6. Paediatric guidelines

Children are often subjected to a variety of painful diagnostic and therapeutic procedures. Immaturity and cognitive impairment may preclude competent expression of pain during such experiences. Therefore, the need for analgesia may not be sufficiently addressed.

Pain assessment and measurement are prerequisites to optimal pain management. Pain measurement tools are available for children of all ages and cognitive ability. Methods of pain assessment as well as treatment guidelines for the paediatric population are well established, but not widely used. The use of pain scores allows the practitioner to select appropriate analgesia for the severity of pain, which improves pain control. Reassessment and regular documentation after initiating management indicate efficacy in pain management. The correct tool is appropriate both developmentally for the child and to the clinical context, and can be used consistently.

Inadequate pain management has physiological, psychological, social and economic consequences, and is an ethical and legal dilemma. Neonates and infants are particularly vulnerable due to the neuroplasticity of their immature nervous systems, with emerging evidence of poorer neurodevelopmental outcomes as a result of repeated painful stimuli without adequate analgesia. There is a dearth of literature demonstrating moderate to severe pain in the paediatric inpatient population, regardless of a medical or surgical diagnosis, as a result of inappropriate and inadequate pain management.

6.1 Principles of pain management in children

- Anxiety, fear and pain in children are intricately linked.
- Intermittent intramuscular (IM) injections are distressing to children and are less effective in achieving pain control than IV infusions or intranasal (IN) administration. Therefore, IM injections are strongly discouraged.
- Avoid per request needed (PRN) dosing as far as possible. Where used, inform and empower the child/caregiver to request analgesia if the child is in pain.
- Always use pain scoring tools to assess pain and to direct appropriate pain management.

6.2 The neurobiology of pain

Even extremely premature neonates are able to process and experience pain. Repeated painful stimuli experienced in the neonatal period have been associated with adverse long-term consequences, including poor cognitive outcomes. Neonates and infants are particularly vulnerable because of the plasticity of their nervous systems. Inhibitory descending pathways only develop after the ascending nociceptive pathways, which possibly, in theory, results in increased susceptibility to painful stimuli.