items refer to perceptions which are defined in the study as "individual viewpoints or impressions about how children in pain are managed by nursing personnel." Seven of the items refer to beliefs which are defined as "pre-existing notions

about children in pain and how pain is experienced or expressed by children in hospital settings." Higher scores indicate stronger agreement with the statement. This scale which was developed by the authors, is based upon the DHHS guidelines for Acute Pain Management of Infants, Children and Adolescents (1992). Construct validity was established through a review of the item pool by ten health professional experts including a pediatrician, a pharmacist, a pediatric nurse practitioner and nursing faculty members who had worked for at least 3-5 years in pediatric settings. The clarity of the items was reviewed by the professionals. Internal reliability for the original study was demonstrated by a Cronbach's alpha = .70 for Beliefs Alignment Scale (10 items) and Cronbach's Alpha = .83 for Perceptions Awareness Scale (7 items). Reliability has been tested in subsequent studies, and was further tested by this study. In this study reliability tested with Cronbach's alpha yielded scores of .6579 for the belief scale and .6767 for the perception scale. The standard of 0.70 for a new instrument and 0.80 for an established one is used in assessing the reliability of an instrument (Talbot, 1995). In the running of the reliability analysis scale of this author's research the alpha would be .7319 if the following item was deleted: "Because of their immature nervous system, children do not need analgesics as often as adults do."

The demographic variables for this study were: age of

participating nurses, number of years employed in nursing and levels of nursing education. Six levels of nursing education were recognized for this study; LPN, ADN/Diploma, other bachelors, BSN, MSN and other Masters. Ten questions pertained to beliefs related to pain and seven questions pertained to perceptions of effective pain management (Appendix B). Higher scores on the belief scale indicate greater alignment with DHHS Pediatric Pain guidelines, and higher scores on the perceptions scale indicate a greater awareness that current practice does not reflect DHHS Pain Guidelines (Margolius, et al 1995). The possible range of scores on the belief scale would be 10-60, for the perception scale 7-42.

Three open ended questions were added by the researcher to determine any free form comments regarding factors influencing nursing interventions, hindrances to pain management in practice and any perceived needs for further education regarding pain management in children. By the addition of open ended questions it was hoped to give an opportunity to the respondents to express any additional feelings or concerns. The topics for the questions were elicited from the original study done by Margolius et al.

Procedure for Data Collection

Letters to the managers of the targeted units were distributed three weeks before the planned start of the study

(Appendix D). These units included a 20 bed in-patient pediatric unit, a post surgical anesthesia unit, a newborn intensive care unit, an out-patient treatment and surgical unit, a walk-in urgent care facility and two ambulatory pediatric practices in northwestern Michigan. A phone call by the researcher followed the letter with a plan for delivery of the questionnaires. The questionnaires were delivered to the units and envelopes were provided for the finished sheets. A pick up date was set for their completion. A cover letter gave a short introduction of the researcher and phone numbers to call for any questions or concerns (Appendix E). Three weeks following the completion of the data collection period letters were sent to the managers of the participating units thanking them and their staffs for their cooperation in the study.

Human Subjects Consideration

Before data collection began, the proposal was submitted to and approved by Grand Valley State University Human Research Review Committee and the study hospital. (See Appendices B and C). Oral permission was received from the office managers at the ambulatory sites. There was no potential risk to the participants in the study. Participation in the study was assumed by the completion of the questionnaire.

CHAPTER FOUR

RESULTS

Data Analysis

The primary purpose of this study was to examine nurses' beliefs and perceptions related to pain in children. The Statistical Package for the Social Sciences (SPSS) was used to analyze the data obtained in this study. Demographic data of the participants (age, years in nursing and education) were correlated to the scores on the beliefs and perceptions scales using Pearson's r correlation. In this study the level of significance was a p value of .05.

Of the 121 surveys distributed, 74 (61%) were returned. Approximately one-half of the registered nurses in the study were ADN/Diploma graduates and the remainder were nurses with higher degrees. There were four LPN's in the study. The majority of the surveyed population was over the age of 35, and two thirds of the respondents had been employed in nursing twenty or more years.

Description of Data

The Children and Pain Survey was the tool used in this study. Scores in the beliefs related to pain and perceptions of

effective pain management were then correlated to the demographic data of the respondents to see if a relationship existed. This instrument consisted of seventeen items. Ten of the items related to beliefs about pain. The possible range of scores in this area was 10-60. The respondent's scores ranged from 22-54 with a mean of 46.343 (SD= 4.996). Higher scores indicate greater alignment with DHHS Pediatric Pain Guidelines (Margolius, 1995). Seven items on the survey represented perceptions of effective pain management. The possible range of scores was 7-42. The respondent's scores ranged from 18-37 with a mean of 27 (SD=4.093). Higher scores on this scale indicate a greater awareness that current practice does not reflect DHHS Pediatric Pain Guidelines (Margolius 1995).

Using the scores tabulated from the Beliefs and Perceptions scales coefficient correlations were run using Pearson's r to see if a relationship existed among the variables. Using the scores on the Beliefs and Perceptions Scale, no significant relationship was shown between the variables of age, years in nursing or education. (See Table 3).

Table 3

Relationship between variables and components of Beliefs and Perceptions Scale

<u>Variable</u>	<u>Beliefs</u>	<u>Perceptions</u>
Age	-.0656 n=65	.0036 n=68
Years in Nursing	-.0606 n=66	.0318 n=69
Education	.1522 n=66	.0405 n=69

Note: Totals do not add up to 74 due to missing data.

Other Findings of Interest

The data were also analyzed using the Mann Whitney U test to determine if any statistically significant differences existed between the education groups. For this test education was compressed into two groups. Group 1 consisted of LPN's and ADN/ Diploma graduates. Group 2 consisted of BSN's and MSN's. There were two items where significant differences did exist. The nurses in the higher education group had higher scores (strongly agreed) that pediatric nurses adequately prepare children for painful procedures, ($Z=-1.66$; $p=.09$), and that pediatric nurses can make a difference in how children cope with painful events ($Z=-2.14$; $p=.03$).

There were three additional open-ended questions to which the participants were asked to respond. Sixty-eight

participants commented on one or more items.

The first question instructed nurses to "list all factors that have had an influence on your nursing interventions related to pain in children." Responses were grouped into two categories; those dealing with nurses and those dealing with the children and/ or their caregivers.

There were several common threads evident in response to the survey. Many respondents demonstrated an unfamiliarity relative to the difference between child dosage versus adult dosage. Many listed experience with children of their own. Another recurring theme was "recollections of personal childhood pain." Several nurses mentioned factors such as: level of education, degree of professional enrichment experiences, depth of professional reading, as well as relative amounts of clinical experience and practice. Several others noted the effectiveness of good communication skills with regards to explaining procedures and interventions in order to decrease anxiety in children and their families. One nurse listed advice from other nurses, ie. listening to older more experienced nurses' "stories about what works and what doesn't." Still others felt that doctors were a good resource for methods of managing pain.

Responses dealing with the child generally included the child's age and developmental level. They also included such factors as physiologic responses (facial expressions, appetite, etc.) as well as the child's personality. Family

dynamics were listed as important, insofar as many nurses wrote that they medicated children upon parental request and relied on the parent's assessment of pain. Many nurses felt that the nature of the pain and the extent of the procedure and diagnosis were important factors in planning interventions.

Nurses from the post anesthesia area wrote of the importance of having parents present as their child emerged from anesthesia. They also stated the importance of such practices as "keeping ahead of the pain" and not letting the child wake up in pain. Most also mentioned having good rapport with the pediatric nurses and being able to give them a detailed report as the child is transferred out of the post anesthesia area.

Those who identified themselves as emergency room nurses stated concern over being "too rushed" to properly assess pain, as well as not being able to see the child for sufficient time in order to evaluate the effectiveness of their interventions. They listed fear/anxiety of parents and/or child as an important factor for pain management in their practice. Many emergency room nurses also felt that ER doctors tended to under medicate pediatric patients. Many felt that it was important to individualize interventions and expressed the notion that they "wished they had more time to properly educate children and their families about pain."

The second question asked, "Are there any issues that

would hinder effective pain management in your practice?" Many respondents answered that "physicians did not order enough medications." Additionally, some responded that when adequate dosages were ordered, "they're not ordered frequently enough." Quite a few nurses felt that there was poor communication between physicians and nurses and that the physicians were skeptical of nurses' assessments of the child's pain. Some nurses wrote, "doctors who don't deal with children exclusively are too conservative" and were apparently "afraid to order more appropriate dosages" of pain medication and didn't want to consult with the nursing staff about a more appropriate dose.

Parental and child's fears were listed as a hinderance to effective pain management, especially when intramuscular pain medication was ordered and the child or parent refused "a shot". One LPN stated that "not being able to give IV meds" was a problem in her practice.

Time constraints were listed as a problem by nurses working in outpatient areas, as well. Those nurses felt that children were not in their care long enough in order for them to assess, teach or evaluate their interventions. One nurse stated concerns about inexperienced pool or float nurses administering medications to children. Other nurses reported anxiety with regards to a variety of factors including: over medication, instability of premature infants, allergies, addiction and respiratory depression. Other themes which

emerged included: lack of communication among personnel, insufficient documentation and lack of consistency in patient assessment due to a variety of nursing personnel dealing with the same patient.

Finally the third question asked, "What do you feel would be helpful to you in your practice regarding pain management in children." Many listed education as being helpful. They felt that in-services, staff discussions, journal articles, presentations of research findings and networking with more knowledgeable nurses and doctors "expert" in the area of pain management would be beneficial. Having physicians who were more willing to accept nurses' assessments and recommendations, and doctors who were more updated about pain in children was listed as being most desirable by some. One nurse stated that it was helpful to be able to "utilize other methods of medication administration such as Patient Controlled Analgesia (PCA), and becoming more comfortable with epidurals in children." Another listed the possibility of having the anesthesiologists give more intra-operative pain medication, allowing the child to wake up with less pain. Some felt that having more guidelines and policies would be helpful to make practices more consistent throughout the institution. Others felt that better documentation and more communication between shifts of nurses was necessary. Having access to pain scales, more orders for IV meds and more staff utilizing anaesthetic creams for blood draws or IV starts were

additional suggestions. One nurse stated that she "would like to have more experience with children and be more comfortable talking at the child's level" while another felt that it would be helpful to be more comfortable calculating dosages. It was further stated that certain areas of the hospital should be made more "kid friendly" to cut down on anxiety for children and parents.

CHAPTER FIVE

Discussion/Limitations/Applications

Relationship of the Findings to the Theoretical Framework

The Roy Adaptation Model for Nursing describes three classes of stimuli that form a person's environment. The focal stimulus is the internal or external stimulus that most confronts the person. The contextual stimuli are all other stimuli present in the situation that contribute to the effect of the focal stimulus. Residual stimuli are environmental factors within or without the person whose effects in the current situation are unclear. By using the category of residual stimuli one has a place to include even uncertain influencing stimuli and the nurse's intuitive impressions (Roy & Andrews, 1991).

In the conceptual framework for this study, the nurses' beliefs and perceptions about children's pain may help to assess the residual stimuli. The findings in this study, (the nurses' scores on the beliefs and perceptions scales), did not significantly correlate with the variables of age, years in nursing or education, and may suggest that reasons for nursing interventions cannot be explained by these factors. The

reason why a nurse would choose one intervention as opposed to another may be the result of multiple factors, some of which may be unclear to the nurse and difficult to quantify.

Discussion of Findings

Seventy-four nurses returned completed questionnaires for analysis. Scores of perceptions and scores of beliefs were correlated with age, years in nursing and educational preparation of the nurse. No statistically significant relationship could be found for any of the variables except, not surprisingly, a significant correlation was found to exist between age and years in nursing.

High scores on the belief scale would suggest greater alignment with the DHHS Pediatric Pain Guidelines. The highest possible score for the scale was 60; (10 questions X 6), (strongly agree). Nurses in this study had a mean score of 46, (S.D.=4.996), indicating a fairly high score, which is interpreted as a good knowledge of the information noted in the DHHS Guidelines. Higher scores on the perceptions scale indicate a greater awareness that current practice does not reflect the information noted in the DHHS guidelines. The highest score possible was 42 (7 questions X 6), (strongly agree). Nurses in this study scored a mean of 27 (S.D.=4.093). These numbers indicate that the nurses somewhat agreed with the statements, or that they felt to some degree that practice somewhat reflects the guidelines.

In the original study done by Dr. Margolius (1995) a

significant correlation was found to exist between the nurses' education and scores on the beliefs and perceptions scales. No correlation was found to exist between years in nursing, years in pediatric nursing or age. This study had a large sample size of 228 participants and was done in a university setting at a pediatric hospital. There was a greater number of nurses in the study with advanced degrees. In the study done by Margolius, 28% of the sample were ADN/Diploma graduates, 43% were BSN's and 11% were MSN's. For this study 51% were ADN/Diploma graduates, 26% were BSN's and 9.6% were MSN's.

Finding no significant correlation between education and scores on the Beliefs Scale, and noting that all of the nurses scored high, one can assume that the nurses all have a fairly good knowledge of the DHHS guidelines.

Many of the same responses from the additional comments section were similar to those noted in the study done by Margolius. The commonality was a need for more education on assessment and pain management in children. It was further noted that nurses and doctors need to collaborate more when managing children's pain.

In the study by Burokas (1985), it was also found that demographic variables had no influence on nurses' decisions to medicate, but that the type of unit where the nurse was employed did. Nurses in intensive care units gave higher doses of narcotics. When nurses were asked to state which

factors affected their decisions to medicate children following surgery, many of the similar responses were noted as in the answers to the additional questions from this study. Burokas listed evaluation of vital signs, response to last medication and overall condition as factors. However these responses were not noted in this study. Factors such as type of surgery, non-verbal cues, type of pain, parent's insistence and the age of the child were listed as reasons to medicate in both studies. In the study by Gadish, et al (1988), which replicated Burokas' study, a significant correlation was found between the nurse's education and decisions to medicate.

Nurse's comments from this current study and previous studies allude to an "uncomfortableness" in medicating young, preverbal infants and children. Many nurses mentioned not being versed in dosages of pain medications and that physicians tend to undermedicate children following surgery.

Utility of the Framework

This study used the Roy Adaptation Model. Six steps have been identified in the nursing process according to Roy (Roy & Andrews, 1990). The assessment of behavior, defined as the actions or reactions under certain circumstances, which for this study, is pain. The primary concern would be the behaviors that are disrupting the person's integrity and not promoting integrity (Fawcett, 1995). The assessment of stimuli then follows. Stimuli are defined as that which provokes a response. The skills used in assessing stimuli are

observation, measurement and interview. The focal stimulus is that which is immediately confronting the person. The contextual stimuli are all other internal or external stimuli evident in the situation. The residual stimuli, which have been the focus of this current study are defined as those having an indeterminate effect on the person's behavior. The nurse has theoretical or experiential knowledge to establish confirmation (Andrews & Roy, 1990). The nurse then can make a nursing diagnosis, set goals, intervene and evaluate nursing care. The framework worked well with this study as it allowed for and helped to explain nurses feelings.

This current study illustrated how nurses' beliefs and perceptions about children in pain are difficult to predict. Demographic variables such as experience, age and education were not predictors on the Beliefs and Perceptions scales. Indeterminate multiple factors, or residual stimuli seem to influence nurses' interventions. This and other previous studies show that personally held beliefs influence decisions about medicating children in pain.

Limitations of the Study

This study was conducted in a Northwestern Michigan city. The sample was recruited from a 354 bed community general hospital and several ambulatory facilities in the area, unlike the original study which was done in a university based children's hospital. Therefore, some of the respondents were not nurses who care only for children. Nurses who worked in

ER, PACU, and Out-Patient Care Areas take care of a wide range of patients. This may have altered their beliefs and perceptions about children's pain or limited their experience with children.

The sample size was moderate, 74 respondents, but had a relatively low percent of Masters Degree prepared nurses (9.6%). This relatively small number, reflective of the community, may also have altered the results.

The survey instrument used in the study demonstrated a reliability level of .6767 for the Perceptions score, and a .6579 for the Beliefs score. In the original study an acceptable level of internal reliability with Cronbach's alpha of .70 for Beliefs and .83 for Perceptions scale was noted (Margolius, et al 1995). This difference could be explained by the relatively small sample and the lower number of MSN's in the study. The findings of this study therefore fail to support the research questions which proposed a relationship between the variables of age, years in nursing, education and scores on the Beliefs and Perceptions scales.

Application to Practice

Although no statistical significance was noted between the variables, all nurses in the study scored relatively high indicating a knowledge of the DHHS Pain Guidelines (1992). The assessment and treatment of pain is a nursing function, the goal of which should be the relief of pain.

One theme noted in the review of literature and also in

this study is that nurses desire more information about pain management in children. However, the literature also suggests that despite the fact that the information exists, nurses do not always bring this knowledge into their practice. Why this occurs still seems to be a personal matter. Nurses who work with children need to learn all they can regarding pain control from research articles, conferences, journal clubs and experienced nurses and doctors. They then need to evaluate their own beliefs and perceptions and sort out those which have no scientific basis. Those intuitions which are helpful and actually provide insight into care can or may help in planning prudent nursing interventions.

All nurses, regardless of educational preparation need to be more aware of research and to help bridge the gap between research and practice. Being actively involved in research in one's institution is important, either by assisting in the collection of data or participating in studies. The AHCPR guidelines need to be read and used in practice. In-service education is important to increase awareness of these guidelines. Nurses should add the use of a standardized pain assessment scale to their practice. Perhaps such comments by nurses such as "too busy, or too rushed" need to be further analyzed and may really mean a sense of discomfort, indicating a need for education.

While this study showed no statistical significance there is clinical significance. In institutions which are not

solely dedicated to the care of children, core groups of nurses who feel competent and have expressed an interest in caring for children can and should be developed. Departments such as the emergency room, recovery room, walk-in clinics need a team of professionals who act as advocates and resource personnel for children's care. Ideally, a multi-disciplinary approach should be taken using physicians, social workers, nurses, laboratory personnel and other ancillary help. As resource personnel this group could help educate other professionals and decrease any uncomfortableness in the caring of children.

Keeping the parent and child together is important. When the child is taken to other departments for studies and tests, the parent needs to be allowed access. This is of importance to both child and parent. If an inter-hospital transport to another facility becomes necessary the parent should be allowed to travel with the child if at all possible. Parents should be allowed and usually want to be more active in the care of their children. As hospital stays are becoming shorter and many illnesses are managed at home, parents need more education in pain management. Parents may need help from nurses, social workers and other members of the health care team to be empowered in the care of their child. This multi-disciplinary approach would be most helpful in achieving this goal.

Further Research

While studies done at large university affiliated medical centers may include more nurses with advanced degrees, the fact remains that children are being cared for in community hospitals, urgent care facilities and in primary care offices. All nurses and physicians need to recognize and assess pain in children, plan care and intervene. Children deserve adequate pain management in any facility, not just those designated as Pediatric Hospitals.

The Children and Pain Survey should be tested further. It could be used in studies to distinguish differences in perception and beliefs of nurses who work in different settings. In this study many nurses identified where they worked but the research questions did not propose any differences between groups of nurses according to the site of employment. Several nurses who did not work in areas solely designated as "Pediatrics" did not feel comfortable answering the items on the survey which began "Pediatric nurses.....". They either commented about this or left these responses blank. This could be altered by changing the wording on the survey or addressing this on the cover letter. Studies could also be done using multiple institutions and comparing the results.

Further research needs to be done using the Roy Adaptation Model where the nurse is the subject of consideration. In the changes which are occurring in health

care today, nurses are being asked to adapt continuously. Research could help nurses adapt in a more effective manner by providing ways to develop interventions.

Summary

This study which explored nurses' beliefs and perceptions of children's pain used the Roy Adaptation Model as a framework. Although no statistical significance was found, clinical significance could be extrapolated from the findings. As was found in previous literature a wide variability exists between health care providers in the assessment and management of pediatric pain. In the application of clinical significance to practice, recommendations were made for areas in health care institutions to form a core of nurses to care for children and to act as advocates for families in non-pediatric areas, such as the emergency room, operating and recovery rooms, etc. This care must also extend to other departments of the hospital such as laboratories and diagnostic centers. All clinical areas need to be aware of the special needs of children and their families.

APPENDICES

Appendix A

August 12, 1996

Dear Pat,

Thank you for your letter and your interest in my questionnaire. As per our phone conversation last Friday, I am writing this letter to give you permission to use it as your research tool for your study, and to have it published with your thesis when the time comes.

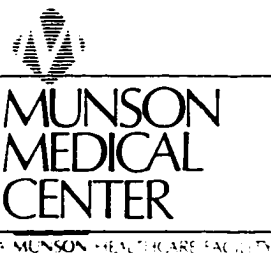
As I said over the phone, we have used the survey many other times since that first study. We have used it in various settings, and I believe it has been a reliable tool. Originally, we had devised it to ascertain beliefs and perceptions which nurses held about children's pain, the link between education and scores on the survey was quite a surprise. I would enjoy hearing about your results when you finish.

I will be away for the next academic year working on a Post Doctoral Fellowship, but I will be phoning the University for any messages if you need to get in touch with me. Good luck with your thesis and your final year of school.

Sincerely,

A black rectangular redaction box covering the signature of Francine R. Margolius.

Francine R. Margolius
College of Nursing
Medical University of South Carolina
Charleston, South Carolina



Appendix B

November 20, 1996

Ms. Pat Gorney
2325 Sandwood
Traverse City, MI 49684

Dear Pat:

Your research proposal has been received. The FDA requirements for review of proposals by the Institutional Review Board are specific. The hospital legal counsel's interpretation of those requirements is that so long as the study is of a survey nature, the information is kept confidential, and that no invasive procedures occur, the IRB may waive its approval requirement.

The IRB has asked me to represent it in determining if the above guidelines are met in proposals submitted by nurses in order to fulfill the requirements of an academic nursing program. I have reviewed your research proposal, "Nurse's Beliefs and Perceptions of Children's Pain", and find that it does meet the above guidelines. You are, therefore, authorized to proceed with your thesis proposal.

Please feel free to contact me should you have questions about this letter, or your conduct of your research in this institution.

Sincerely,

A black rectangular box redacting the signature of Janet Y. Jackson.

Janet Y. Jackson, R.N., M.S.N.
Vice President
Patient Care Services

ctclrb

cc: Ralph Cerny, Chair
Institutional Review Board



Appendix C

1 CAMPUS DRIVE • ALLENDALE MICHIGAN 49401-9403 • 616/895-6611

March 11, 1997

Patricia Gorney
2325 Sandwood
Traverse City, MI 49686

Dear Patricia:

Your proposed project entitled "*Nurses Beliefs and Perceptions About Children in Pain*" has been reviewed. It has been approved as a study which is exempt from the regulations by section 46.101 of the Federal Register 46(16):8336, January 26, 1981.

Sincerely,

A black rectangular box redacting the signature of Paul Huizenga.

Paul Huizenga, Chair
Human Research Review Committee

Appendix D

December 26, 1996

Dear Manager,

I am currently doing my thesis work for the degree of MSN at Grand Valley State University.

I need your help and the help of your staff for data collection. I am exploring nurse's beliefs and perceptions regarding children in pain. The enclosed questionnaire, when filled out, will provide me with that data.

Please have your staff and yourself fill out the enclosed questionnaire and place in the enclosed envelope. I can pick up the finished questionnaires at a later date.

Any questions? Please call me on W-3, 56270, or at home, 947-8871, and leave a message on my answering machine if I'm not available at the time.

Thank you,

Pat Gorney, RNC, BSN

Appendix E

Date

Dear Colleague,

I am currently doing research on nurse's beliefs and perceptions about children in pain. I am asking for your help in the collection of data.

If you would take a few minutes out of your busy day to fill out this attached questionnaire it would be a tremendous help to me.

There are no right or wrong answers--just choose the response which you feel reflects your beliefs and perceptions. There are three questions on the second page for your comments. Next, please check your level of nursing education. Then put the completed questionnaires in the envelope. They will be picked up on by myself. These questionnaires will be used only by myself for my research and will be destroyed following tabulation. No attempt will be made to link you with your answers. If you are interested in the results of this research, or have any other questions, feel free to contact me on Pediatrics, 56270, or at home (616) 947-8871.

Finally, please enjoy the treats I have sent to your department.

Thank you,

Pat Gorney

Appendix F
CHILDREN AND PAIN SURVEY

Pick a value from the scale below that best represents your response to each statement and write that value in the space provided.

1. Strongly Disagree
2. Moderately Disagree
3. Somewhat Disagree
4. Somewhat Agree
5. Moderately Agree
6. Strongly Agree

- _____ Pediatric nurses assess pain appropriate to the development level of the infant/child.
- _____ Pediatric nurses accurately assess the intensity of a child's pain.
- _____ Pediatric nurses adequately prepare children for painful procedures.
- _____ Pediatric nurses adequately prepare parents when their child is having a painful procedure.
- _____ Pediatric nurses use a consistent approach in assessing a child's pain.
- _____ Pediatric nurses document effectiveness of pain management.
- _____ Pediatric nurses choose a pain management tool according to a child's age and development.
- _____ In assessing pain in infants, crying is the only way to know if they're experiencing pain.
- _____ Because of their immature nervous system, children do not need analgesics as often as adults do.
- _____ Children become addicted to narcotics more easily than adults.
- _____ Most likely a child is pain-free if he/she is able to sleep after a painful experience.
- _____ Accurate documentation of pain assessment leads to more effective pain management.
- _____ Children differ widely in their response to painful procedures.
- _____ A child's perception of pain can be influenced by how a pediatric nurse approaches the child.
- _____ Pain assessment is the essential first step to alleviate pain in a child.
- _____ Pediatric nurses can make a difference in how children cope with painful events.
- _____ Pediatric nurses can have a powerful influence on the management of children in pain.

ADDITIONAL QUESTIONS

1. List all factors that have had an influence on your nursing interventions related to pain in children.

2. Are there any issues that would hinder effective pain management in your practice?

3. What do you feel would be helpful to you in your practice regarding pain management in children? (ie, more inservices, etc)

4. What is your highest level of Nursing Education?

_____ LPN

_____ ADN/Diploma

_____ Other Bachelors

_____ BSN

_____ MSN

_____ Other Masters

5. What is your age in years? _____

6. How many years have you been in Nursing? _____

Appendix G

June 20, 1996

Patricia A. Gorney
2325 Sandwood
Traverse City, Michigan
49686

Francine R. Margolius EdD, MSN, RN
College of Nursing
Medical University of South Carolina
Charleston, South Carolina

Dear Dr. Margolius

I am a Masters Student in Nursing at Grand Valley State University in Allendale, Michigan. I am doing my Thesis on nurses' feelings and perceptions regarding children in pain. I am citing your article which appeared in Pediatric Nursing, titled "Beliefs and Perceptions About Children in Pain: A Survey" which was published in the March-April 1995 issue.

I am asking your permission to use your instrument which appeared in the article as "Table 1. Children and Pain Survey". I would also appreciate any further information you could give me regarding this subject.

Thank you for your help regarding this subject.

Patricia A. Gorney RNC, BSN

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