

PERCEPTION OF THE PEDIATRIC PATIENT ACCOMPANY DURING ANESTHESIA INDUCTION AND AWAKENING

Percepção do acompanhante do paciente pediátrico durante a indução e o despertar da anestesia

Percepción del acompañante del paciente pediátrico durante la inducción y el despertar de la anestesia

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ABSTRACT: Objective: To know the perceptions of children's companion in anesthetic induction and awakening. **Method:** An exploratory, descriptive, qualitative study carried out in the surgical center (SC) of a pediatric hospital in Porto Alegre, Rio Grande do Sul, Brazil, with seven mothers present during anesthetic induction and awakening of the child. Data collection was carried out in two parts: 1. Non-participatory observation in anesthetic pre-induction and induction; 2. Semi structured interview in the post-anesthetic recovery room (PARR). **Results:** Two categories emerged from the contents analysis of field journals: strategies used by companions and tranquility. The strategies used were: crying, love and affection. Two categories emerged from the interviews: positive and negative experiences, the former being the most outstanding one. **Conclusion:** Accompanying a child in the anesthetic-surgical process triggered more positive than negative impressions on mothers. In addition to giving support and tranquility to the child, companions themselves would feel safer. **Keywords:** Anesthesia. Operating Room Nursing. Child. Mothers. Pediatrics.

RESUMO: Objetivo: Conhecer as percepções de acompanhantes das crianças na indução anestésica e no despertar da anestesia. **Método:** Estudo exploratório, descritivo, qualitativo, realizado em um centro cirúrgico (CC) de um hospital pediátrico de Porto Alegre, Rio Grande do Sul, Brasil, com sete mães presentes na indução anestésica e no despertar da criança da anestesia. A coleta de dados foi realizada em duas fases: 1. observação não participativa na pré-indução e na indução anestésica; 2. entrevista semiestruturada na sala de recuperação pós-anestésica (SRPA). **Resultados:** Da análise de conteúdo dos diários de campo emergiram duas categorias: estratégias utilizadas pelos acompanhantes e tranquilidade. As estratégias usadas foram: choro, amor e carinho. Das entrevistas emergiram duas categorias: experiência positiva e experiência negativa, sendo a primeira a mais destacada. **Conclusão:** Acompanhar o filho no processo anestésico-cirúrgico desencadeou mais percepções positivas do que negativas nas mães. Além de dar suporte e tranquilidade à criança, as acompanhantes se sentiram mais seguras. **Palavras-chave:** Anestesia. Enfermagem de centro cirúrgico. Criança. Mães. Pediatria.

RESUMEN: Objetivo: Conocer las percepciones de acompañantes de los niños en la inducción anestésica y en el despertar de la anestesia. **Método:** Estudio exploratorio, descriptivo y cualitativo, realizado en un centro quirúrgico (CQ) de un hospital pediátrico de Porto Alegre, Rio Grande do Sul, Brasil, con siete madres presentes en la inducción anestésica y el despertar del niño de la anestesia. La recolección de datos fue realizada en dos fases: 1. Observación no participativa en la pre-inducción y en la inducción anestésica; 2. Entrevista semiestructurada en la sala de recuperación postanestésica (SRPA). **Resultados:** Dos categorías surgieron del análisis del contenido de los diarios de campo: estrategias utilizadas por los acompañantes y tranquilidad. Las estrategias usadas fueron: llanto, amor y afecto. Dos categorías surgieron de las entrevistas: experiencia positiva y experiencia negativa, siendo la primera la más destacada. **Conclusión:** Acompañar a niños en el proceso anestésico-quirúrgico desencadenó más percepciones positivas que negativas en las madres. Además de dar soporte y tranquilidad al niño, las acompañantes se sintieron más seguras. **Palabras clave:** Anestesia. Enfermería de Quirófano. Niño. Madres. Pediatría.

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INTRODUCTION

Surgery, as well as hospitalization, is an experience that brings a lot of anxiety to children and their accompanying parties, causing changes to the routine of the whole family and producing several feelings, such as stress, by withdrawing the child from both their family and social contacts to which they are accustomed to. In the surgical center (SC), this situation is usually potentialized, once it is an enclosed and different environment, with restricted access and people dressed in uniforms¹.

In this context, it is important to take into account the meaning of perception and feelings. "Perception" is understood in the sense of "[...] process by which the nature and the meaning of sensory stimuli are recognized and interpreted"²; the word "feelings" is understood as a synonym of "emotions", that is, "[...] affective states that may be experienced and have the property to excite and motivate individuals"².

Anxiety can manifest itself in different ways in pediatric patients, according to age range and to patient's degree of development. The higher the child's anxiety in the preoperative period, the greater the chance of developing postoperative disorders, especially the ones related to behavior (such as nightmares, irritability, eating problems and disobedience)³.

In this sense, Law No. 8.069 of 1990, of the Brazilian Child and Adolescent Statute, in article 12, contemplates that: "health care establishments should provide conditions for the full-time stay of a parent or guardian, in cases of hospitalization of children and adolescents"⁴.

The presence of a family member during anesthesia induction may decrease the child's anxiety, which also reduces the need for physical restraint and improves the nurse-patient relation. However, there is still resistance to the presence of parents at that moment, an attitude resulting from values yet ingrained in the area of health⁵.

Anesthesia induction of pediatric patients is a moment of great discomfort, both for them and their companions. Young children often do not understand what is happening, and can relate the time of hospitalization and surgical procedure to a punishment. This may hinder their recovery, once that experiencing unpleasant situations influences the immediate postoperative period and may bring about some negative memories, which will last for years⁶.

In this context, the guiding question to our research is: what are the perceptions raised in children's companions in anesthesia induction and awakening in pediatric surgeries?

This research is justified due to the lack of studies addressing the theme of the presence of pediatric patient companions during anesthetic procedures.

OBJECTIVES

1. To know the perceptions of patients' accompanying parties during anesthesia induction and awakening.
2. To identify the feelings raised and the strategies used by accompanying parties who took part in anesthesia induction and monitored the child's anesthesia awakening.

METHOD

This is an exploratory, descriptive study with a qualitative approach, following the theoretical basis of the content analysis of Bardin, with thematic categorization, which allows for the understanding and description of the phenomenon under investigation, based on the opinions of companions⁷.

The research was carried out in the SC of a pediatric hospital, located in Porto Alegre, Rio Grande do Sul, Brazil.

The population chosen for this study consisted of accompanying parties of children undergoing surgical procedures. Inclusion criteria were: accompanying (family member or guardian) children undergoing surgical procedures, being present during anesthesia induction and awakening. Exclusion criteria included:

1. Accompanying parties who were not present in both phases of data collection;
2. Accompanying parties of children who underwent surgical procedures with local or regional anesthesia or large-sized surgeries, considering these patients do not usually go to the post-anesthetic recovery room (PARR) after surgery.

The sample consisted of seven mothers who met the inclusion criteria. The number of subjects included in the present study was determined by the saturation of the data, since this is a qualitative research.

Data collection was carried out from May to July 2017, in the morning and afternoon shifts. Accompanying parties were invited to take part in the research according to the order of their arrival in the pre-induction room, where children and mothers waited before going into the operating

RESULTS

room. The study was explained, and those who accepted to participate in it signed an informed consent for later data collection.

Information collection was carried out in two phases. The first consisted of non-participatory observation in anesthesia pre-induction and induction, in which the participants were accompanying the child, whose experiences observed, together with the researcher's reflections, were recorded in a field log for each subject in the research, totaling seven information logs. The instrument was identified as the interviewee's field log, presented throughout the text as IFL, followed by a serial ID number for each interviewee.

The second phase occurred in the PARR, after the child's awakening from anesthesia. A semi-structured interview was performed at this moment, using a script with guiding questions, which aimed at meeting the study's objectives. This was recorded and subsequently transcribed at the child's bed in the PARR. Three questions were asked:

1. "Tell me how was the child's awakening from anesthesia".
2. "How did you feel when you saw the child waking up?".
3. "Now that the surgical procedure is over, and you are standing next to the child, tell me what was it like to have the opportunity of being next to them during anesthesia induction".

The information was assessed by thematic categorization, according to Bardin⁷. The NVivo[®] software was used in order to carry out the cutouts of the most important records in logs and interviews.

The present project was sent through *Plataforma Brasil* to the Research Ethics Committees of the proposing and co-participating institutions, in order to obtain authorization for their execution. Data collection occurred only after the due approvals (CAAE # 62523016.0.0000.5683 and CAAE # 62523016.0.3001.5345). To that end, the rules in Resolution No. 466/2012⁸, which provides guidelines and rules for researches involving human beings, were followed. The subjects selected for this research were informed of its objectives and signed the informed consent, having the option to discontinue their participation in the study if they wished so, without any harm done.

In order to ensure participants' anonymity, their initials were coded by a capitalized letter I (interviewee), followed by a serial number (1, 2, 3...), according to their order of participation in the study.

Seven mothers of children aged between 2 and 11 years, submitted to combined general anesthesia, participated in the study.

Two categories emerged from the analysis of the field logs: tranquility and strategies used by companions. The former figured in all field logs and the later was observed in five registry units (71.42%).

It was observed that five mothers expressed, as a strategy, crying at the time of anesthesia induction in their children. Other strategies were also demonstrated, such as providing love and affection, in addition to the role of circulating nurses, as shown below:

1. IFL5 – [...] when they slept, the anesthesiologist informed the mother that the child had already slept [...] The mother kissed them and left crying. The circulating nurse escorted them to the exit, asked if everything was okay and explained she could go downstairs, have some coffee, and that she would be summoned when the surgery was over.
2. IFL7 – Pre-induction: Very calm mother [...] the child plays with toys and other children in the induction room. Very agitated [...]. Anesthetic induction: Mother apparently calm. The child laid down on the surgery bed on their own. Anesthesia and nursing staff communicated well with mother and child [...]. The child soon fell asleep [...]. As she kissed the child's forehead, the mother started to cry. The circulating nurse escorted the mother to the exit [...] she told her to go have some coffee and eat something, because it would take long [...] for the surgery to be over, and that as soon as the child would go to the recovery room she would be summoned.

Tranquility was observed in all field logs, both for children and mothers, according to the following excerpts:

1. IFL2 – In the pre-induction room, the child was playing a lot with toys and the mother was very calm [...]. In the surgery room, the staff kept talking to the mother [...]. mother and child were very calm [...]. After the child fell asleep, the mother kissed their forehead and the circulating nurse escorted her to the waiting room and explained the time it would take, that she could go downstairs and have some coffee,

and that as soon as the child would go to the recovery room, she would be summoned.

2. IFL4 – In the pre-induction room: very calm mother, child playing with toys. During induction: mother apparently calm, so is the child. The induction was very fast [...]. As soon as the child fell asleep, the mother left crying, with no one from the staff to accompany her.

The contents of the interviews resulted in two thematic categories: positive and negative experiences. The former was observed in six records and, the later, in only one.

Six mothers expressed happiness and relief as positive feelings (85.7%). Only one (14.3%) participant informed that being present during anesthesia induction brought feelings that were difficult to deal with, making this opportunity a rather negative experience:

1. I1 – It's because this is her first time, so I didn't know how she was going to react [...]. Oh, I was very...nervous, I don't know...it was a very bad feeling...with her alone in there and all [...].
2. I1 – (laughs) It's not a very good experience... Because it is a feeling of uncertainty of what awaits for you in there, right... How to react [...] I didn't like it much (laughs) [...]. I was...like, crazy, asking to know if she was okay... You don't know...What happens in there after you leave, right [...]. I, for one, was scared, right, you know... Thinking there was [...] some complication, right [...]. I felt very bad when I was in there [...]. Now I feel calmer.

Even if difficult feelings were experienced, the mothers reported that having participated in the whole anesthetic-surgical process was a positive experience, as shown in their statements:

1. I3 – Oh, I was a little....a little nervous. I was a little nervous, mostly for seeing her like that [...]. Oh, I'm happy [...]. Her father called just now [...] I told him everything is fine [...]. Yeah, it was good, for us to accompany her, right?... It gives more...credibility to her, to keep calmer, right? [...]. Being together was better [...]. It's much better.
2. I4 – What a relief (laughs) [...]. I was tense [...] nervous, because...well, we know, right, that a general anesthesia is scary because it's called general (laughs) [...]. It was... Everything, right... Both for me and for him. For me to stay calm and him too.

3. I6 – What a relief [...]. As good as it gets, because we... See he's being taken good care of, right... We don't keep wondering how he is [...]. This is much better [...] I would've been so nervous.
4. I7 – Oh, it was great [...]. When I walked in here, I remembered of when he was born... So... It was a shock, you know? [...]. But he's okay, thank God [...]. I would rather have participated in the whole thing, even the surgery [...]. Of course... I felt...Safe, right [...] but it's our son, right? So we... Can't... leave and go somewhere... And leave them, right? [...].

When asked about the child's anesthesia awakening, there were expressions related to tranquility, as can be seen in the following statements:

1. I1 – It's the first time, right... I, uh, I didn't know how she was going to react, but she woke up very calm.
2. I4 – No, he woke up quietly... He looked at me, still sleepy, he was calm.
3. I7 – No, it was calm, it was calm...

According to the results obtained in the present study, it is possible to verify that, although mother seemed calm during anesthesia pre-induction and induction, they reported having struggled with feelings during these moments, but their wish of being with their children during the anesthetic-surgical process, as well as the benefits obtained from doing that, prevailed over these negative feelings. Crying, a strategy observed in anesthetic induction, expressed the feelings of some mothers in the situation just mentioned.

Tranquility, a fact observed in anesthesia pre-induction and induction periods, was reported by mothers in the PARR. Furthermore, they described positive feeling at the time of the child's awakening.

DISCUSSION

The present research cast a light on the accompanying parties of children about to undergo surgery, evidencing that, in all cases, children were accompanied by their mothers. In a study carried out in São Paulo, mothers were also the majority of accompany parties of pediatric patients undergoing surgical procedures and who ended up fasting along with their children⁹. This data was similar to the findings of this research, since the field logs' records verified that the circulating nurse would usually tell the mother to go eat something or have

some coffee. Possibly, professionals do that as a routine procedure, once that mother would usually not feed themselves, considering their children should have “nothing by mouth” (NBM) in the immediate preoperative period.

In the research mentioned previously⁹, feelings such as nervousness, anxiety and concern have been observed. In this research, the manifestation of crying was observed in five of the seven mothers in the anesthesia induction period. Although some of them were “anxious” (IFL1), “apprehensive” (IFL3) and “tearful” (IFL5) during pre-induction, they seemed calm during induction until the child fell asleep.

In another study, the feelings of accompanying parties of children in pediatric surgery were expressed by anxiety, nervousness and fear. This occurs at the moment in which mother and child are separated, when the child is taken into the operating room, and their companions need to stay in the waiting room, wondering what could be happening during the intervention¹⁰.

Furthermore, mothers had different manifestations of fear and anxiety, through crying or agitation, caused by the unknown, and related to the surgery itself. Even with the aid of health professionals regarding the surgical process, many companions were not able to remain completely at ease¹⁰.

The results of the present study showed that, when mothers accompanied their children to the operating room, they seemed calm; but after witnessing their child’s loss of consciousness, they cried — evidencing the same feeling displayed by other accompanying parties in the previously mentioned study¹⁰.

As much as companions try to remain calm in front of the hospitalization situation, the lack of knowledge of what could occur makes them feel very distressed. The strategies most often used by parents are: giving love and affection, looking for tranquility and spiritual support¹¹. The results of the present study agree with what was reported by the authors, once that most mothers demonstrated this feeling by kissing their child after anesthesia induction. Although spirituality was not observed in the manifestations of the mothers in the research, it is not unlikely that they may have used this strategy.

The field logs showed that patients, in their majority, were calm, characterizing an important factor, considering that the anesthesia induction, at times, may be seen by the child as a punishment for something they did⁶. Thus, it is sometimes necessary to prepare the parents beforehand to introduce the child in the SC.

The inability to actively take part in the process, i.e., just looking and being together, may sometimes result in negative feelings. In some cases, seeing your child in a distress situation, when you are not in charge of such situation, may be cause of great anxiety in some progenitors. The feelings of fear, anxiety and nervousness are caused by the unknown, as in not knowing how the anesthesia induction will be, how the child will react and how they will be during the period their companions are not allowed to be present. In this context, the presence of parents during anesthesia induction considerably increases their satisfaction, contributing to a positive experience¹².

A study analyzed the experience of using volunteers to accompany parents to the operating room, helping them and clarifying the process. Before the child’s elective surgery, parents received a pamphlet with information about their presence in anesthesia induction. Of the parents who took part in the process, 99% of them reported feeling well-prepared for the procedure¹³. Similarly, most mothers in this research reported that being with their children at that time was a positive experience.

The presence of parents during the procedure improves the quality of anesthesia induction in children who were not medicated in the preoperative period, thus increasing the occurrence of smoother inductions; also, there is lesser need for physical restraint¹⁴. In this investigation, anesthesia inductions went on smoothly, as well as the child’s awakening. There was only one situation in which a kind of physical restraint was necessary, where the mother and the circulating nurse had to hold the child, due to their becoming extremely agitated and nervous at the time the inhalation anesthesia mask was placed on their face.

In the field log records, it was verified that only one child was not distracted by the toys available in the pre-induction room. This child was 11 years old, which may suggest that new forms of distraction should be used for this age range. An easy and time-saving method which may be used to reduce anxiety in pediatric patients is the use of tablet interventions¹⁵. The use of this equipment was shown to be superior to midazolam, regarding the reduction of anxiety of children aged between 1 and 11 years old, at the moment they are separated from their parents and during anesthesia induction¹⁶.

Although one mother interviewed reported not having enjoyed the experience of participating in anesthesia induction, the staff interacted a great deal with both mother and child, talking to and entertaining them both during the process. Also, the mother was accompanied by the nursing

staff to the exit after the process was over, and received recommendations on the postoperative period. Some factors which can contribute to parental anxiety may be related to personality, age, education, marital status, occupation, previous hospital experiences, concerns regarding the surgery and the anesthesia itself⁷.

In another study¹⁸, the participating mothers expressed feelings of anguish, impotence, loneliness, guilt, fear, sadness and anxiety. Authors¹² recognize that entering an operating room is stressful, regardless of the absence or presence of parents. It should be noted that the results in this study are similar to the ones of previously mentioned studies^{12,18}, considering research subjects expressed fear and anxiety. Moreover, it was possible to observe that, even though the anesthetic-surgical process is challenging, with the occurrence of negative feelings, mothers prefer to take part in these moments.

The I1 and I5 subjects expressed similar feelings regarding the act of anesthesia itself and about not knowing how the child would respond. However, subject I1 reported it not having been a good experience. The stress of parents may interfere in the ability to meet the emotional needs of the child, such as helping them to create managerial strategies for these feelings during hospitalization. When parents are calm and present, they contribute to the cooperation of their kids during the procedures⁶. Negative feelings may be part of this process, since surgical procedures involve some risks, but they do not turn the experience of participating in anesthesia induction into a negative thing.

In a study¹⁹ carried out in the city of Porto, in Portugal, parents believed their presence during the induction period and in the PARR decreased anxiety and provided greater comfort and safety to the child. On the other hand, when asked about the arrival of the child in the PARR, 42.9% of parents stated that the child was agitated. The data of the aforementioned study¹⁹ differs from the present research, in which the subjects expressed tranquility in their statements.

During data collection, a difficulty was observed when conducting further interviews, provided that mothers were living a moment of reasonable tension, with concentration and stress focused on the situation at hand, meaning the anesthetic-surgical procedure their children were going through, which resulted in little involvement between interviewee and interviewer. This is an understandable fact in a health situation involving children and their accompanying parties, when attention is focused on the event itself, placing any other situations that may occur at the same time in the background.

FINAL CONSIDERATIONS

This research allowed the observation of the perception of children's accompanying parties (seven mothers) in anesthesia induction and awakening. In pre-induction, the manifestation of tranquility prevailed both in children and in their mothers. As for anesthesia induction, some mothers reported negative feelings during the anesthetic-surgical procedure, though having a positive overall experience, once that it was possible to take part in the whole process and to ensure support and tranquility to the child.

When identifying the feelings experienced in the PARR, there was a predominance of relief and happiness. Also, most children experienced a smooth awakening from the anesthesia. The strategies used by mothers/companions were providing love and affection, crying at the moment the child fell asleep. The role of the circulating nurse is noteworthy as a support to mothers.

The role of SC and PARR nurses, committed and able to act out to calm down and comfort children and mothers, is essential, generating ways to care for and assist others.

Accompanying parties should be considered to become an active part of the process, providing greater safety to children and greater satisfactions to their companions, in order to make the anesthesia induction a moment of greater tranquility to all who are involved, aiming at a better pediatric patient awakening.

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