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Book review

A pocket guide for pediatric nurses

Kathy Reid

Oakes, LL (2011). Compact clinical guide to infant and child pain management: an evidence-based approach for nurses. New York: Springer, 368 pp. ISBN 978-0-8261-0617-9 (Paperback: \$45.00 USD).

Linda Oakes, MSN, RN-BC, CCNS, is a Clinical Nurse Specialist at St. Jude Children's Research Hospital in Memphis, Tennessee, USA. Her nursing career has spanned almost four decades and this book includes personal perspectives based on her vast experience as well as current evidencebased practice. I found it touching that she dedicated the book to Dr. Donna Wong (1948-2008), the author of world-renowned pediatric nursing textbooks and of the Wong-Baker FACES Pain Rating Scale. The book is intended for nurses and is one of a series of books edited by Yvonne D'Arcy on pain management approaches for nurses. Other pediatric health care professionals may also find it of interest, including physicians, due to the detailed section on pharmacological management of pain in children.

In reviewing this *Compact clinical guide*, I found that it invites comparison with another recent book by nurses on pediatric pain: *Managing pain in children: a clinical guide* by Twycross, Dowden and Bruce (2009). The Oakes book is a pocket sized book and as such, mainly consists of text, with fewer tables, diagrams and highlighted practice points than the Twycross et al. book.

The book is divided into seven sections. Section 1 is an overview of pain in pediatrics, including a chapter on pain assessment. Sections 2, 3 and 4 address various pharmacological and non-

pharmacological treatment approaches. Section 5 addresses teams and the role of parents. Sections 6 addresses specific treatment considerations for needle pain, critical and terminal illness, and section 7 addresses management of some common pain conditions. Not all chapters are written in the same style making it more challenging to use the book quickly. It would have been helpful for all chapters to have summary statements as well.

Chapter 1 begins with a very brief section addressing the problem of pain in pediatrics, and the well known point that pain is often underrecognized and undertreated in children. Oakes provides a brief review of pain anatomy and physiology with particular emphasis on preterm infants. The remainder of the chapter provides a good overview of different ways pain is classified, the impact of pain on the developing child, and a brief section on the consequences of pain on infants.

Chapter 2 reviews pain assessment. Overall the chapter is well written, addressing the need to fit assessment into the overall treatment plan. For each of the tools included in the chapter, she provides a review of the evidence supporting its use for various pediatric populations. Diagrams of many of the tools are included. In the section on observational tools for infants, however, the Premature Infant Pain Profile (Stevens, 1996) is not included, which is surprising given its reported reliability, validity and clinical utility in assessing pain in preterm and term infants.

Chapter 3 briefly addresses practice points in choosing and scheduling analysics. The remainder of the chapter reviews selected nonopioids for mild to moderate pain, such as acetaminophen and NSAIDs. She includes a table of dosing guidelines and an overview of pharmacodynamics. Indications, dosages, contraindications, adverse effects and available preparations are included for most of the drugs.

Chapter 4 provides a comprehensive review of opioids, including detailed information on many different opioids, dosages for intermittent and continuous use, different routes of administration such as oral, intravenous, and subcutaneous administration. The section on patient-controlled analgesia is very well written for clinicians, addressing starting doses, the use of basal infusions, and guidelines for family controlled analgesia. Management of adverse effects and side effects is discussed, as well as a section on tolerance, physical dependence, and addiction, which are areas that are often misunderstood by health care professionals. The section addressing safety includes a key point often overlooked by busy health care professionals: that electronic monitoring cannot substitute for good clinical assessment. It would have been helpful to have this important point highlighted in the text, perhaps in bold or in a text box. This chapter differs from others in that it does not include a summary statement.

Chapter 5 briefly reviews co-analgesics such as anticonvulsants, antidepressants, and local anaesthetics. Each is briefly reviewed as to mode of action and indications. Dosing guidelines are included in tables. Those who wish to prescribe these medications would require more information than is presented here.

Chapters 6 and 7 address regional techniques – epidural infusions and continuous peripheral nerve blocks. Both of these chapters are written in similar style, including written explanations, accompanying diagrams of placement and dermatomes, indications for use and medications. Assessment, patient care, and monitoring for potential complications are explained in bullet form making these two chapters very easy to read and follow. The diagram chosen to demonstrate the epidural infusion did not include a pump; however, the need for pumps is discussed in the text.

The next section of the book comprises three chapters on non-pharmacological methods of managing pain. All are written in a similar style,

reviewing each therapy, indications and contraindications, necessary skills of the health care provider and methods. The author rightly points out that many of these methods are within the scope of nursing practice, which is an important point, as she reviews evidence demonstrating that nurses often do not use these techniques. Chapter 8 reviews including principles tips for selecting developmentally appropriate techniques. Cognitivebehavioral techniques such as distraction, relaxation, use of art therapy and medical play are discussed including their indications for use and practice points for implementation. Throughout the chapter the author stresses that these skills are simple and natural for health care providers to implement.

Chapter 9 describes in greater detail two specific cognitive techniques – guided imagery and hypnosis. Evidence supporting use of these techniques in managing pain is reviewed, and an example of a guided imagery exercise is included. The need for (and lack of) specialized training in using these techniques is briefly discussed. This chapter does not include a summary statement.

Chapter 10 provides a brief review of several different physical approaches. The author points out the difficulty in researching these techniques for effectiveness, and for many of them such as acupuncture, exercise therapy and massage, the need for skilled practitioners. There is a section on specific techniques for infants including nonnutritive sucking and positioning. The chapter ends with a great summary table reviewing the various techniques by age group.

Section 5 of the book contains two chapters, addressing teams and the role of parents. In both of these chapters, although evidence is reviewed, it is clear that the author's wealth of experience in managing pain guided these two chapters. Chapter 11 reviews multidisciplinary team approaches for both individual children and institutions for quality improvement. Included in the chapter are samples of a pain management agreement and a pain diary from the author's institution. Chapter 12 provides a comprehensive review of the role of parents in procedural pain in the text, as well as a copy of her institutions' educational booklet on helping children with pain.

Chapter 13 reviews specific techniques for managing needle-related pain and distress. Both pharmacological and non-pharmacological techniques are reviewed. Sucrose is recommended only up to 4 months of age despite evidence suggesting it is effective up to 12 months (Harrison et al., 2010). This chapter also lacks a summary statement or paragraph.

Chapter 14 provides a comprehensive review of pain in critical illness, which is a nice balance between current evidence and the author's own experience. The challenge of assessing pain and sedation in the presence of critical illness is addressed, as is the challenge of assessing and managing withdrawal. There is a lack of discussion of the role of parents in the critical care environment.

Palliative care is presented in chapter 15 with an emphasis on the fact that children are dying in pain. The chapter is brief and to the point, emphasizing the ethical duty of health care providers to relieve pain.

Chapter 16 discusses managing pain for a few selective operative procedures and traumas including orthopedics, burns, and minor traumas. Missing is a discussion on managing pain for ear, nose and throat and dental surgeries, which are the most common surgical procedures for children, as well as any discussion on managing postoperative pain at home following discharge from hospital.

Chapter 17 reviews pain in sickle cell disease. including a brief overview of different pain manifestations directly related to the disease such as acute pain conditions and chronic pain. The importance of rapid assessment and the need for opioids to manage severe pain are stressed. There is a section addressing how health care providers are often barriers to effective assessment and management of painful crises, especially in the emergency room. More discussion on current evidence, including outpatient and home management would have been helpful.

Chapter 18 provides a good comprehensive review of pain in cancer. Once again, the author's expertise in this area is evident. In a wonderful paragraph on page 302, the author shares an important point that patients she has cared for have

asked her to convey, reminding us that children with cancer often undergo many painful procedures and not to offer false reassurances that this is just one poke.

Chapter 19 provides a comprehensive review of current evidence into chronic pain in children, including incidence, the importance of believing the child and developing a therapeutic alliance. Several chronic pain conditions are reviewed including headache, musculoskeletal conditions, and chronic abdominal pain. The author points out that the approaches to assessment and management of chronic pain are different from those of acute pain and the need to develop treatment plans is based on functional goals rather than just relief of pain. There is a very brief section reviewing current literature on chronic pain in children with neurological and cognitive impairment. A summary statement for this chapter would have been helpful.

Overall, this is a nice compact book outlining several important aspects of assessing managing pain in children. Its pocket size makes it easy for clinicians to keep handy but that size is also a limitation in how the book is designed. Due to its overwhelming emphasis on text, it is more difficult than the Twycross book to quickly read and review important points, although the author did include clinical pearl highlights in many sections. Although in the preface the author indicates that the book is for primary care providers, it is written mainly for those nurses who work in tertiary care pediatrics. with a large emphasis on children in hospital settings. Both outpatient settings and home management are lacking (Drendel et al., 2006; Segerdahl et al., 2008; Fortier et al., 2009). In addition, the inclusion of clinical cases would assist readers in the application of knowledge. Despite these gaps, I would recommend this great little book for nurses who wish to carry a book with them in their clinical practice. It's a great addition to the growing list of books addressing pain in pediatrics.

Kathy Reid, RN, MN, NP Pediatric Chronic Pain Service, Stollery Children's Hospital, Edmonton, AB, Canada email: kathy.reid@albertahealthservices.ca

References

Drendel AL, Lyon R, Bergholte J, Kim MK. Outpatient pediatric pain management practices for fractures. Pediatr Emerg Care 2006;22:94-99. www.pubmed.gov/16481924

Fortier MA, MacLaren JE, Martin SR, Perret-Karimi D, Kain ZN. Pediatric pain after ambulatory surgery: where's the medication? Pediatrics, 2009;124:e588-e595. www.pubmed.gov/19736260

Harrison D, Stevens B, Bueno M, Yamada J, Adams-Webber T, Beyene J, et al. Efficacy of sweet solutions for analgesia in infants between 1 and 12 months of age: a systematic review. Arch Dis Child 2010;95:406-413. www.pubmed.gov/20463370

Segerdahl M, Warrén-Stromberg M, Rawal N, Brattwall M, Jakobsson J. Children in day surgery: clinical practices and routines. The results from a nation-wide survey. Acta Anaesthesiol Scand 2008;52:821-828. www.pubmed.gov/18498436

Stevens B, Johnston C, Petryshen P, Taddio A. Premature Infant Pain Profile: development and initial validation. Clin J Pain 1996;12:13-22. www.pubmed.gov/8722730

Twycross A, Dowden S, Bruce E. Managing pain in children: a clinical guide. Chichester, UK: Wiley-Blackwell, 2009. www.worldcat.org/oclc/233261092