

## Stressors encountered by the parents due to planned surgery of the child

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The child's surgery is a significant event in their life, affecting both the child and their parents. Parents face many difficulties as a result of their extreme anguish while witnessing their child in agony. In addition to the child's surgery, parental anxiety is a significant issue that might impact the child's recovery, post-operative care, mental health, and relationship with their parents. The health of the parent will likewise be impacted in the same manner as the child. In this review, discussion has been done over the stressors encountered by the parents due to planned surgery of the child, its effect on the child as well as parents, and strategies to reduce parental anxiety before surgery of the child.

**Keywords:** Parental Anxiety, Surgery, Child

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<b>Manuscript Received</b> 2024-09-01	<b>Review Round 1</b> 2024-09-04	<b>Review Round 2</b> 2024-09-10	<b>Review Round 3</b> 2024-09-16	<b>Accepted</b> 2024-09-22
<b>Conflict of Interest</b> None	<b>Funding</b> Nil	<b>Ethical Approval</b> Yes	<b>Plagiarism X-checker</b> 13.32	<b>Note</b>
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## Introduction

Many parents experience anxiety prior to, during, and following their child's surgery, with an emphasis on general safety, risks (including death or disability of the child), and side effects, as well as worries about pain and the unknown results of the surgery. Parental anxiety remains a significant and underappreciated issue among parents. Parents may experience stress, worry, and anxiety in the hospital setting, which may have an impact on their overall bio- psychosocial development. They also struggle with being in unfamiliar surroundings, being disconnected from home, financial challenges, and not understanding how to support their children. As a result, parents should be emotionally ready before having their child undergo surgery.[1]

Perioperative parental anxiety may be caused by a number of things, such as parental separation, a lack of control over the surroundings, or the possibility of complications or fatality in their children.[1][2][3][4][5][6]

Evidence has indicated noteworthy correlations between a parent's anxiety prior to surgery and their child's anxiety and behaviors during the recovery phase, which can last up to six months after the procedure.[7][8][9][10]

### Several potential causes of anxiety among parents

Lack of knowledge and awareness regarding disease condition of child [1]

Insufficient level of education [1]

Inadequate assistance from family as well as health care professional [11]

Absence of prior experience with surgery

Negative feedback from other parents who have witnessed the same surgical procedure of child.

Trust issues and an abundance of coping approaches [11]

Failure of effective interpersonal relationships and communication abilities with others [12]

Parents' socioeconomic standing

The accessibility to medical services and upkeep.

Terror of potential complications and long- term effects

Worry about the pain of their child [13]

Fear of surgery and anesthesia [1]

Uncertainty about the results of surgical procedure [1]

Fear of dying

Inability to recover from anesthesia [1]

Family disputes [1]

Children's risk of being disabled following surgery

Children's dependence on parents or others [7]

Have horrible emotions or visions in their imagination about the child

Emotional distress [14]

Lack of control over the situation [13]

### Parental anxiety and its impact on child

The concern, dread, and tension that some individuals feel in connection with their responsibilities as parents or caregivers is known as parental anxiety. Having a child to care for is an enormous responsibility. Anxiety strikes most parents or caregivers once in a while, but for some it also happens after the child has surgery. Anxiety in parents can affect the quality of their lives or their children's life.[15]

### Parent-child relationship

The relationship between a parent and child is one of unconditional affection and care; to a child, this is the one relationship one can close their eyes and believe in. This relationship is characterized by love, happiness, care, reliance, and a respectful and safe environment for the child. A pleasant and healthy parent-child connection is beneficial to the children and the family. When the parents experience anxiety then it affects the parent child relationship there may be the lack of proper communication between them which will lead to further complications between healthy parent child relationships. A child's development and overall growth are supported by the special tie that exists between a parent and their child's future. Their conduct, attitude, attributes, and values are established by it.[16] A parent-child relationship that is disrupted due to excessive anxiety might make it challenging to build a solid, encouraging attachment.

### Care of the Child

Anxiety in parents can make it difficult for them to provide children with adequate care, including proper nutrition, sanitation, and other aspects of child rearing. In order to provide a loving and caring atmosphere for their child's development, parents must acknowledge and deal with their own anxieties. After an exclusive review of literature, it has been found that the prevalence of parental anxiety was high before the surgery of the child. This remains the least acknowledged issue among parents. When a parent's anxiety becomes overwhelming, it can interfere with their ability to care for their children and make it harder for them to handle unfamiliar or stressful situations when their child is having surgery.[1]

### Mental health of Child

It has been demonstrated that pediatric anxiety in a preoperative context significantly worsens children's clinical outcomes and the health care system overall. Research has indicated that children's anxiety and emotional responsiveness are significantly impacted negatively by prior parental anxiety. To lessen the child's anxiety, parental preoperative anxiety therapies are crucial. Children are more prone to experiencing anxiety related to surgery because of their limited abilities, inability to exercise self-control, excessive reliance on others, poor comprehension, and limited life experience. Anxiety triggers the autonomic and endocrine systems, resulting in elevated heart rate, blood pressure, cardiac contractility, and the production of cortisol and catecholamines.[7]

The way these systems interact might affect how anesthesia is induced. There is a clear correlation between the child's age and their level of anxiety. According to earlier reports, older children are better equipped to handle the stress of surgery than younger ones. Children's anxiety during the perioperative period is believed to be a reflection of their dread of being away from their parents and their comfortable surroundings, where they may freely express themselves and feel at peace. Moreover, their fright of syringes, needles, and unfamiliar medical equipment frequently makes them feel even more anxious.[7]

Being exposed to their parents' anxiety on a daily basis is a less evident issue that children of nervous parents may face.

Anxiety in parents is typically characterized by excessive concern over the possibility of anything going wrong. Children who hear their parents express their anxieties aloud may grow to internalize these worries and anxieties as their own.

Additionally, some parents often exhibit nervous behaviors in specific circumstances. Children may feel equally intimidated by some situations and respond in a similarly avoidant way if they observe that certain events make their parents nervous.[14]

According to recent research, prior to a pediatric surgical procedure, up to 75% of children and 74% of parents report feeling anxious. Furthermore, it is well recognized that a child's anxiety is impacted by the anxiety of their parents.[7]

### Physical health of Child

A review investigated the possibility that children who have a parent with a mental illness are more likely to experience physical sickness during childhood.[17]

Anxious parents might find it difficult to keep their environment clean and healthy, which could cause their children to develop bad hygiene and self-care routines. In order to provide a healthy atmosphere and advance their child's physical wellbeing, parents must manage their own anxieties.

### Child's recovery, rehabilitation and follow-up

Parental anxiety may indirectly affect children. In order to reduce anxiety, increase a sense of control, and facilitate postoperative recovery, families and their children must be well-prepared prior to surgery.[18]

Overwhelming anxiety can cause parent-child relationship to become strained, [16] which makes it difficult to offer emotional support and care during the healing process. It can also cause problems with follow-up treatment and increased healthcare consumption.

Numerous studies also showed that a parent's anxiety can be passed on to their child, which can worsen family dynamics and prolong the child's rehabilitation period following surgery.[1]

In order to ensure that their child receives the most effective treatment and assistance possible during the healing and rehabilitation process, parents must learn to control their stress and collaborate with medical professionals.

### **Post- operative outcome and pain**

It has been proved that preoperative anxiety significantly affects both the clinical postoperative outcome and pain perception. But measuring a subjective emotion like fear in young children facing surgery and their parents is difficult.[13]

Conversely, children with moderate-to-severe preoperative anxiety in their parents reported higher levels of pain.[1] Anxiety related to surgery has been found to be a significant cause of discomfort, particularly in children; up to 75% of children who have surgery have excessive levels of worry prior to the procedure. The post-operative progress is affected by this condition.

The majority of children who have pre-operative anxiety have been shown to alter in behavior later on, recover slower than others, and have a higher chance of experiencing mild discomfort after surgery. Furthermore, it is not surprising that there was a significant association between the parents' and children's anxiety levels during the pre-operative phase, considering the psychological dependency of parents and children on one another. [19]

### **Difficulty in adapting to the hospitalization and its surroundings**

In pediatric surgery, preoperative anxiety is a well-known and widely discussed clinical issue affecting children and their parents. Due to possible effects on pharmaceutical and psychiatric treatment, it may have major consequences for the patient.

Excessive levels of anxiety can therefore lead to longer hospitalizations and more severe postoperative compliance. It is additionally acknowledged that the parents of the children who are going to have surgery exhibit anxieties of their own, and that these are linked to the children's anxiety, for example, by the child passing down its fear to the parent and vice versa.[13]

### **Parental anxiety and its impact on parents themselves**

Processes that might result in sickness also have their roots in anxiety. Prolonged exposure to elevated anxiety levels can impact an individual's psychological and physiological state, as well as compromise the immune system's ability to develop an immune response.[19]

The severity of surgical intervention rises with the number of parents exhibiting symptoms of severe anxiety. High discomfort was associated with parents' years of education and social interaction as well as their characteristic anxiety. Parents who are experiencing the most severe conditions seem to require extra assistance and support from friends and family.

Parents with higher educational attainment tend to be more equipped to handle their child's circumstances and have less acute symptoms of anxiety.[12] It is very difficult for parents to handle unfamiliar or stressful situations when they face anxiety before surgery of their children.[20]

### **Strategies to reduce Parental Anxiety**

Pediatric anxiety in a preoperative setting has been shown to have significant negative downstream effects on the clinical outcomes of children and the healthcare system as a whole.

Studies have found that preoperative parental anxiety has significant negative effects on children, regarding anxiety and emotional response. Therefore, interventions for parental preoperative anxiety are important to reduce the child's anxiety. [7]

### **Enhancement of education and understanding about the child's surgery**

Strategies to reduce parental anxiety have been shown at multiple centers across the world. These include providing parents with sufficient information about their child's medical condition, the anesthetic and surgical plan, post-operative pain management, and information about potential anesthesia and surgical complications.[1]

According to a preoperative survey conducted on children and their parents, the topics most sought after were the postoperative treatment, anesthetic duration, recovery from anesthesia, and postoperative pain management. Parents' anxiety was observed to rise when they were not given enough information about potential risks associated with surgery and anesthesia.

Reduced anxiety among parents was the outcome of providing age-appropriate knowledge and preparedness, which also helped the child's social and communication abilities.[1] A study of the literature determined ways surgery affects parents.

It also examined several presurgical educational programs that are developmentally appropriate and spoke about how these programs affect the parents and children. Preoperative visits, humor, and diversion are a few examples of factors that have been shown to be beneficial in reducing preoperative anxiety in both parents and children. Research has also indicated that less anxiety in children may be achieved by parents preparing themselves adequately.[6]

Research indicates that educating parents on the pre-, intra, and postoperative events of their child's surgical journey by textual, visual, or audio means can increase their understanding and reduce anxiety. Individualized education programs have been shown in another study to be beneficial in lowering anxiety among parents before their child's surgery and increasing their satisfaction with the preoperative care.[6]

Preoperative education using formal or informal instruction or educational resources to get children and their families ready for surgery. Parental anxiety was reported to be decreased by studies assessing preoperative education in a format that enables parents to express concerns and ask questions (such as educational counselling or an informational preoperative visit).[7]

### **Involving and encouraging parents in the care and play of the child**

During the preoperative stage, both therapeutic and regular play might help parents feel less anxious before surgery. Therapeutic play is the practice of involving children in age-appropriate activities that help them get ready for or divert their attention from an impending operation or treatment. Studies have examined the impact of play-based therapies, which parents frequently engage in with children, particularly with regard to reducing parental anxiety.[7] Many parents suffer from anxiety, but it gradually goes away as their role as caregiver has more experience and grow more relaxed and self-assured in their ability to care for children.[15]

### **Acquainted with the environment**

Prior to surgery, familiarity with the hospital setting can help parents feel less anxious in a number of ways. Understanding the design of the hospital, its rooms, and its equipment might help reduce the frightening atmosphere.

Recognizing protocols, getting to know the healthcare staff: may build rapport and confidence. Additionally, it improves coping, raises sense of control, prepares one mentally and physically, and lessens fear of the unknown. A research examined whether toys and preoperative visits affected children' and parents' anxiety levels as well as the level of satisfaction they were with the course of treatment. The findings showed that giving parents preoperative visits prior to surgery reduces anxieties.[11] Research revealed that giving hospital visits reduces preoperative anxiety more than the traditional preparation method among parents of children undergoing open-heart surgery. [21]By being acquainted with the hospital environment, parents can feel more comfortable, prepared, and in control, reducing their anxiety and stress levels before their child's surgery.

### **Positive interactions and rapport with the healthcare provider**

Communication with healthcare providers builds rapport, clear and concise communication may allay fears, clarify concerns, and give comfort. Emotional assistance, decreased uncertainty, confirmation of concerns, information, and education can enable parents to actively participate in their child's care. [12] Good relationships may raise hopes for the future, lowering anxiety and fostering a feeling of stability, comfort, and support.

### **Fostering a healthy parent-child relationship**

The most important relationship a child has while growing up is with their parents. A child's upbringing and overall growth are based on their relationship with their parents. It also affects how a child's personality develops in overall.[22] Having good communication with their child helps them feel safer, and confident. Because it gives parents a sense of fulfilment and helps them feel less anxious before surgery.

### **Non -pharmacological techniques**

Parental presence: Some institutions strive to lessen the preoperative anxiety that children and families suffer by having parents present throughout anesthetic induction, which means letting children stay with parents or caretakers until they are under general anesthesia. In pediatric anesthesia, it is a popular non-pharmacologic perioperative anxiety intervention.[7]

Music therapy: According to a review article, parents' perceptions of the facility were enhanced and they came to believe that music therapy was beneficial for both them and their children.

Participating in music therapy alongside their children, the parents/caregivers reaffirmed the idea that active parental engagement in the intervention contributes to the reduction of anxiety.[7]

## Conclusion

Parents may experience anxiety due to lack of knowledge, education, assistance, experience, negative feedback, trust issues, interpersonal relationships, socioeconomic standing, accessibility, fear of complications, pain, anxiety, family disputes, child disability, and emotional distress.

Parental anxiety is a significant issue that can impact a child's recovery, post-operative care, mental health, and relationship with their parents.

Parental anxiety can affect the parent-child relationship, it can also hinder the child's growth and independence, their ability to care for their children and make it difficult to handle unfamiliar or challenging circumstances during their child's recovery.

Interventions for parental preoperative anxiety are important to reduce the child's anxiety and improve the overall well-being of the child and their parents.

Parental anxiety can be reduced through various strategies, including education about the child's surgery, familiarity with the hospital environment, interaction with parents who have recovered more quickly, positive interactions with healthcare providers, and fostering a healthy parent-child relationship.

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