

### Introduction

Relieving pain is an important part of the healthcare providers' care planning process, to maintain and enhance quality of life. As advocates for patients, the goal of health care providers is to deliver optimal pain relief to reduce distress and anxiety. To achieve pain relief successfully, it is important that health care providers understand how to properly assess and manage pediatric pain.

Assessing and managing pain in the pediatric population is a challenge for multiple reasons. Resolving these challenges is not as simple as one might expect as they are impacted by the needs of the child, healthcare providers, and their families. It is important for healthcare providers and families to give special attention to a child's pain as they are dependent on adults for their care. Recognizing these difficulties and working to resolve them will lead to optimal pain relief allowing children to gain trust in healthcare workers. This suggests that preventing, assessing, and treating a child's pain can impact how they view the healthcare delivery system and its workers in the future. Identifying barriers to effective pain management will promote good patient outcomes and support the child's growth and development.

### Background

Children develop differently, making it more difficult to assess and manage their pain consistently. It is impossible to understand how preverbal children experience pain because they cannot verbally describe it. While an older child who is more cognitively developed can communicate, this stage of growth and development makes it easier for healthcare providers and families to relieve their pain. A healthcare provider's approach to treatment and a family member's knowledge can also influence if a child's pain is well-managed. Unrelieved pain in hospitalized children has become a significant problem.

### Behavioral Pain Assessment Tools

There are specific tools designated for children, based on their developmental stage to measure the intensity of their pain. Healthcare providers use the FLACC scale (Faces, Legs, Activity, Cry and Consolability) to determine pain in this age group. This FLACC scale assesses 5 areas to rate pain from 0-2: 0 shows relaxed behavior in a child, 1 is occasional restlessness and 2 shows frequent discomfort. Using this scale, a total score of 0 means the child is relaxed and comfortable, 1-3 means they are in mild discomfort, 4-6 is moderate pain and 7-10 is severe discomfort and pain. The number scale is used for adolescents and adults. This scale asks patients to rate their degree of pain on a scale from 0-10



### Pain Assessment and Management Outside of the Health Care Setting

The unfamiliarity of emergency medical transport in assessing and managing pediatric patients. They often use opioids for pain management before the child arrives to the hospital, which affects their pain rating leading to the risk of inappropriate treatment.

After discharge, the disconnect between the health care providers instructions and what the parents understand results in pain management becoming inconsistent leading to unrelieved pain of the pediatric patient.

### Methods

A systematic review of the literature was utilized to identify the articles revealing the barriers in managing the pain of pediatric patients. The database used was Cumulative Index of Nursing and Allied Health Literature (CINHAL Plus with Full Text). There were several searches conducted however there are some articles that did not meet the criteria, these include: published date, peer-reviewed, English language and ones that did not address the barriers of pain management in children. The time was set to January 2016- September 2022 to narrow down articles by current and relevant data. The article was also limited to peer reviewed academic articles as they have reliable data, and the English language was also a filter used. I used keywords and Boolean to find results which then gave me 8 articles that are peer reviewed, in the correct time frame and addressed the barriers/challenges in pain management of children



### Results

The articles that met the criteria for barriers of pain management and assessment in pediatric patients revealed four common themes. The themes that affect optimal pain assessment and management of children are a child's psychosocial development and inability to communicate their needs effectively, health care providers inability to respond to a child's need, the structure of the health care delivery system affecting timely and effective treatment, and caregivers lacking knowledge and experience with providing pain medications

#### **1. Children's Psychosocial Development and Inability to Communicate their Needs Effectively**

Children's psychosocial development and inability to communicate their needs is a limitation to effective pain management. Healthcare providers need to use the specific pain rating scale for the child's developmental stage. Using the correct pain scale based on a child's developmental stage will lead a more accurate assessment and effective management. Pediatric patient's reluctance to communicate their pain is often due to their heightened anxiety of how healthcare providers will treat their pain. In some cultures, like the Hispanic and Korean cultures, children are taught to be tough, effecting their willingness to communicate their pain.

#### **2. Health Care Providers Inability to Respond to a Child's Need for Consistent and Effective Pain Medication**

The health care providers' inability to respond to a child's need consistently and effectively creates a barrier in pain relief. Nurse's feel that they do not have enough knowledge in pediatric patients to provide effective care. Nurses also lack confidence in their care because they feel like doctors do not value their opinion for treatment plans.

#### **3. The Structure of the Health Care Delivery System that Doesn't Support Timely and Effective Treatment**

Another challenge in managing pain in pediatric patients is the structure of the health care delivery system affecting timely and effective treatment. Shortage of staffing in pediatric units challenges pediatric pain management, this includes shortage in nurses, doctors and pharmacists. The shortage in staffing creates a delay in immediate presence at bedside and pain medication distribution. Inadequate staffing also makes pain management a low-priority for nurses with a huge workload. Lastly, the lack of organizational support creates a lack of clinical guidelines for pain assessment and management leading to ineffective care.

#### **4. Parents/Care Givers Lack of Knowledge and Experience with Providing Pain Medications**

Caregivers lacking knowledge and experience with providing pain medications is another barrier for effective pain management of children. The absence of experience and knowledge parents have create reluctance and concern for the pain management of children. When parents are put under stressful situations it creates inconsistency with the care children receive at home because parents are not retaining instructions after discharge.

### Discussion

The aim of this literature review was to explore the challenges in assessing and managing pediatric pain. Overall, results show that there are common themes that hinder pain management. Effective pain management requires that the child, healthcare workers and the caregivers must work together to achieve optimal pain management.

A child's psychosocial development and willingness to communicate their pain contribute to the challenges healthcare workers experience when trying to provide the appropriate care. It is important that healthcare providers are aware of the child's stage of development for optimal pain assessment and management. Institutions should support healthcare workers by providing them with the proper tools and education necessary to assess and manage pediatric pain. This will allow healthcare workers to feel confident in their care.

The lack of knowledge caregivers has on taking care of their child outside of the healthcare setting can also be improved by providing them with clearer instructions and follow-up calls. This will minimize their anxiety and optimize the care of their children.

### Conclusion

Providing effective care is hindered by a child's inability to communicate their wants and needs, an institutions' lack of support for their workers, healthcare providers' knowledge and experience, and the caregiver's attitude. Identifying these barriers will lead to effective pain management that will promote good patient outcomes and support the child's growth and development. To identify these challenges, healthcare workers and caregivers need continuous education in pediatric pain assessment and management to achieve effective care.



### References

- Alhani, F., Aziznejadroshan, P., & Mohammadi, E. (2017). Experience of nurses about barriers to pain management in pediatric units: A qualitative study. *Journal of Nursing and Midwifery Sciences*, 4(3), 89. <https://doi.org/10.4103/jnms.jnms.2.17>
- Czarnecki, M. L., Guastello, A., Turner, H. N., Wrona, S. K., & Hainsworth, K. R. (2019). Barriers to pediatric pain management: A brief report of results from a multisite study. *Pain Management Nursing*, 20(4), 305-308. <https://doi.org/10.1016/j.pmn.2019.01.008>
- Elias, J. M., Prashanth, P. V., Shenai, N. A. S., Mony, K. R., & Varghese, S. M. (2019). Knowledge and attitude regarding children's pain and perceived barriers to optimal pain management among staff nurses. *International Journal of Nursing Education*, 11(1), 51. <https://doi.org/10.5958/0974-9357.2019.00012.6>
- Gaba, M., Vazquez, H., Homel, P., Likourezos, A., See, F., Thompson, J., & Rizkalla, C. (2021). Language barriers and timely analgesia for long bone fractures in a pediatric emergency department. *Western Journal of Emergency Medicine*, 22(2). <https://doi.org/10.5811/westjem.2020.9.48431>
- Mediani, H. S., Duggan, R., Chapman, R., Hutton, A., & Shields, L. (2017). An exploration of Indonesian nurses' perceptions of barriers to paediatric pain management. *Journal of Child Health Care*, 21(3), 273-282. <https://doi.org/10.1177/1367493517715146>
- Mellion, S. A., & Adelgais, K. (2017). Prehospital Pediatric Pain Management: Continued barriers to care. *Clinical Pediatric Emergency Medicine*, 18(4), 261-267. <https://doi.org/10.1016/j.cpe.2017.09.007>
- Sabeti, F., Mohammadpour, M., Pouraboli, B., Tahmasebi, M., & Hasanpour, M. (2021). Health Care Providers' experiences of the non-pharmacological pain and anxiety management and its barriers in the Pediatric Intensive Care Units. *Journal of Pediatric Nursing*, 60. <https://doi.org/10.1016/j.pedn.2021.07.026>
- Tam, M. T., Wu, J. M., Page, P. M., Lamb, E. A., Jordan, I., Chambers, C. T., & Robillard, J. M. (2020). Barriers and facilitators to effective pain management by parents after pediatric outpatient surgery. *Journal of Pediatric Health Care*, 34(6), 560-567. <https://doi.org/10.1016/j.pedhc.2020.06.008>
- Wuni, A., Salia, S. M., Mohammed Ibrahim, M., Iddriss, I., Abena Nyarko, B., Nabila Seini, S., Tonsagari, I., & Mohammed, J. (2020). Evaluating knowledge, practices, and barriers of paediatric pain management among nurses in a tertiary health facility in the Northern Region of Ghana: A descriptive cross-sectional study. *Pain Research and Management*, 2020, 1-11. <https://doi.org/10.1155/2020/8846599>
- Yu, K. E., & Kim, J. S. (2021). Pediatric postoperative pain management in Korea: Parental attitudes toward pain and analgesics, self-efficacy, and pain management. *Journal of Pediatric Nursing*, 58. <https://doi.org/10.1016/j.pedn.2020.12.002>

### Acknowledgements

I would like to thank my faculty advisor, Nancy Ebersole for all her patience. I would also like to thank Scott Nowka for his encouragement and motivation to successfully complete the honors program and my peers who have pushed me to always work hard. Lastly, I want to thank my parents for their constant support.