

## **Book review**

### **Managing pain in children: A clinical guide**

Reviewed by Karen L. Hewson

**Twycross A, Dowden SJ, Bruce E (2009).**  
***Managing pain in children: a clinical guide.***  
**Oxford: Wiley-Blackwell, 256 pp. ISBN 978-1-4051-6894-6** (Paperback: \$63.99 CDN; \$52.99 USD).

*Managing Pain in Children: A Clinical Guide* is a well written resource that covers a range of pertinent topics in pediatric pain. The undertreatment of pain in the pediatric population is addressed and strategies for improving practice are presented. The physiology of pain is reviewed with specific application to children. Assessment and management of acute, chronic, palliative and procedural pain are covered in all age groups, from neonates to adolescents. Treatment strategies are described using a holistic approach to care.

The evidence-based, practical approach makes this guide a useful reference for both novice and experienced health care professionals. The compilation and summarization of the pediatric pain literature also make it valuable for educators and researchers in the field. The layout of the book is consistent between chapters, using an easy to read format with headings and bullets. Multiple charts, tables and practice points throughout the book are invaluable for ongoing reference. Each chapter is well summarized and the reader is guided to additional resources. The primary audience is nursing, although reference is made to other health care professionals in most chapters. The contributors all have pediatric backgrounds with specialization in pain management.

Chapter 1 provides a solid introduction to the book, raising the all too familiar point that the

management of pediatric pain remains suboptimal despite the wealth of evidence. There is a good overview of the misconceptions surrounding pediatric pain, as well as the consequences of unrelieved pain. A nice feature is the reference to children's views around the effectiveness of pain management. Studies are presented describing nurses' perceptions and management based on best practice guidelines. Professional accountability and the 'ethical imperative' in the management of children's pain are discussed.

Chapter 2 addresses the complexities of the anatomy and physiology of pain in a clear, understandable manner. This is a welcome review of a topic that is often poorly understood by nurses and other health care professionals. The relationship and differences between nociceptive and neuropathic pain are well described. Physiological differences of pain in children are highlighted, which is often missing in such discussions. The relationship between the anatomy and physiology of pain, theories of pain perception and commonly held misconceptions of pain in children are presented.

The biopsychosocial model is outlined in chapter 3, including practical implications of the model. Studies done on the various biological, psychological and social factors influencing children's pain experience are described. The relationship between stages of cognitive development and perception of pain is well described in chart format. The influence of culture and familial patterns is raised. Further discussion on these aspects would be useful.

Chapter 4 provides a comprehensive overview of the pharmacology of pain management in children and applies this information in a practical, understandable manner. This is also an area that often requires more in-depth understanding, so that effective analgesia can be provided. There is detailed information about medication choices, dosages, and routes. Practice principles for dealing with opioid tolerance are outlined; this is an area that health care professionals often find challenging. Additional information on the management of opioid dependence in infants and children would be helpful, including strategies to deal with the misconceptions often held among health care professionals and families.

Chapter 5 provides a broad overview of non-drug strategies used in pediatric pain management, including a section specifically dedicated to infants. A variety of strategies are defined with reference to the effectiveness of these strategies. Particularly helpful is the list of references the reader can go to for further information. Considering that nurses do not routinely use these strategies in practice, further exploration as to why would be useful. A discussion would fit well here on the roles of different disciplines in the implementation of non-drug therapies.

Inadequate pain assessment has been identified as one of the key barriers to effective pain management in children. Chapter 6 provides a very thorough overview and description of self-report and behavioral measurement tools. The advantages and disadvantages of each tool are well summarized. Pain history questions are presented for acute and chronic pain. A nice feature is the discussion of factors to consider in assessing pain in cognitively-impaired children, in whom pain is often undertreated. There is a lack of discussion on pertinent factors such as the influence and role of family in pediatric pain assessment, as well as problem solving when children cannot and will not report pain.

Chapter 7 provides a detailed overview on the management of acute pain with emphasis on multimodal analgesic regimes and the assessment and management of adverse effects. Numerous charts, diagrams, and practice points provide guidelines and protocols for dosing and monitoring.

The use of PCA and regional analgesia is described in detail. The concept of 'pain problem solving' is introduced, which is a practical approach to assessing potential causes of unrelieved pain. Acute neurological pain due to surgery or head injury is often poorly managed, although this topic was not addressed in the book. The importance of parent education for the management of pain at home is raised and could warrant further discussion throughout the book.

Chapter 8 provides the reader with a broad understanding of chronic pain in children including incidence, etiologies, associated factors, and the impact on children and family. Headaches, abdominal pain, and musculoskeletal pain are addressed. There is a lack of discussion on chronic pain associated with disease conditions such as sickle cell crisis, cancer pain and HIV. Chronic pain in infants is discussed as an area that warrants further attention. There is advocacy for a multimodal, multidisciplinary approach to chronic pain in children. Due to the complexities of chronic pain and lack of treatment outcome data in children, a case-based approach to this chapter may have provided increased application.

Pediatric palliative care is presented in chapter 9 exploring historical aspects, similarities and differences to adult palliative care, research on location preference, and the needs of children, parents and siblings. Excellent discussion is offered on the challenges in pediatric palliative care including evidence-based practice, home-based care, and ethical issues. There is advocacy for palliative care in critical care areas, where the majority of pediatric deaths occur. The focus is on palliative care in developed countries; however the author alludes to the need for palliative care in underresourced countries, where diseases such as HIV are pandemic.

A review of drug and non-drug interventions used in the management of procedural pain in children is the focus of chapter 10. The importance of preparation and the parental role in procedural pain is emphasized, including practical tips and resources for parental education. This chapter includes a brief section on procedural pain in neonates, an area that needs continued exploration. A definition of procedural pain would be helpful as

certain procedures may not be considered as painful and appropriate interventions may not be implemented.

The first ten chapters provide depth and breadth on a variety of topics related to pain in children. The final chapter is dedicated to exploring the future of pediatric pain management. The authors contend that in order to have forward movement in the area of pediatric pain, five factors must be addressed: knowledge, beliefs, decision making, ward culture and organizational culture. There is a brief discussion of these factors and related strategies. The need is identified to more effectively manage change and to further explore children's views on pain management. This chapter can be invaluable in assisting health care organizations and accrediting bodies in addressing pain management priorities. The primary focus is on nurses, which misses the opportunity to explore a multidisciplinary approach to improving pain management in children.

Health care professionals working with children in all settings will benefit from reviewing this book. A multidisciplinary focus, with contributions from other disciplines, would be welcomed in future editions. Increased focus on the parents' role in children's pain management would also be of value. The content could be further enhanced with the use of clinical examples and some case-based analysis. Despite these limitations, this clinical guide is a welcome addition to the pediatric pain literature and would serve well as a textbook for a course in pediatric pain.

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