Parental involvement in their children’s postoperative pain management in hospital

Recommendations

- Parental roles in their child’s postoperative pain management should be clearly defined by healthcare staff. Parents should be educated on the different methods, including non-pharmacological methods, for relieving their child’s postoperative pain and they should be encouraged to actively participate in their child’s care. Parental efforts should be acknowledged to encourage a partnership between nurses and parents for effective pain management for the child. (Grade B)

- Parents may require more in-depth information on their child’s pain and pain management regimen in the hospital, including the use of morphine pumps, effects and side effects of morphine and other available pain medications. (Grade B)

- Pain-related instructions can be provided at different times during the child’s hospitalization to prevent parents from feeling overwhelmed with all the information received at one time. (Grade B)

- Nurses who are caring for children post-operatively should be equipped with a comprehensive knowledge of pain management, in order to assist parents to participate in their child’s care. (Grade B)

- Nurses can provide support for parents by the recognition and anticipation of common feelings experienced by parents such as concern, fear, and depression. Enabling parents to share their feelings can assist with parent’s coping. (Grade B)

Information Source

This Best Practice Information Sheet has been derived from a systematic review published in 2011 in the JBI Database of Systematic Reviews and Implementation Reports. The systematic review report is available from the Joanna Briggs Institute (www.joannabriggs.org).

Background

Increasingly, parents are encouraged to be more involved in the care of their child while in hospital. Effective pain management relies mainly on the accurate assessment of the child’s individual responses and behavior. Healthcare staff may not be familiar with the child due to the short length of stay in hospital. Therefore, parents have a significant role in knowing their child’s unique behavior, and can help in the effective and accurate pain assessment and management for their child.

There are noteworthy benefits of parental participation in their child’s pain management for both the child and the parents. These include a positive effect on the emotional well-being of the child, as well as an impact on the child’s anxiety and pain levels, sleeping patterns and post-operative outcomes.

Grades of Recommendation

These Grades of Recommendation have been based on the JBI-developed 2006 Grades of Effectiveness1

- Grade A Strong support that merits application
- Grade B Moderate support that warrants consideration of application
- Grade C Not supported
Objectives

The purpose of this Best Practice Information Sheet is to present the best available evidence regarding the involvement of parents in their child’s postoperative pain management in the hospital setting. In-depth understanding of the research in this area will be beneficial to clinical practice to help improve the guidance provided to parents by healthcare staff concerning interventions for pain alleviation in their children in the hospital setting. This will provide parents with well-defined roles in the hospital and increased confidence to play a role in the management of their child’s post-operative pain.

Types of Intervention/Phenomena of interest

The quantitative interventions of interest included parental interventions in alleviating their child’s post-operative pain, as well as factors influencing their participation.

The source review for this Best Practice sheet also considered qualitative studies that included the following phenomena of interest: the involvement and experience of parents in managing their children’s post-operative pain.

Quality of the research

Both the qualitative and quantitative studies included in this review were assessed critically during the appraisal process using standardized tools. The included studies obtained met the criteria outlined by JBI and were considered of high quality to be included in the review.

The included qualitative studies in the review were closely related to the review topic, there was a great degree of congruity between the research methodology, research objectives, and the representation and analysis of data.

Conclusions drawn in the qualitative research studies had an apparent flow from the interpretation of the data. The quantitative studies had clearly defined inclusion criteria of the sample and appropriate statistical analysis methods were used.

Findings

Use of pharmacological methods by parents for their child’s postoperative pain alleviation

One included study reported on the prevalence, severity and parents’ management of their child’s pain after a short hospital stay in a children’s hospital in Canada. A total of 189 parents of children aged 6-12 years old participated in the study. Parents were instructed to complete a three-day diary of the methods they used to relieve their child’s post-operative pain. Specific instructions were given by the nurses or surgeons to the parents regarding medications to relieve their child’s post-operative pain. This study showed that even when parents recognize existing pain in their child, most of them did not give sufficient doses of medication to relieve their child’s pain. Parents had a number of misconceptions pertaining to pain management including the belief of addiction to analgesics. At the same time, they did not receive sufficient instructions in the hospital regarding the proper use of pain medications in order to correct those misconceptions. This led to the majority of children with post-operative pain receiving inadequate number of doses of analgesics and some children continued to have pain despite regular medications. This indicated the importance of educating parents routinely on the adequate dosage of the analgesic medications and instructions of the basic analgesic regimens.

Use of non-pharmacological methods by parents for their child’s postoperative pain alleviation

Two studies reported on non-pharmacological interventions used by parents to relieve their child’s post-operative pain.

In one study, a total of 192 parents whose children were aged 8-12 years old and hospitalized in one of the pediatric surgical wards in Finland’s five university hospitals were recruited in the study. The parents had to complete a questionnaire survey to determine the frequency of use of non-pharmacological methods. The results of this study indicated that parents utilized many non-pharmacological methods to alleviate their child’s post-operative pain during hospitalization. Strategies most commonly utilized were providing emotional support and helping with their child’s daily activities. Cognitive-behavioral and physical methods were seldom used. Although most parents did prepare their child for the surgery, some inadequacies were recognized. This might be due to the lack of knowledge of parents in this area. Only about half of the parents made use of strategies such as imagery, relaxation, breathing techniques and massage, also reflecting a lack of knowledge about these strategies.

The other study used a similar questionnaire survey and was conducted in five provincial hospitals in China, with 206 parents participating. In this study, the most commonly used strategies included emotional support and helping with daily activities, with additional distraction and imagery strategies used by the parents. Compared to other strategies, physical methods and some cognitive-behavioral methods including breathing techniques, relaxation and positive reinforcement were less utilized. The study concluded that the reason for this was that the parents’ use of non-pharmacological methods was limited to only those that were actually more familiar to them in their daily life.

Parents feelings in the process of managing their child’s post-operative pain

Two papers addressed the feelings of parents in the process of managing their child’s post-operative pain. One descriptive survey paper focused on the parents’ support and satisfaction with their child’s post-operative care. This paper explored two themes from the findings derived from a larger study on parental involvement in children’s post-operative pain, which were parental support and parents’ satisfaction with their children’s post-operative pain management. Twenty parents participated in the study and were given an adapted form of the Nurse Parent Support Tool (NPST) questionnaire to measure their perceptions of nurse support during their child’s hospital stay. Four dimensions of support were assessed: supportive communication; parental esteem; emotional support; care giving support. The mean total NPST score from the parents was 72.85 (±11.97). The results indicated that parents felt there was a lack of information provided in terms of how to give care to their child and reported feeling less supported. These results showed differences from the nurses’ perceptions, highlighting the gap in communication between the nurses and parents.
Factors that influence parents’ management of their child’s post-operative pain

Factors promoting parental participation in the implementation of their child’s pain relief measures for their children’s post-operative pain included:

- Opportunities provided to participate according to personal preferences (91%);
- Nurses paying heed to the parents’ wishes regarding their child’s care (57%);
- Receiving sufficient and understandable information regarding the expected length of their child’s pain, and other non-pharmacological pain alleviating methods (43%);
- Opportunities for emotional support (40%);
- Clearly defined roles in implementing pain relief measures for their child’s pain (23%).

Most of the parents agreed that ample opportunities were provided for them to participate in their child’s care according to their own personal preferences, however, only a small percentage of the parents totally agreed that they had a clearly defined role in the child’s pain relief regimen.

Factors hindering parental participation in the implementation of their child’s pain alleviating measures included:

- Nurses’ lack of time to provide guidance (32%);
- Negative feelings of parents (19%);
- Lack of information/understanding of the information provided (10%);
- Underestimation of the parents’ expert knowledge by health care professionals (6%).

Parents’ negative feelings during their participation in their children’s pain care in one of the pediatric surgical wards in the five university hospitals of Finland. A total of 192 parents completed the questionnaire developed by the researchers which included demographic data related to the parents and their child and information about the factors affecting participation in their hospitalized child’s pain-relieving actions. Concern (72%) was the most common feeling experienced among the parents. Other feelings verbalized by the parents included fear (46%), helplessness (36%), anxiety (28%), depression (22%), guilt (13%), and anger (8%). In addition, 55% of the parents provided information to the open-ended question inquiring reasons for their experiences of those feelings. Risk of complications relating to the procedure or the degree of seriousness of the situation (25%), normal feelings due to parenthood (23%), lack of information and feeling insecure (22%), and having to see their child in pain and not able to help (18%) were the main reasons to explain the feelings experienced.

Narrative summary of qualitative studies

Parents experienced negative views regarding their children’s pain management, with only a few parents expressing contentment with their child’s pain management. Parents described their passive role in their child’s pain management, as the parental role was not well-defined and expressed to them. This study revealed the superficial and restricted nature of parental involvement in their child’s pain management. Though parents were aware of the gaps in their knowledge, most parents were passive in approaching the nurses when in need of information. Parents implied that asking for more information would be interpreted as questioning the judgment of the staff and they were careful in the interviews to avoid criticizing staff regardless of how they felt about their child’s care. Parents were unaware of the ‘lockout’ safety device of the morphine pump to prevent their child from overdosing on morphine. There appeared to be a need on the children’s part to alert parents about their pain by expressing it verbally, as some parents did not recognize certain behaviors as manifestations of pain.

Implications for practice

This review found that parents can utilize pharmacological interventions and non-pharmacological strategies to help alleviate their child’s post-operative pain. The evidence suggests that creating an awareness of the hindering and promoting factors that affect parental participation can enable health care professionals to provide guidance and education to parents in order to encourage active parental participation in their child’s pain care. Parents need to be empowered in terms of their knowledge in order to improve the partnership of care between parents and health care professionals. Emotional support and communicating effectively with the parents are areas of concerns which need to be addressed in the clinical area.

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JBI Best Practice 16(3) 2012
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**Healthcare workers with comprehensive knowledge of child pain management (Grade B)**

- Educate parents about different non-pharmacological methods (Grade B)
- Support parents and share feelings (Grade B)
- Acknowledge parental participation (Grade B)
- Inform parents about child’s feelings (Grade B)
- Encourage parents to participate (Grade B)
- Information throughout child’s hospitalization (Grade B)
- A lot of information at the one time

**Acknowledgments**

This Best Practice Information Sheet was developed by the Joanna Briggs Institute. In addition this Best Practice information sheet has been reviewed by nominees of International Joanna Briggs Collaborating Centers.

**References**


“...must only be used by people who have appropriate expertise in the field to which the procedure relates. The applicability of any information must be established before relying on it. While care has been taken to ensure that this edition of Best Practice summarises available research and expert consensus, any loss, damage, cost, expense or liability suffered or incurred as a result of reliance on these procedures (whether arising in contract, negligence or otherwise) is, to the extent permitted by law, excluded.”