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INTRODUCTION

Regardless of the proof to guide clinical work on being promptly accessible, the administration of ache in youngsters is frequently imperfect. This part will begin by giving a meaning of ache and torment administration and will highlight the results of unrelieved agony. Kids' perspectives about the adequacy of their ache administration will be examined, and usually held misinterpretations about agony in youngsters definite. The variables thought to impact torment administration practices will be illustrated. Data about agony administration benchmarks distributed in a few nations will be examined. How well youngsters' agony is right now overseen will be considered nearby the issue of expert responsibility. At long last, the moral basic for dealing with kids' ache adequately will be analyzed.

Pain Definition:

What is Pain?

Pain is whatever the experiencing person says it is, existing wherever they say it does’ (McCaffery 1972) McCaffery, M. (1972) Nursing Management of the Patient in Pain . Lippincott, Philadelphia. Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage. Pain is always subjective. Each individual learns the application of the word through experiences related to injury in early life’ (International Association for the Study of Pain [IASP] 1979, p. 249) International Association for the Study of Pain (1979) Pain terms: A list with definitions and notes on usage. Pain 6, 249–252.

These two definitions of pain illustrate that the experience of pain is both a subjective and an individual phenomenon. This is particularly clear in the IASP definition, which explains how the many facets of pain
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interrelate and affect pain perception. Although supporting the concept of pain as a subjective phenomenon, the original IASP definition fell short in relation to those unable to communicate verbally, including neonates and young children and cognitively impaired children. This was addressed in 2001 when the following amendment was made: ‘The inability to communicate in no way negates the possibility that an individual is experiencing pain and is in need of appropriate pain-relieving treatment’ (IASP 2001, p. 2) International Association for the Study of Pain (2001) IASP Definition of Pain. IASP Newsletter 2,2

Pain management means applying the stages of the nursing process – assessment, planning, implementation and evaluation – to the treatment of pain.

The cyclical basis of pain

Stages of pain management

Consequences of Unrelieved Pain
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Pain has an important purpose, serving as a warning or protective mechanism, and people with congenital analgesia who are unable to feel pain, often suffer extensive tissue damage (Melzack and Wall 1996). Melzack, R. and Wall, P. (1996) The Challenge of Pain, updated 2nd edition. Penguin, London. However, unrelieved pain has a number of undesirable physical and psychological consequences. When these are considered, the need to manage children’s pain effectively is clear. The results of studies demonstrating this are outlined in Box 1.2. Children’s memories of pain also influence subsequent pain experiences (Noel et al. 2012). Noel, M., Chambers, C.T., McGrath, P.J. and Klein, R.M. (2012) The influence of children’s pain memories on subsequent pain experience. Pain 153, 1563–1572. Other consequences of unrelieved pain include: • In a retrospective study with adults (n = 147), aged 17–21 years, childhood experiences of medical and dental pain were significant predictors of adults’ medical pain (Pate et al. 1996). Pate, J.T., Blount, R.L., Cohen, L.L. and Smith, A.J. (1996) Childhood medical experience and temperament as predictors of adult functioning in medical situations. Child Health Care 25, 281–298.

Consequences of unrelieved pain

Physical effects

- Rapid, shallow, splinted breathing, which can lead to hypoxaemia and alkalosis
- Inadequate expansion of lungs and poor cough, which can lead to secretion retention and atelectasis
- Increased heart rate, blood pressure and myocardial oxygen requirements, which can lead to cardiac morbidity and ischaemia
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➢ Increased stress hormones (e.g. cortisol, adrenaline, catecholamines), which in turn increase the metabolic rate, impede healing and decrease immune function

➢ Slowing or stasis of gut and urinary systems, which leads to nausea, vomiting, ileus and urinary retention

➢ Muscle tension, spasm and fatigue, which leads to reluctance to move spontaneously and refusal to ambulate, further delaying recovery

Psychological effects

➢ Anxiety, fear, distress, feelings of helplessness or hopelessness

➢ Avoidance of activity, avoidance of future medical procedures

➢ Sleep disturbances

➢ Loss of appetite

Other effects

➢ Prolonged hospital stays

➢ Increased rates of re-admission to hospital


Children’s Views about the Effectiveness of Pain Management
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Pain is a bio-psychosocial experience and this is why two people undergoing the same surgery or experiencing the same illness may report different pain experiences. When considering children’s painful experiences it is, therefore, essential to explore children’s views. Indeed the United Nations Convention on the Rights of the Child (1989) United Nations (1989) Convention on the Rights of the Child. United Nations, New York. states that: ‘Children’s views must be taken into account in all matters affecting them, subject to children’s age and maturity.’ Children’s views about how well their pain has been managed have been explored in four studies in the past decade. It is evident that from the child’s perspective there is a need to evaluate practices. (Further discussion about undertaking research with children can be found although these studies highlight the fact that children continue to experience moderate to severe pain, it is worth noting that this does not necessarily impact on satisfaction with care (Twycross and Collis 2012 Twycross, A. and Collis, S. (2012) How well is acute pain in children managed? A snapshot in one English hospital. Pain Management Nursing, online early.; Vincent et al. 2012 Vincent, C., Chiappetta, M., Beach, A. et al. (2012) Parents’ management of children’s pain at home after surgery. Journal for Specialists in Pediatric Nursing 17, 108–120. Vincent, C., Chiappetta, M., Beach, A. et al. (2012) Parents’ management of children’s pain at home after surgery. Journal for Specialists in Pediatric Nursing 17, 108–120.; Twycross and Finley 2013) Twycross, A. and Finley, G.A. (2013) Parents’ and children’s views about pain management. Journal of Clinical Nursing, online May 2013.. A study by Habich et al. (2012) found no changes in patient or family satisfaction with care despite improvements in pain assessment when evaluating the effectiveness of implementing evidence-based paediatric pain guidelines. These findings suggest that children, and their families, may expect to experience pain when in hospital and
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Studies exploring children’s views about pain management

Polkki et al. (2003)

• Children (n = 52), aged 8–12 years, were asked about their postoperative pain experiences and to suggest what nurses could do to improve postoperative pain management

• Children indicated that they wished the nurses had given them more or stronger analgesic drugs, as soon as they asked for them, and that they would like nurses to ask them about their pain on an hourly basis. Children would also like nurses to provide them with meaningful things to do to distract them from their pain.

Kortesluoma et al. (2008)


➢ Children (n = 44), aged 4–11 years, were interviewed about their experiences of pain management in hospital. Children’s descriptions of what helped when they were in pain included self-help strategies, the assistance of healthcare professionals
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and significant others, medicine, emotional support and modifying the environment.

- Children felt that healthcare professionals were not always gentle enough or did not have enough time to manage their pain adequately. They expected professionals to be competent and empathic, and to give time to help them when in pain.

Twycross and Collis (2012)


- As part of a larger study, young people (n = 17) completed a questionnaire about their pain management experience. Young people felt their pain management was of an acceptable level or very good. This was despite the fact that 58% of children experienced severe pain and 24% moderate pain.

Twycross and Finley (2013)


- Children (n = 8), in one Canadian tertiary hospital, were interviewed about their perceptions of pain care, and asked to rate the worst pain experienced postoperatively on a numerical scale.

- Most children (n = 10) experienced moderate to severe pain postoperatively.
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- Children were, on the whole, satisfied with the care provided.
- Children reported being asked about their pain, receiving pain medication and using physical and psychological methods of pain relief.
- A lack of preoperative preparation was evident for one child.

Evidence:

Lia is a 3-year-old girl admitted to the hospital with fever and dehydration. She has a 2-day history of cough, rhinitis, lethargy and poor oral intake. On admission her oxygen saturation (pulse oximetry) is 92%, her temperature is 39.8°C, her respiratory rate is 38/min and her heart rate is 142/min. She requires an IV for parenteral antibiotics.

- How would you assess Lia’s fear and anxiety?
- What pharmacological strategies would you use to reduce Lia’s pain and anxiety related to this procedure (IV cannulation)?
- What physical strategies would you use to reduce Lia’s pain and anxiety related to this procedure?
- What psychological strategies would you use to reduce Lia’s pain and anxiety related to this procedure?

Pharmacological strategies

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Some analgesic drugs take longer to be effective than others but with careful planning this should not be a barrier to successful management.

Topical local anesthetics


(For further information about local anesthetics see Research in this area has demonstrated that:

- All transdermal forms of topical local anaesthetic creams and patches (e.g. EMLA, amethocaine [tetracaine], liposomal lignocaine [lidocaine] 4% or 5%) are effective in reducing needle pain (Crowley et al. 2011).

- Amethocaine (tetracaine) is superior to EMLA® in reducing needle-related pain (Stinson et al. 2008) and the pain associated with IV cannulation (Curtis et al. 2012).
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Timing of pharmacological options

- Lignocaine/prilocaine (EMLA®): 45–60 minutes
- Amethocaine (tetracaine); liposomal lignocaine (lidocaine) (LMX®): 30–45 minutes
- Lignocaine (lidocaine) iontophoresis or heat-activated preparations: 15 minutes
- Needle-free 1% lignocaine (lidocaine) delivery (J-tip®); 1% buffered lignocaine (lidocaine) infiltration; ice/vibration (Buzzy®): 2 minutes • Nitrous oxide: < 1 minute
- Vapocoolant spray: 15 seconds

The timings for the various pharmacological options are mentioned above.

Cryotherapy

Vapocoolant sprays (e.g. ethyl chloride or pentafluoropropane with tetrafluoroethane [Pain Ease]) are available in some countries. These agents work by surface cooling the skin, act immediately and last up to 60 seconds (Soueid and Richard 2007; Page and Taylor 2010) Soueid,
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Their effect is comparable to topical anaesthetics, with their greatest benefit seen in time-poor situations. Research has shown that vapocoolants:


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  - Are widely available, safe, convenient to use and cost effective
  - Should be the mainstay of pharmacological interventions for needle-related pain

The choice of agent should be determined, at least in part, by the urgency of the procedure.

Psychological strategies

Preventing the child and parents


The age of the child and the type of procedure to be undertaken (Jaaniste et al. 2007a; Cohen 2008; Zempsky 2008a). The information provided to children should include sensory information (i.e. what the procedure will feel like) as well as information about why the procedure is necessary (Jaaniste et al. 2007b; Cohen 2008; Hockenberry et al. 2011). Jaaniste, T., Hayes, B. and von Baeyer, C.L. (2007b) Effects of preparatory information and distraction on children’s cold-pressor pain outcomes: A randomized controlled trial. Behavior Research and Therapy 45, 2789–2799.

The information needs of children of different ages are outlined in Table 10.1. There is very little information available about the appropriate timings for providing children with information prior to a
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painful procedure. Suggested timings for physical and psychological interventions before a procedure. Some of the actions healthcare professionals can take to help children and parents prepare for a painful procedure. How children perceive the cause and effect of pain at different developmental stages

• Helping children cope with pain: What health professionals can do
  o Give step-by-step information about what will happen during the procedure, including what the child will see, hear and feel, and why the procedure is necessary
  o Provide children with coping strategies they can use during the procedure
  o Children need truthful information to build trust in the healthcare professionals working with them use age or developmentally appropriate language and avoid medical jargon
  o Use medical play with young children - this allows them to use the equipment and adopt different roles such as the nurse or doctor
  o Avoid making promises that you cannot keep, e.g. ‘it won’t hurt’ or ‘it feels like a mosquito bite’
  o Avoid high anxiety words such as pain, hurt, cut, needle or shot use words such as poking, freezing and squeezing instead
  o Do not suggest that the procedure will definitely hurt
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- Be aware of possible misinterpretations of words and phrases such as dye or put to sleep

- Address children’s concerns (e.g. taking all my blood) • Consider using books or web-based resources describing the procedure for the child and/or parent Adapted from Young (2005) Young, K.D. (2005) Pediatric procedural pain. Annals of Emergency Medicine 45 , 160–171.; Jaaniste et al. (2007a); Kuttner (2010)

Misconceptions about Pain

Children are still experiencing moderate to severe pain in hospital Pediatric nurses’ post-operative pain management practices: An observational study. Journal for Specialists in Pediatric Nursing 18 (3), 189–201. One reason for this could be the perceptions of the healthcare professionals caring for the child. A number of misconceptions about children’s pain have been identified, with a comprehensive summary of these provided by Twycross (1998) Twycross A. (1998) Perceptions about paediatric pain. In: Paediatric Pain Management: A Multidisciplinary Approach (eds A. Twycross, A. Moriarty and T. Betts), pp. 1–24, Radcliffe Medical Press, Oxford.. The key misconceptions and a summary of the evidence demonstrating their mythological status can be seen in this mis-conception have all been shown to have no scientific basis.

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