

## Sample Analysis, Synthesis, & Response Paper II

### Raising Awareness of Pain in the Pediatric Population

By: Alisha J. Middel

Could you imagine having open heart surgery and receiving only a single dose of Tylenol to treat your pain? I witnessed this exact situation in my pediatric clinical alternate week experience in the pediatric intensive care unit (PICU).<sup>1</sup> In my mind this would cause so much distress and unnecessary suffering for a patient, especially in one who cannot communicate his/her suffering. This particular six-week old lay in his bed under the warmer with lines coming out of virtually every orifice of his little body. Hours ago he had just had open-heart surgery so the doctors would band his pulmonary arteries to stop excess blood from shunting into his lungs from a very large atrial-ventricular canal heart defect. This baby was very unstable. His vital signs wavered all over the place. I could see him trying to wake up and his heart rate would sky rocket into the one-hundred-sixties to one-hundred-eighties. I saw no attempt to assess his pain by a nurse using any objective data or pain scale in the six hours I was with him. Looking back in his chart at the end of my shift, he had only been given one dose of Tylenol within the twelve hours he was in the PICU. Even though he could not communicate his pain verbally, he was inevitably in some pain due to undergoing such an invasive procedure.

*1: Good choice of topic and use of opening line to capture the reader's attention.*

This situation impacted me and I desperately wanted to learn more about the pain management in the pediatric population. The areas I want to focus on in raising awareness of pediatric pain consist of looking at pain from a nursing perspective, while understanding the impact of pain, pain assessment, and pain management.<sup>2</sup>

*2: Very specific about the focus of the paper.*

#### Pain Impact

##### *Pain Physiology*

It used to be thought that because children and neonates had immature nervous systems, it meant that they could not experience or remember pain the same way adults do.<sup>3</sup> This is not true.<sup>4</sup> It has been found that pain pathways in the peripheral and central structures develop early in fetal life, usually between the first and second trimesters (Snidvongs, Nagaratnam & Stephens, 2008). Reflex responses to somatic stimuli can be seen as early as eight weeks gestation. However, complex synapses in the dorsal horn of the spinal cord, inhibitory pathways, and cortical connections fail to develop until early in the neonatal period (Mackenzie et al., 2006). Just because pediatric patients may not be able to communicate pain the same way as adults, does not mean they do not experience it. Even with all of our advancements and research in the study of pain management, "children continue to suffer unnecessary pain while in the hospital" (Ellis et al., 2007, p. 264). So the question lies not in the fact that children of all ages experience pain, but what can we, as nurses, do to end the anguish children face as a result of their unmanaged pain?

*3: Awkward phrasing. Try rewording to: "Past research has indicated that because children and neonates . . ."*

*4: Good use of short and long sentences.*

*Note: The first time you mention a group of authors, you must list all of their names.*

## Implications of Unmanaged Pain

Inadequate pain management in children is still a problem we face today.<sup>5</sup> Unmanaged pain can have detrimental effects on children both physically and psychologically, leading to chronic health issues (Garland & Kenny, 2006).<sup>6</sup> “Preventing pain is not only humane, it can also reduce the risk of subsequent morbidity” (Mackenzie et al., 2006, p. 4). Some physical consequences that may happen are that children have delayed healing and become sensitized to pain. Pain can often turn on many physical, biochemical, and cellular processes that change a child’s future response to pain, causing a lower pain threshold (Mackenzie et al, 2006). Other physical responses like an increased heart rate, blood pressure, and intracranial pressure, along with decreases in oxygen saturation and skin blood flow have been indicators of unmanaged pain (Hockenberry & Wilson, 2007).

There are also many psychological consequences of unmanaged pain in children.<sup>7</sup> They may feel helpless, anxious, irritable, or depressed. Under such stress, their coping mechanisms become less effective or undermined. Children can show signs of post-traumatic stress disorder and develop significant fears towards any type of healthcare (Mackenzie et al., 2006). Some other potential long-term consequences of untreated pain in infants consist of psychosocial problems, neurobehavioral disorders, poor adaptive behavior, attention deficits, learning deficits, and emotional temperament changes (Hockenberry & Wilson, 2007).<sup>8</sup>

### Pain Assessment

#### Behavioral and Physiological Measures of Pain

<sup>9</sup>“Pain assessment is a vital first step in managing pain in children” (Garland & Kenny, 2006, p. 18). Subjective and objective data should be used when a nurse assesses a patient’s pain. Different assessment tools should be used for different ages in children. Three suitable pain assessment tools available to nurses today are the FLACC scale, FACES scale, and numeric scale. The FLACC scale assesses behavioral pain indicators in children from two months to seven years. It assesses a child’s facial expression, leg movement, activity level, cry, and consol- ability. Each category is ranked from zero to ten points. A score of zero means the child is experiencing no pain and a score of ten means the child is experiencing the worst pain imaginable.

The FACES scale is a subjective scale and can be used for children as young as three-years-old and provides three scales in one: facial expressions, numbers, and words. It consists of six cartoon faces ranging from smiling (“0” or “no hurt”) to tearful (“5 or 10” or “hurts the worst”). The child can be instructed to simply point at a face that represents how they are feeling or if needed can be told what each face means individually.

Lastly, the numeric scale is subjective and can be used for children as young as five who have a good grasp on numbers. The nurse instructs the child that a “zero” means no pain and a “ten” represents the worst pain imaginable. If easier, a nurse can have the child report on a zero to five score (Hockenberry & Wilson, 2007). Even though this is subjective in nature, it is still important for the nurse to assess the child’s behavior. You know you have a problem when a child rates his or her pain in a “ten” while smiling and playing video games.<sup>10</sup>

#### Challenges

Some of the challenges that come with assessment tools are that often nurses do not use the tools consistently and “only one-third (of nurses) used the pain assessment scale that their hospital had recommended” (Griffin, Polit, & Byrne, 2008, p. 297). In the research article, “Implementing Best Practice Pain Management in a Pediatric Hospital”, a comprehensive pain management program (CPMP) was developed to try and fix these practice gaps.<sup>11</sup> The things that were addressed were the

5: Good transition.

6: Introduce your quote using a signal phrase for easier transition and flow.

7: Using the word “also” ties this paragraph and the previous paragraph together.

8: Effective summary of physiological and psychological responses to pain.

9: Consider introducing your quote.

Note: Try to refrain from using the third person “you.”

10: You described three good tools to use in pain assessment of a child.

11: You don’t need to use the name of the article, just the author’s last name.

inconsistencies in pain assessment, how it was managed, discrepancies in documenting, and lack of “standards” for treating the pain (Ellis et al., 2007). This fact of “variability in practice” was evidenced in this study. “Some nurses used pain scales routinely and recorded and repeated the information to colleagues, whereas other nurses had not incorporated pain scales into their practice” (Ellis et al., p. 272). Information from the nurses who implemented the CPMP found that lack of communication and inconsistencies between how nurses assessed pain were the biggest barriers in children obtaining proper treatment.<sup>12</sup>

*12: Good follow-up to give reasons why nurses don't assess pain using the tools.*

## Pain Management

### *Non-pharmacological Management*

Non-pharmacological treatment for pain in children can help decrease their fear, anxiety, and stress that can be associated with pain. It is not meant to replace pharmacological treatment but be a supplement to it. Some of the techniques used for children are distraction, relaxation, guided imagery, and positive self-talk (Hockenberry & Wilson, 2007). One role important to the treatment of children that uses these techniques is that of the Child Life Specialist.<sup>13</sup> “Child life is a non-medical, therapeutic service designed to address the psychological, social, and intellectual needs of pediatric patients” (Bandstra et al., 2009, p. 321). The big role that child life can play is in preparing the child with information and medical play, so they are informed and know what to expect, thus reducing stress. They also use techniques, such as comfort positioning in painful procedures, so that the child does not have to be restrained. This gives the child some sense of control. Other effective techniques they use are positive reinforcement, progressive muscle relaxation, and distraction through play or virtual reality (Bandstra et al.).<sup>14</sup>

*13: You might consider using a colon here. This allows the first sentence to function as an introductory sentence to your use of the quote.*

### *Pharmacological Management*

Before any pharmacological pain management is used in children, a thorough health history and physical assessment is necessary. Nurses need to pay particular attention to their vital signs, especially cardio-respiratory status, level of consciousness, airway patency, allergies, weight, and any other contraindication to the medication that may be administered (Mackenzie et al., 2006). No one type, dose, or route of pain medication is used universally to treat a child's pain. It all depends on their age and weight, level of pain, medical diagnosis, and a host of other variables. The goal is to recognize the pain and administer safe and effective medication accordingly, so the child does not suffer unnecessarily.

*14: Thorough discussion of non-pharmacological and pharmacological management of pain.*

## Conclusion

### *Nursing Implications*

“Successful pain management in children involves the recognition and assessment of pain followed by safe and appropriate treatment” (Snidvongs et al., 2008, p. 213).<sup>15</sup> There are so many barriers that we, as nurses, have yet to overcome. Some barriers I recognized are that we need to get over the misconception that children do not have pain or will not remember it, the under use of pain assessment tools, and a lack of recognized standards for pain relief (Mackenzie et al., 2006).<sup>16</sup> Children are humans and we need to treat them with respect, which means allowing them pain relief when needed. It is our duty as nurses to advocate for them and do our best so that they do not suffer unnecessarily.

*15: Consider an introductory phrase at the beginning of this sentence such as: According to Snidvongs et al. (2008), “Successful . . .”*

*16: Awkward wording in this section. You could use a more parallel structure.*

### *Personal View*

My opinion on this issue of unmanaged pain in children is that nurses are

obligated both clinically, morally, and ethically to do all in our power to relieve pain and distress in children. I also believe parents should be actively involved in their child's care. They often know the children better than we do and can tell us when "something may not be right." Some things that I want to implement in my practice in pediatrics are adopting a "child-centered approach, rather than a procedure-focused approach" (Mackenzie et al., 2006, p. 1). I also want to use pain assessment routinely and consistently; and use both pharmacological and non-pharmacological management of my patient's pain. I have chosen nursing as a career to be the best advocate for my patients and do for them what I would want done for my son or daughter.<sup>17</sup>

**Note to Student:**

Good job on this paper Alisha. I can tell you've given this topic some thought and researched it well. You've focused the paper on what the problem is and how nurses can improve their treatment of pain in children. The paper flows well with good transitions and use of headings to help organize your content. You used APA fairly well with only a few issues and a few problems with grammar, spelling, and punctuation.

*17: Strong ending listing your own views on the topic and what you plan to do in your own career.*

## References

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Note: See page 199 in the Publication Manual of the American Psychological Association (6th ed.) for information on a reference with up to seven authors.

Note: See page 198 in the Publication Manual of the American Psychological Association (6th ed.) for information on a reference with more than seven authors.