

# RÉDUIRE L'ANXIÉTÉ PÉDIATRIQUE AVANT LES CHIRURGIES : DES STRATÉGIES À L'INTENTION DES INFIRMIÈRES ET DES INFIRMIERS

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## RÉSUMÉ :

Le processus chirurgical peut causer de l'anxiété chez les enfants et cette anxiété peut être associée à des résultats négatifs à court et à long terme.<sup>1,2</sup> La réduction de l'anxiété avant une chirurgie peut améliorer l'expérience chirurgicale de l'enfant et de sa famille. Cet article vise à déterminer des stratégies que les infirmières et les infirmiers doivent privilégier afin d'aborder cet enjeu, notamment une approche axée sur l'enfant, des techniques pour le distraire et la présence de parents éclairés.

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**KEYWORDS:** PAEDIATRICS, PRE-OPERATIVE ANXIETY, PERIOPERATIVE NURSING.

## REDUCING PAEDIATRIC ANXIETY PRE-OPERATIVELY: STRATEGIES FOR NURSES

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## ABSTRACT

The surgical process can cause anxiety in children and this anxiety can be associated with both short and long term negative outcomes.<sup>4,5</sup> Reduced pre-operative anxiety can improve both the child's and family's surgical experience. This article identifies strategies for nurses to address

this issue, including: a child-focused approach, distraction techniques, and informed parental presence.

## INTRODUCTION

Advances in paediatric surgery and anaesthetic care have, in our current health care climate, resulted in an increased number of day surgeries for

children and procedures taking place at younger ages.<sup>1</sup> The health care system has, in response, moved away from individual-focused care and toward a more holistic family-centered approach.<sup>2,3</sup> Compounding these trends is the reality of the information/internet age which results in families who have obtained their own outside information or created their own expectations, the current cost-conscious health care environment, and the demand to decrease wait times and increase patient turnover. This results in health care professionals struggling to balance the fast-paced demands of the current health care system while providing a holistic, informative, family-centered, health care approach. Patients, therefore, often experience limited time with health care professionals pre-operatively and post-operatively.

Nurses must, despite what is only a brief patient interaction with children and their families, address the potentially devastating reality of pre-operative paediatric anxiety. Surgery can be emotionally traumatic for children and result in high levels of pre-operative anxiety.<sup>4,5</sup> The impact and trauma of the surgical experience in highly anxious children is certainly felt both pre and post-operatively. Children with high anxiety pre-operatively often demonstrate fear of health care professionals, are visibly upset, and are uncooperative. This results in a traumatic experience for all parties – the child, parents, and healthcare professionals. When young children are uncooperative and upset pre-operatively it often results in a masked anaesthesia induction, in which the child is held still (against their will), by members of the health care team, until they are anaesthetized. Post-operatively the impact includes the child emerging from anaesthesia upset, which may include emergence delirium.<sup>4,6</sup> Emergence delirium is defined as a "dissociated state of consciousness in which the child is inconsolable, irritable, uncompromising or uncooperative, typically thrashing, crying, moaning, or incoherent."<sup>7,8</sup> Pre-operative anxiety is, in addition, associated with increased post-operative pain.<sup>4,6</sup> Kain et al. (2006) also found that anxious children required significantly more analgesics, to cope with post-operative pain, than is the case with non-anxious children. In addition pre-operative anxiety is also associated with nightmares, sleeping problems, fears, general post-operative anxiety, and appetite problems.<sup>4,6</sup>

Understanding the cause of pre-operative anxiety in children is essential to addressing this issue. Visintainer and Wolfer (1975) identified five components of the surgical experience that evoke anxiety in children including: physical harm or bodily injury, separation from parents/trusted caregiver, fear of the unknown, uncertainty regarding appropriate behaviour, and loss of control. The results of this seminal study are supported by current literature. In a grounded study Wennstrom, Hallberg, and Bergh (2008) recognized that day surgery and the hospital experience cause paediatric anxiety due to the experience of "facing an unknown reality,

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breaking away from daily routines, trying to gain control, and losing control". (p.101)<sup>10</sup> Therefore, the fear of the unknown, intimidating and unfamiliar environments, and required hospital procedures are all sources of pre-operative anxiety for the paediatric population. This article will highlight helpful strategies nurses can implement, into their current practice, in order to reduce paediatric pre-operative anxiety.

### Discussion:

A common strategy, cited in the literature, for reducing paediatric anxiety is through the use of pre-operative preparation programs.<sup>11,12,13</sup> Pre-operative preparation programs include pre-admission visits and a child-focused tour of the hospital units. The goal is to help familiarize children with the hospital routine and environment through the use of medical play therapy and education.<sup>11,14</sup>

Given the aforementioned fast-paced perioperative environment, where time is money, many paediatric hospitals do not have the capacity to offer advanced preparation programs. These programs can also be challenging in that they require a significant time commitment from families.<sup>15</sup> The question, therefore, remains: What strategies can nurses use in their everyday practice in order to reduce pre-operative anxiety in children? Nurses certainly have an obligation to advocate for restructuring of perioperative environments, through elements such as the creation of a pre-operative preparation program, to improve the quality of health care services. In the meantime, however, other smaller changes in practice can have a significant impact on children's pre-operative experience. Current literature indicates there are several strategies that reduce paediatric anxiety and can be easily incorporated into everyday nursing practice. These strategies include a child-focused approach, medical play and medical re-interpretation, distraction, and informed parental presence.<sup>5,10,13,15,16</sup>

### Child-Focused Approach:

A child-focused approach involves providing information directly to children (in addition to information provided to family members). Smith and Callery (2005) found children indicated they generally did not receive information directly from health care professionals. Health care professionals tended, instead, to speak to the parents and the children learned about what was happening to them only by overhearing these conversations.<sup>17</sup> While there is limited time allocated for nurse-patient interaction, during the immediate pre-operative period, the literature indicates that developing therapeutic relationships with paediatric patients, and speaking to them about their experience in age-appropriate terms, is one strategy that may decrease some children's anxiety.<sup>17</sup> Addressing children directly facilitates the reduction of the aforementioned stressors by helping them face an unknown reality, providing information on how to behave, and enabling children to regain some control.

Incorporating a child-focused approach, within pre-operative nursing practice, involves individualizing and adapting the information and presentation style according to the patient's developmental stage. Paediatric hospitals provide care for children from infancy into teenage years and so the needs and understanding of the patient will vary greatly. Cookie cutter information and/or techniques will not be as successful.

Justus et al. (2006) indicate infants and toddlers have strong attachment to their parents and therefore suffer primarily from separation and stranger anxiety during their perioperative experience.<sup>11</sup> Coaching parents on how to soothe and calm their child, through use of a comforting tone of voice and facial expressions, is important at this age. According to Justus et al., pre-school and school aged children often respond well to medical play

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(discussed in a following section). By contract adolescents are struggling for independence and so need to be able to participate in informed choices regarding their medical care.<sup>11</sup> Explaining the anaesthesia and surgical process, and allowing these children to participate in their care through actions such as holding their own mask, may help restore some of their autonomy and reduce their anxiety during the pre-operative period.

### Medical Play and Medical Re-Interpretation:

Medical play and medical reinterpretation are two strategies that can be used to tailor the information provided to suit the developmental needs of the child. Children often arrive for day surgery with a favourite stuffed toy and interaction and medical/therapeutic play with this toy is one way to quickly and effectively tailor information to the specific child. An example of this strategy will help illustrate its usefulness: A very timid and shy 5-year-old girl is waiting for surgery. Upon walking into the room, and performing introductions, this author immediately focused on the child's doll rather than on the little girl. 'Dolly' received an assessment, had her bracelet checked, received a pre-operative assessment, and was told she was here for her specific surgery. The attention then shifted to the little girl and her family. Although this brief interaction took only a few seconds, it was enough to reduce the girl's anxiety. This brief intervention addressed several of the anxiety provoking dimensions identified by Visintainer and Wolfer (1975) and Wennstrom et al. (2008).<sup>9,10</sup> Through role-playing, with the doll, the child became familiar with hospital procedure and expected behaviours. Once the doll was returned to the child the child also regained her sense of control and security.

Medical re-interpretation is another strategy that helps provide information to children in a meaningful manner.

This strategy informs children, in an age-appropriate manner, of what to expect and how to behave.<sup>5</sup> Aron et al. (2007) and Martin et al. (2011) indicate re-interpretation of medical equipment and procedures can reduce paediatric anxiety.<sup>5,18</sup> An example of this would be to teach children about coming into the operating room and going to sleep by breathing a 'fire-fighter mask' or 'blowing up a balloon.' The use of intravenous access is often referred to as 'getting a drink through a straw.' In a prospective study with children ages 2-10 years, Aron et al. found they had success familiarizing children with anaesthesia equipment pre-operatively by teaching/instructing them to 'blow up the balloon.' Aron et al. found "children who become acquainted with the balloon fifteen minutes prior to entering the operating room were more distracted and less anxious." (p. 4)<sup>18</sup>

### Distraction:

Distraction is another effective anxiety reduction technique.<sup>5</sup> Friendly conversation, non-medical talk, and watching television can help alleviate anxiety.<sup>5</sup> Children often become overwhelmed during the pre-operative period, the walk to the operating room, and throughout the initial stages of anaesthesia induction. Drawing their attention away from this and toward more pleasant topics, such as their favourite activities, can distract them and visibly decrease their anxiety. Martin et al. (2011) also identified that certain behaviours, such as calling attention to the child's current experience, acknowledging anxiety, offering "reassuring statements, emphasizing, and apologizing" (p.3) are all actions that can, in fact, increase a child's anxiety. In addition, Martin et al. specify, "implying control over situations a child did not actually control" (p.3) is undesirable and leads to increased distress and anxiety. Therefore distraction and careful attention to the language, used by nurses and other health care professionals, can have a significant impact on a child's perioperative experience and level of anxiety.<sup>5</sup>

### Informed Parental Presence:

Parental presence in the operating room is a topic of controversial debate. Many parents want to be admitted into the operating theatre for the induction of anaesthesia.<sup>13</sup> There are, however, conflicting results regarding the actual effectiveness of this practice. Paediatric hospitals, as a result, vary widely regarding their policies. The benefits of parental presence in the operating room include "increasing child cooperation, enhancing parental satisfaction, fulfilling parents' perceived sense of duty to be present, and enhancing parental satisfaction with medical care." (p. 61)<sup>13</sup> The possible negative outcomes of parental presence include: "elevation of parental anxiety, increasing staff workload... disruption of the operating room routine, increasing child behaviour problems, and legal problems." (p. 62)<sup>13</sup>

In addition to the wide range of pros and cons, regarding parental presence, there is conflicting evidence regarding the reduction of child anxiety as a result of parental presence in the operating room. Zuwala and Barber (2001) outline that, even though parental presence eliminates some of the separation anxiety, "the child's level of anxiety is correlated positively with the parent's level of anxiety." (p.21)<sup>19</sup> The literature is very clear on this point. If parents are unprepared and very anxious during this experience they then transmit this to, and increase the anxiety of, their children.<sup>13,19,20</sup> This means that informing and educating parents, regarding their role as emotional supports, is one strategy that has the potential to reduce children's perioperative anxiety. Parental preparation and presence in the operating room is, in addition, associated with increased parental satisfaction and embraces the paediatric model of family-centered care. Perioperative nurses have an obligation to inform, guide, and support parents regarding ways to be

the most reassuring to their child during their operative experience and must take time to prepare, coach, and inform parents.

**The Nursing Role:**

The above discussion highlights the significant impact, on the perioperative experience for children and their families, that can result from small changes in practice. Martin et al. (2011) identified that “nurses represent medical specialists who can have tremendous amount of influence over the children’s experience in the perioperative environment.” (p.8)<sup>5</sup> Perioperative Nurses have an obligation, as part of the holistic nursing assessment and care, to advocate and incorporate evidenced-based practices including the aforementioned anxiety reducing strategies. As the paediatric operating room becomes increasingly technical it is crucial to ensure that technology does not override patient-focused care, interaction, and expertise.

**Conclusion:**

Paediatric surgery is an anxiety provoking experience for children. Reduced pre-operative anxiety can improve both the child’s and family’s surgical experience. This includes increased parental satisfaction, child compliance with hospital procedures, and reduced post-operative recovery time as well as long-term benefits such as, but not limited to, reduced fear of the hospital experience.<sup>4,6</sup> Nurses must be cognizant regarding the triggers of pre-operative anxiety for children including fear of harm, separation from parents, fear of the unknown, uncertainty, and a loss of control.<sup>9,10</sup>

Nurses should develop and incorporate anxiety-reducing strategies such as adopting a child-focused approach, incorporating distraction techniques, and eliminating undesirable behaviours from their personal practice. This article, in addition, highlighted that

nurses must recognize parents/caregivers as part of the family-centered care team and to actively advocate for informed and prepared parental involvement. Incorporating these strategies requires small changes in practice behaviors, but will have a significant impact on the health and satisfaction of our paediatric patients and their families.

ORNAC Standards pertaining to this article can be found in the Operating Room Nurses Association of Canada (ORNAC) (May 2011) Standards, Guidelines, and Position Statements for Perioperative Registered Nursing Practice (10th edition). Section 1, pg(s) 30-32, Standard(s) 1.1, 1.2, 2.1, 2.3, 2.4.

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