

Knowledge and Attitude Regarding Children's Pain and Perceived Barriers to Optimal Pain Management among Staff Nurses

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ABSTRACT

Pain is one of most common adverse stimuli experienced by children, occurring as a result of injury, illness and necessary medical procedure. So assessment of pain in children is very important. The objectives of the study were to assess the knowledge and attitude of staff nurses regarding children's pain management and the perceived barriers to optimal pain management in children. Also to find out the association of knowledge and attitude with the selected demographic variables. This observational analytical survey study was conducted among 120 staff nurses working in pediatric care units. Subjects were selected by using convenience sampling. Knowledge and attitude was assessed by using a semi structured questionnaire and the perceived barriers were identified by using a structured checklist. Research showed that among 120 study participants more than half of subjects had average knowledge (58.3%) and (41.7%) had poor knowledge whereas majority of the subjects had a neutral attitude (95.8%) and only (4.2%) had negative attitude regarding children's pain management. Among 21 barriers, most frequently reported 5 barriers were identified. Majority of the study participants reported delay in orders being processed by the pharmacy as barrier (89.2%). Rest of the barriers reported were my concern about children becoming tolerant to analgesics (76.7%), delay in orders being processed by the pharmacy (62.5%), my concern about side effects of medications (53.3%) and patient's reluctance to report or rate pain (48.3%). There was no significant association between the knowledge scores and attitude scores with socio personal and professional variables. A nurse's knowledge and attitude can affect his or her ability to adequately provide pediatric pain management. Hence there is an exigent need for assessing the knowledge and attitude towards children's pain management.

Keywords: Children; pain management; nurse's knowledge; attitude; perceived barriers.

BACKGROUND

Pain is defined as an "unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage"¹. It is one of the most common reasons for seeking health care. According to definition by McCaffery "Pain is subjective and that the patient's pain is whatever the patient indicates"².

Pain is one of most common adverse stimuli experienced by children, occurring as a result of injury, illness and necessary medical procedure. It is

associated with increased anxiety, avoidance, somatic symptoms and increased parent distress. The paediatric acute pain experiences involve the interaction of physiological, psychological, behavioural, developmental and situational factors. An important responsibility of nurses who care for children is eliminating pain and suffering when possible however it has been documented that children are often under treated for pain³.

Pain management is a very important aspect of nursing care of the paediatric patient. A nurse's knowledge and attitude can affect his or her ability

to adequately provide paediatric pain management. According to the International Association for the Study of Pain (IASP), Special Interest Group on Pain in Childhood (2005), pain relief is a human right. Pain in children is a subjective experience that “has sensory, emotional, cognitive, and behavioural components that are interrelated with environmental, developmental, socio - cultural, and contextual factors,” and is often considered inadequately assessed and undertreated²⁰. The role of the nurse in pain management encompasses the entire nursing process. The nurse assesses for the presence of pain, plans pharmacological and non-pharmacological pain management strategies with the medical team, implements the plan, and evaluate the effectiveness of the interventions (American Nurses Association [ANA], 2001)⁴.

Today, pain in children is not adequately addressed, and there is a deficiency of knowledge in the treatment of pain in people of different areas of health, such as physicians, nurses, psychologists, and dentists. Medical staff often exhibit widespread and inappropriate attitude towards pain management in children despite the efficacy of a variety of psychological and pharmacological interventions for reductions the pain. A statistically significant proportion (49–64%) of hospitalized children receives inadequate pain management despite the increase in knowledge and available treatments.

OBJECTIVES

To assess the knowledge among staff nurses regarding children’s pain management, to assess the attitude of staff nurses regarding children’s pain management, to assess the perceived barriers to optimal pain management in children, to determine the association of knowledge and attitude with the selected demographic variables.

MATERIALS AND METHOD

Design and Setting

The research design adopted for the study was observational analytical design. The study was conducted at paediatric care units of Malankara Orthodox Syrian Church Medical College Hospital, Kolenchery in Ernakulam district of Kerala state.

Sampling

Sampling is based on non probability convenience sampling. Researcher selected all the staff nurses who met inclusion criteria, during the 4 weeks period of data collection. In this study, sample size consists of 120 staff nurses.

$$\text{Sample size } n = \frac{Z^2(1-\alpha/2) \sigma^2}{\mu d^2}$$

Where, $Z_{(1-\alpha/2)} = 1.96$, σ^2 (SD of previous study) = 4.31

μ (population mean of previous study) = 13

d (precision) = 0.06

Research Instrument

Semi structured questionnaire consists socio demographic data consisted of 6 items including age, sex, religion, professional education , years of experience, previous knowledge regarding children’s pain management. Standardized questionnaire on Nurses knowledge attitude regarding relieving children’s pain (KASRP) (revised on 2014) developed by Betty Ferrell and , RN, PhD, FAAN and Margo McCaffery, RN, MS, FAAN) was the instrument used in this survey to collect data. The KASRP is a self-administered test with 39 items. Of these, 22 are true and false, 17 multiple-choice items. The questionnaire was modified by the researcher according to scenario of the present study and validated with the experts which included 23 knowledge questions and 16 attitude questions. The questionnaire was designed to test nurse’s knowledge and attitude regarding relieving children’s pain and attitudes regarding characteristics of pain management, pharmacology, tolerance, and principles of assessment and management. A checklist was developed by the researcher based on the review to identify the nurse’s perceived barriers to optimal pain management. It consisted of 21 components related to clinical experience, doctor’s orders, barriers related to self.

Data collection technique

Subjects were identified based on inclusion criteria informed consent forms and the patient information sheet was distributed and consent taken from the staff nurses. The staff nurses were assured the anonymity and confidentiality of the information provided by them.

Ethical Aspects

After obtaining ethical clearance from the Institutional Review Board of Malankara Orthodox Syrian Church Medical College Hospital, formal permission was obtained from medical superintendent and the head of the departments of paediatrics .

Statistical Analyses

Both descriptive and inferential statistics were used to analyze the data. Frequency and percentage were calculated to present socio demographic data, professional data, knowledge, attitude and perceived barriers.

RESULTS

Table 1 – Frequency and percentage of level of knowledge of staff nurses n=120

Level of knowledge	Frequency (f)	Percentage (%)
Poor (0-7)	0	0
Average (8-15)	70	58.3
Good (16-23)	50	41.7

Table 1 shows the frequency and percentage of knowledge of staff nurses on children’s pain management. The study findings were estimated that among 120 study participants more than half of subjects had average knowledge (58.3%) and (41.7%) had poor knowledge regarding children’s pain management with mean 14.2 and SD 1.6 .

Table 2 - Frequency and percentage of attitude of staff nurses regarding children’s pain management.

n= 120

Attitude	Frequency (f)	Percentage (%)
Negative (0-5)	5	4.2
Neutral (6-10)	115	95.8
Positive (11-16)	0	0

Table 2 shows the frequency and percentage of attitude of staff nurses on children’s pain management. The study revealed that among 120 study participants majority of the subjects had neutral attitude (95.8%) and

only (4.2%) had negative attitude regarding children’s pain management with mean 8 and SD 2.8 .

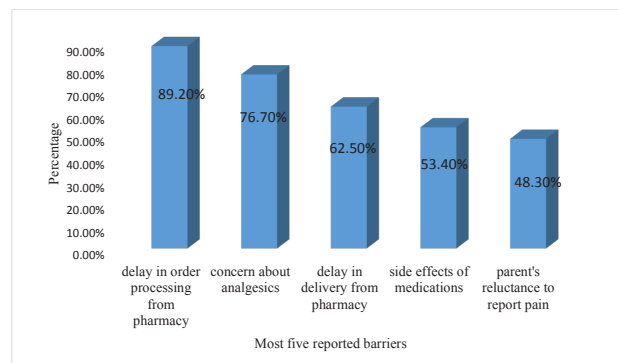


Figure 1 - Bar diagram showing percentage distribution of most five perceived barriers reported by the study participants.

Study participants were asked to identify barriers that prevent them from performing adequate pain management during their clinical practice in hospitals. Among 21 barriers, most frequently reported 5 barriers were identified. Majority of the study participants reported delay in orders being processed by the pharmacy as barrier (89.2%). Rest of the barriers reported were my concern about children becoming tolerant to analgesics (76.7%), delay in orders being processed by the pharmacy (62.5%), my concern about side effects of medications (53.3%) and patient’s or parent’s reluctance to report or rate pain (48.3%). The study concluded that there was no significant association between the knowledge scores and attitude scores with socio personal and professional variables.

DISCUSSION

In the present study the knowledge and attitude of staff nurses assessed using ‘Nurse’s knowledge attitude survey regarding children’s pain management showed that more than half of subjects had average knowledge (58.3%) and (41.7%) had poor knowledge regarding children’s pain management. And majority of the subjects had neutral attitude (95.8%) and only (4.2%) had negative attitude regarding children’s pain management.

A descriptive survey approach was used to assess the knowledge and attitude of staff nurses regarding the assessment and management of pain in children in selected hospital Mangalore. The study results showed that the majority (53%) of the sample had inadequate knowledge regarding assessment and management of pain in children. Majority (77%) of the sample showed

favourable attitude towards assessment and management of pain in children. This study supports the present research project, due to fact that subjects were staff nurses and setting was clinical setting.

Whereas a contradictory study was done as institution based cross-sectional study among 261 nurses in Public Hospitals of Mekelle City from March 15 to April 15, 2015. Out of 251 participants more than half (58.6%) of nurses had adequate knowledge and had good practice 140 (55.8%).

Many studies conducted at various setting showed that staff nurses have inadequate knowledge and positive attitude towards children's pain management.

In the present study, study participants were asked to identify barriers that prevent them from performing adequate pain management during their clinical practice in hospitals. Among 21 barriers, most frequently reported 5 barriers were identified. Majority of the study participants reported delay in orders being processed by the pharmacy as barrier (89.2%). Rest of the barriers reported were my concern about children becoming tolerant to analgesics (76.7%), delay in orders being processed by the pharmacy (62.5%), my concern about side effects of medications (53.3%) and patient's reluctance to report or rate pain (48.3%).

In a similar study, describes strategies used by the Joint Clinical Practice Council of Children's Hospital of Wisconsin to identify barriers perceived as interfering with nurses' ability to provide optimal pain management. The five most significant barriers identified were insufficient physician (MD) orders, insufficient MD orders before procedures, insufficient time to pre-medicate patients before procedures, the perception of a low priority given to pain management by medical staff, and parents' reluctance to have children receive pain medication.

Present study revealed that there was no significant association between the knowledge scores and attitude scores with socio personal and professional variables like age gender ,professional education, years of experience , previous knowledge and source of information.

A study measured the knowledge and attitude of Finnish paediatric nurses to children in pain and the connection between nurses' attitudes, nurses' attributes and nurses' own view of their knowledge and ability to take care of children in pain. The findings showed that

such attributes as nurses' age, education, and experience, place of work and field of expertise do not have a significant effect on nurses' knowledge and attitudes.

Whereas a descriptive survey approach was used to assess the knowledge and attitude of staff nurses regarding the assessment and management of pain in children in selected hospital Mangalore. The study results showed that there was a significant association between knowledge with the selected demographic variables and the attitude with the selected variables. There was also a significant correlation between the knowledge and attitude of the staff nurses regarding assessment and management of pain in children.

CONCLUSION

Pain management is a very important aspect of nursing care of the paediatric patient. A nurse's knowledge and attitude can affect his or her ability to adequately provide paediatric pain management. The findings of the research study showed that the nurse's have inadequate knowledge regarding children's pain management but have a neutral attitude towards it. The study signifies the need of continuing education . Hence there is an necessitous need for assessing the knowledge and attitude of staff nurses regarding children's pain management.

Conflict of Interest - Nil

Statement of informed consent – Informed consent was obtained from all the samples for being included in the study.

Source of Funding – Self

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