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*Nurses' attitudes and approaches
toward invasive procedural pain
management in children*



Nurses' attitudes and approaches to management of invasive procedural pain



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Introduction

- Pain associated with invasive procedures are usually not managed effectively in children (Czarnecki et al., 2011)
- Chronic ache (Baulch, 2010; Sinatra, 2010)
- Impaired brain development in children (Brummelte et al., 2012)
- Anxiety, fear (Curtis, Wingert, & Ali, 2012)
- Health-seeking behaviour of children (Morgan, 2014).
- Affects satisfaction with the care which enhances the nurse-patient relationship (Kozlowski et al., 2014)

Pain management approaches

- Pharmacological remedies such as acetaminophen, opioids, anxiolytics, and sedatives (Czarnecki et al., 2011).
- Local anaesthetics (Pasero, Polomano, Portenoy, & McCaffery, 2011) in a form of mixtures, vapocoolant sprays and gels (Bice et al., 2014; Curtis, Wingert & Ali, 2012)
- Non-pharmacological remedies include suggestion therapy (Taddio et al., 2010) and distraction (Stinson, Yamada, Dickson, Lamba, & Stevens, 2008; Tufekci, Celebioglu, & Kucukoglu, 2008; Uman, Chambers, McGrath, & Kisely, 2008)
- Non-nutritive sucking in older infants and toddlers (Curtis et al., 2012)
- Oral sweet solutions (Joung & Cho, 2010)

Attitudes towards pain management

- Neonates as young as 28 weeks can perceive more pain (Akuma & Jordan, 2012).
- Topical medications and support from nurses led to a reduction in distress in children to the barest minimum (McCarthy et al., 2013)
- Nurses are ready to advocate for the patient even to the point of losing their license (Morgan, 2014)
- Nurses express empathy for children during the preparation and process of painful invasive procedures (Lloyd, Law, Heard, & Kroese, 2008)

Attitudes towards pain management

- Inadequate procedural pain management may result from attitudes and beliefs (Bice, Gunther & Wyatt., 2014)
- Knowledge gap and the fear of addiction to analgesics (Aziato & Adejumo, 2014a)
- Applying creams and utilizing the waiting time (Taddio et al., 2010)
- Low collaboration between nurses and physicians (Latimer et al., 2009)
- Disagreement on the approach to managing pain (Czarnecki et al., 2014)
- Few nurses provide pain care during painful procedures (Latimer, Johnson, Ritchie, Clarke & Galin, 2009)

Attitudes towards pain management

- Pain is seen as a normal phenomenon (Machintosh-Franklin, 2014)
- Children should be able to withstand some forms of pain (Lui, So & Fong, 2008)
- Children exaggerate pain even when the procedure is less painful (Twycross & Collins, 2013)
- Painful procedures last for a brief period (Nimbalkar, Dongara, Phatak, & Nimbalkar, 2014; Verghese & Hannallah, 2010)
- Excuses such as lack of pain assessment tools and flowchart for pain medications (Twycross & Collins, 2013).
- Aim to explore approaches and attitudes of nurses towards procedural pain management in children who are admitted to healthcare facilities

Methods

Design - qualitative exploratory descriptive design (Creswell, 2014)

Setting - paediatric department of Regional Hospital, Koforidua, Eastern Ghana

Population - All professional nurses working in the paediatric unit for at least six months

Sample: 14+2 nurses (saturation)

Data collection tool and Procedure - semi-structured interview guide was used to conduct a face-to-face interview

Ethical Consideration - Ethical approval (NMIMR-IRB CPN 095/13-14)

Data analysis –thematic content analysis

Results - Demographics

- Sixteen participants comprising nurses, midwives and a paediatric nurse working in the paediatric unit participated in the study.
- Thirteen (13) were females with age range from 21 to 59 year
- Seven (7) participants had worked for 1-5 years while the rest had worked between 11 – 25 years
- Only two had worked less than a year
- Majority (10) of the participants were married
- Most (8) of the participants were Akans, others such as Ewes, Krobos, Ga/Adagme and Guan ethnic groups.
- All participants were Ghanaians and Christians.

Positive attitudes towards pain

Effective pain - **reduction** in pain, procedure **easier** to perform, and create a **cordial relationship** - child, mother and nurses on the ward;

“As we are entering the vein, we are piercing the skin so by all means the child will feel the pain so we should do something about it” – N11

Positive attitudes towards pain

“If you give something that would prevent the child from being exposed to the pain during the invasive procedure, it will lessen the pain that will be inflicted before the procedure is done” – N16

“My role is to make sure that the pain is relieved at long last so whatever I have to do to relieve the pain within my means, I will have to do it” – N6

Negative attitude towards pain

Nurses avoid using medications to manage procedural pain due to **exaggeration of pain, fear of addictions and time constraints;**

“At times, when some of the children see that their mothers are present, they exaggerate and cry” – N1

“If the medications are not available, I will not do anything” – N13

“If you have to wait for 30 to 45 minutes before you can do the procedure, only few out of 10 nurses may be willing to wait for such a long time” – N8

Negative attitude towards pain

- *“Sometimes, the things may be available but the nurse may not give because of fear of addiction so while the doctor has prescribed the medication, the nurse won't give” – N7*

Non-pharmacological approaches

Non-pharmacological approaches were mostly used which include psychological, use of diversional strategies and parental involvement;

- *“At times, we create some jokes just to entertain them and divert their attention from the procedure” – N7*
- *“Sometimes we say sorry to the child during the painful procedure” – N13*

Non-pharmacological approaches

- *“We have toys and rattles that we give to the children to play with during the procedure” – N11*
- *“Mothers volunteer to help the nurse by holding the baby and talking to him or her so the nurse could do the procedure” – N4*

Pharmacological approaches

- Pharmacological management of invasive procedural pain in the hospital was rare due to fear of addiction;
- *“Seriously I have been here for a year now but I have not seen any patient being given premedication prior to an invasive procedure, no not one” – N16*
- *“Sometimes, the things may be available but the nurse may not give because of fear of addiction so while the doctor has prescribed the medication, the nurse won’t give” – N7*

Discussion

- Distraction- **singing, offering gifts** (ice cream, toffees, and sweet drinks), use of toys, balloons, and cartoons which were provided by the staff and the hospital (Stinson, Yamada, Dickson, Lamda, & Stevens, 2008; Tufekci et al., 2008; Uman et al., 2008)
- **Parental involvement** during painful procedures helped the children to calm down before, during and after the procedures (Taddio et al., 2010).
- Pain medications were rarely used due to non availability (Bice et al., 2014)
- Nurses expressed positive attitudes as they **placed value** on pain management (Aziato & Adejumo, 2014a; Morgan, 2014)
- Effective invasive procedural pain management helped to **reduce stress and aggression** (Taddio et al., 2009)

Discussion

- Enhanced cordial relationship between the nurse and the children (Kozlowski et al., 2014)
- Empathy for the children during the procedures (Lloyd et al., 2008)
- Pain management not warranted in invasive procedures (Machintosh-Franklin, 2014)
- Topical medications could cause life-threatening complications among children (Nimbalkar et al., 2014; Verghese & Hannallah, 2010)
- The use topical medications for the management of procedural pain within a duration that will not be time consuming (Taddio et al., 2010)
- It is therefore evident that management of invasive procedural pain in children was not a priority to some nurses

Conclusion

- Invasive procedural pain was common in the paediatric unit
- Non-pharmacological approach was commonly used while pharmacological approaches were rarely utilized
- Educational training to motivating nurses' invasive procedural pain in children on admission in healthcare facilities
- Policies and guidelines could be provided so nurses and other health care professionals can manage invasive procedural pain effectively
- Incorporate pain management course in the curriculum of nursing institutions

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