## **Research Article**

# Psychosomatic Symptoms, Complex Emotions and Experiences of the Mothers Related to Paediatric Surgeries: A Qualitative Study

## Oznur Tiryaki<sup>1</sup>, Elif Erbay<sup>2</sup>, Sumeyra Topal<sup>3</sup>, Nursan Cinar<sup>4</sup>

<sup>1-3</sup>Institute of Health Sciences, Sakarya University, Turkey; <sup>4</sup>Faculty of Health Sciences, Department of Pediatric Nursing, Sakarya University, Turkey

## **Abstract**

**Objectives:** The aim of this study was to identify psychosomatic symptoms and experiences of mothers.

**Methods:** Ethics committee approval and institutional permission were obtained before starting the study. The sample of the study consisted of 23 mothers who agreed to voluntarily participate in study between May 01 and 31, 2018. The interviews were performed by two researchers. The content analysis of the obtained data was made by the researchers and the main themes were determined and interpreted.

**Results:** It was observed that 47.8% (n=11) of the mothers who were included in the study were between 24-29 age range. Experiences by the mothers in the preoperative period were analyzed according to the expressions, the themes of fear, psychosomatic symptoms of mother, stress, curiosity, complex emotions and confusion, impact of previous experiences, concerns about home care and seeking resources to learn more about paediatric surgeries.

**Conclusion:** It was found that the mothers were in need of the support of the health professionals in many ways in order to get satisfactory experiences related to paediatric surgeries of their children. The findings would attract the attention of health professionals and contribute to their approach to the families.

Corresponding Author: Oznur Tiryaki, Institute of Health Sciences, Sakarya University, Turkey.

E-mail: oznuritiryaki@gmail.com

Keywords | Child, Surgery, Preoperative Period, Mother's Experience

## Introduction

Pediatric surgery involves a large age group of patients from premature, newborn to adolescent children.¹ Mostly, the concepts of surgery and anesthesia could always be seen as reminiscent thing of feelings like tension, fear, anxiety and excitement. Children who are struggling to perceive abstract concepts such as illness and death may find the hospitalization and surgical procedure traumatic and may experience the feeling of loss.² Hospital environment, staff, materials used, procedures to be performed, pain, anticipation of disturbing experiences, diagnosis and prognosis (course of the disease) are unknown conditions for the children in each hospita-

lized group and may be a source of anxiety. The child's adaptation to the hospital and treatment can affect the communication with the healthcare professional and the future hospital experience. Experienced a lot of pain and fear during childhood may cause fear and avoidance when taking the medical healthcare in adulthood. It is known that traumatic symptoms and anxiety levels are increased in the mothers of the children who undergo surgical procedures. The applied anesthesia and surgical procedure for the child can be an important cause of concern for both the child and the parent. Parents whose children undergo surgical procedures may experience extreme stress and desperation. The most

important anxiety source for hospitalized children is the separation from their parents. Therefore, it is important to ensure the continuity of the relationship of the hospitalized children with their families. It is difficult to establish a trust relationship with the parent when the parent's anxiety is not eliminated. It is extremely important that the nurses to be aware of the anxiety of the family, especially of the mothers, and to meet their needs with a family-centered care approach. The purpose of this study is to examine the experiences of the mothers who were preparing their children for surgery during preoperative period by using in-depth interviews.

#### **Methods**

The research was conducted between 01-31/05/2018 in clinics of Pediatric Surgery on two campuses of an educational research hospital. This is a qualitative phenomenological study. The sampling of the research consisted of 23 mothers who volunteer to participate in the study, and had no communication problem in the stated time period in Pediatric Surgery clinic at both campuses of the hospital.

In the collection of the data, interview technique was used. The data were collected by using a form including information about participants and semi-structured interview form. In-depth interview technique was applied to family members. The interviews were conducted by sitting at the same level with the participants, listening actively and were directed by the questionnaire forms. The duration of the interview with the family varies between 30-45 minutes. The answers given by the mothers are stated exactly as they expressed in the results section. The semi-structured interview was recorded on the voice recorder. The interviews were written to the Microsoft Word software by listening repeatedly by the researchers. The data have been read many times.

In the evaluation of the data, content analysis method was used. The data were evaluated by two researchers and codes that could appear from each word and sentence were generated with a consensus. Later, the researchers came together to form a common code list. After the resulting codes, the thematic coding was started and the codes were classified by the researchers and suitable themes were extracted. Subsequently, all interview data were coded and interpreted and reported.

In order to be able to conduct the research, the written permission (02/04/2018-86) of the institution where the study was conducted was taken and the verbal approval of the all participants about their voluntary participation. The names of the participants were not used because of the research ethics. For this reason, participant mothers are named with codes A1, A2, A3, A4 etc. The mothers were informed about the use of the voice recorder and any problems have not been experienced.

## **Results**

The mothers (n=11, 47.8%) were in between the ages of 24 and 29, 39.1% (n=9) were married for 5-9 years, 65.2% (n=15) were living in the city center, 43.5% (n=10) had high school graduates, 91.3% (n=21) were housewives, 69.6% (n=16) had equal income and expense, 73.9% (n=17) were in the nuclear family. The mean age of the children to be operated was found to be  $5.04 \pm 5.03$  (min.5 months to max.16 years), 65.12% (n=15) of the children were five years old or younger and 78.26% were male. It was determined that 56.5% (n = 13) of the mothers had no knowledge about anesthesia, 3 of the children were previously anesthetized and have surgery, and 1 of them had problems due to anesthesia. It was stated that 47.8% of the participants (n = 11) were supported by family members and 21.7% (n = 5) of this support were performed by the spouses of the participants.

When the mothers' experiences were analyzed according to the expressions in the preoperative period, eight themes were created (Table 1).

### **Concerns About Home Care**

"I have worries when I think of home care, frankly I am worried that if I have a nuisance at home. I had my son after two daughters. I do not know how to care for post-operative dressing, cleaning, bathroom, private area care because I do not have experience in male child care" (A7, right inguinal hernia and circum-

## **Table 1:** Themes

## **Themes**

Concerns about Home Care
Psychosomatic Symptoms of the Mother
Complex Emotions and Confusion
Curiosity
Stress
Impact of Previous Experiences
Seeking Resources to Learn More

cision). "It is crying too much at home and at night. It is a grumpy baby but I prefer to care at home because it is easier for me" (A8, cystoscopy). "I think about how the surgery will pass and how I will care at home. I hope it will not be difficult" (A11, lymphadenopathy, undescended testis and circumcision) "I do not know how to care after surgery. I worry about it when I think about it" (A20, bilateral inguinal hernia and tongue tie).

## Psychosomatic Symptoms of the Mother

"I am over-excited, my body is shaking, my mouth is dry and I am very thirsty. I am still thankful that my child is healthy" (A1, undescended testicle and circumcision). "I can not stand to see blood, I am going dizzy, even when I say it now I feel bad" (A7, right inguinal hernia and circumcision). "It hurts me more than my child, I feel bad when I think the pain my child will suffer. I could not even look when the vascular access was establishing, I went out and my psychology broke" (A13, tongue tie and circumcision). "I can not think of anything, I suppose I became speechless" (A17, endoscopy). "If I will tell my thoughts, I would cry now. I do not want to cry beside you. I have insomnia, I feel nauseous, I am about to vomit" (A19, tongue tie and circumcision).

## **Complex Emotions and Confusion**

"I do not know what to think or how to feel. I hope everything will be fine. It is not easy to get the risk of surgery, I am very confused as a mother" (A5, right torticollis). "I am worried, will it be problematic, or will we satisfy with the surgery, should it be performed later or now for my baby, I do not know. I trust the physician but in the end there is also the possibility of a misfortune" (A12, tongue tie and circumcision). "The child is hungry and can't stand hunger. It was not stay hunger even for 2 hours. He did not eat for 6-7 hours. I decided the surgery to be done early because of its age is little but I think should it be a little later, but it is too late to think these. It is both hungry and too little, I do not know what will happen" (A14, circumcision). "The people around me said that it is too little for the surgery and I act early. Now, I am little confused about whether they were right. I am only concerned about my child's health" (A16, undescended testis and circumcision). "I do not know if the result will be good or bad after the surgery, I am

very confused" (A17, endoscopy). "I investigated the disease myself, I brought my child to four different doctors, even one of these physicians said that there was no necessity to surgery, I would have given up. All of them said the surgery was necessary" (A23, bilateral inguinal hernia and umblical hernia).

## **Curiosity**

"I wonder how it will react after surgery" (A3, bilateral undescended testis and circumcision). "I am a health professional, I know the process but still there is curiosity. Even if I am a health professional, I become curious unintentionally" (A9, circumcision). "Information was not given enough, I don't know what will happen before and after the surgery and it makes me curious" (A12, tongue tie and circumcision; A20, bilateral inguinal hernia and tongue tie). "I have curiosity more than fear, I wonder how the surgery will pass and how it will end" (A6, cholecystectomy; A14, circumcision). "I am curious whether my daughter's sugar will rise due to surgery" (A18, pilonidal sinus). "I am curious how the surgery will result. I trust the doctor. My curiosity is not about the physician, it is about how my son will react after the surgery" (A21, circumcision).

## **Stress**

"I have feelings of excitement, panic, stress and whatever you seek. I should be relax, my child should not feel my feelings, my child is nine years old and aware of everything" (A5, right torticollis). "I am excited, worried but I do not know why and I can not explain why I feel this way. I do not know what it will be like, will the little baby be able to wake up after narcosis, does it have allergies to something. He is very hungry, he can not stand it and I can not stand it, I am cut to the heart" (A11, lymphadenopathy, undescended testis and circumcision). "I do not feel anything (she is crying and unable to speak)" (A14, circum-cision). "I am more relaxed because it had many operations before. I was constant crying at the first surgery, my emotions were more intense. I am not stressed currently but I worry if they get him to intensive care unit(ICU) after surgery" (A15, Percutaneous endoscopic gastrostomy (PEG) and undescended testes). "It is hungry and too little, I am stressed, I want to breast-feed as soon as possible" (A16, undescended testis and circumcision). "Our doctor and nurses are giving care very good, so I am not stressed. Our doctor examined well relieved me" (A18, pilonidal sinus). "I'm stressed but I'm not very worried. I think it's a situation we can handle. Staying in hospital is also putting me in stress. It is difficult with a little baby, in the hospital the baby's regular life at home is broken, my psychology is broken" (A22, bilateral undescen-ded testis and circumcision). "I'm very stressed currently, I was panicked when I first learned of the disease. I'm so worried that I would cry if you touch, I'm so excited" (A23, bilateral inguinal hernia and umblical hernia).

## The Impact of Previous Experiences

"I have experience because my first son had surgery when he was 7 years old, but he is smaller in age, so I'm worried about him. The catheter will be inserted. He is a very active child I think can I hold the catheter in its place" (A2, hypospadias). "Last year, when we came to surgery, they did not need surgery and they were intervened with needles. A little time passed, it started to cry when urinating. When we came to the physician again, the operation was decided" (A3, bilateral undescended testis and circumcision). "It had three surgeries before. I have anxiety compared to previous surgeries. I'm a little more relaxed because our physi-cian said that this operation will be simpler than the others" (A6, cholecystectomy). "My daughter had operation too and she cried. It's hard to calm them down and I do not know what to do he it will cry too much. I feel helpless when they cry" (A7, right inguinal hernia and circumcision). "When it had first operation I became tired from the crying in front of the operating room door. I'm upset again, I'm crying again, but I'm stronger. I am worried about surgery every time, this happens, but I feel more strongly now we got used to it. When my son comes to the hospital, he gets very restless, he is aware of everything. He cries too much when he see nurses, physician and needle" (A8, cystoscopy). "My son had many surgeries and we have gained experience, we got used to it and became professional" (A15, PEG and undescended testes). "It's just five months old, I can't stand for its pain. It's brother had surgery but his age was older. Actually this is luckier, smaller, does not understand what's going on. It's brother cried too much after the surgery, there was a mistake in tests, so they were repeated again and again, (A16, undescended testis and circumcision).

## Seeking Resources to Learn More

"I talked to the doctor, the hospital and the surgery one by one. We are relieved and we trust our doc. I learned that there was nothing so great in the surgery and I was relieved. "(A3, bilateral undescended testis and circumcision; A11, lymphadenopathy, undescended testis and circumcision; A14, circumcision). "I did research on the internet last night. I did not check the operation, I checked at the healing process" (A7, right inguinal hernia and circumcision). "I did research on the internet because I did not know about the operation, it is a simple process according to what I read" (A17, endoscopy). "I watched the surgery videos from the internet, I feel upset" (A22, bilateral undescended testis and circumcision).

#### Fear

"I am afraid because it is too little, just nine months, I am very afraid that there will be infection, edema in the wound place" (A2, hypospadias). "I am afraid my child will go into surgery, every operation has a risk but it is beyond my power, I am afraid" (A4, ingrown toenail). "We have fear. Because this was not the first surgery, it had already undergone major surgeries. But it is not more risky, the appendicitis has exploded, the organs have been inflamed, the adhesions occurred in the gut and they have operated three times in a month" (A6, cholecystectomy). "I am a health professional, I know the process but I still have fears because I'm a mother" (A9, circumcision). "I am both nervous and fearful because it is a process I do not know" (A10, right undescended testis and circumcision). "I have fears about how the surgery will be for my son, and how he will be treated, I think only I can get rid of my fears if my son become healthy, it is beyond my power because the surgery eventually creates anxiety" (A11, lymphadenopathy, undescended testis and circumcision). "My biggest concern is what we will live after the operation. I have fear of what we will experience after the operation related to body. Will I be able to breastfeed more easily after surgery? I am worried about this" (A12, tongue tie and circumcision). "My only fear and wish, is them to give it my hands after the operation, I do not think they will take care enough in intensive care, no one can care like a mother" (A15, PEG and undescended testes). "I am afraid of things that could go wrong during surgery. Of course we have signed the forms

for which we have all responsibility for surgery, but I am still afraid. I have not started on additional food for five months yet and I am afraid that if the narcosis causes an allergy" (A16, undescended testis and circumcision). "My daughter is diabetic and I am afraid that if she will suffer diabetes due to surgery. She is hungry for twelve hours and she ate only one apple" (A18, pilonidal sinus). "I am not afraid of the surgery but afraid of that if it will not wake up because of the narcosis or if bad things happen after surgery" (A19, tongue tie and circumcision). "I divorced my husband, I care my child myself and I am afraid that if anything happens or I will lose my child" (A21, circumcision). "I do not know why, but I'm too scared, it's beyond my power and I think it's because I'm a mother" (A23, bilateral inguinal hernia and umblical hernia).

### **Discussion**

Millions of children are anesthetized and operated in the world, every year. The fact that the child is hospitalized for surgery also causes the parents to live an intense anxiety.7 It is known that high levels of anxiety in the preoperative period lead to postoperative pain, delay of discharge, sleep disturbances and behavioral changes. 8,9 AL-Sagat et al. 10 conducted literature review in health-related databases by using the keywords of "preoperative preparation", "child surgery", "preoperative preparation programs for children" "preoperative anxiety of children", "preoperative education", "preoperative anxiety" and identified three common themes from 48 articles related to the subject. These themes are "Preoperative Anxiety in Children", "The Influence of Preoperative Anxiety on Pediatric Patients and Their Parents", "Psychological Preparation in Parents and Children during Preoperative Period". The themes we have obtained from our research are similar to the literature (Fear, Psychosomatic Symptoms of the Mother, Stress, Curiosity, Complex Emotions and Confusion, Impact of Previous Experience, Concerns about Home Care, Seeking Resources to Learn More).

In our research, the fact that the concerns, stresses and curiosities of the mothers in preoperative period were about how the surgery will pass in general, the risk of developing an anesthesia-related complication and the compliance of the child at all stages shows that insufficient information might be given before the

surgery or images of their previous experiences or other's experiences which found in internet adversely affect mothers' poses. It is suggested that nurses to use various methods in order to control the stress and fear of the family and the child in the preoperative period. The postoperative difficulties can be prevented with various methods applied in the preoperative period (videos, toys, excursion inside the clinic, written or visual documents). In a systematic compilation study, it was found that distracting the attention of children with video during the preoperative period has a decreasing effect on the anxiety and stress of the children and reduces the need for sedative drugs and this method is cost-effective in terms of both money and time. In the preoperative period that the preoperative period has a decreasing effect on the anxiety and stress of the children and reduces the need for sedative drugs and this method is cost-effective in terms of both money and time. In the preoperative period the preoperative period has a decreasing effect on the anxiety and stress of the children and reduces the need for sedative drugs and this method is cost-effective in terms of both money and time.

In a study conducted by Franzoi and Martins (2016), Yale Preoperative Anxiety Scale was applied to 52 participants including patients of pediatric surgery and their relatives (mother, mother/father, father, grandmother). It was found that 69% of the children and 73% of the mothers had anxiety. The same scale was applied to 82 patients by Dağlı et.al. (2016) in our country and it was found that 30.4% had high level of anxiety. The same scale was applied to 82 patients by Dağlı et.al. (2016) in our country and it was found that 30.4% had high level of anxiety.

Previous experiences of mothers participating in the study, their concerns about home care and their seeking of resources to learn more about the operation are affecting the level of anxiety. Mothers with children who had previously been hospitalized were reported to have less anxiety levels and mothers who were previously in-patient had higher anxiety levels. <sup>15</sup> More information shared by the physician and explanations are stated to reduce the anxiety. <sup>16</sup> Informing about the nursing initiatives, ensuring the communication with the physician, getting subjects into touch with healthy/sick individuals and their families in similar positions will both contribute to reducing the anxiety levels of the children and the support of the mothers/fathers' to their children. <sup>17</sup>

Nurses should learn about the experiences of the children and their families in previous surgical interventions, if any, about the problems, impressions and expectations that they have experienced with surgical intervention. This information can be used as a guide to the physical and psychological comfort of the patient. At the same time, it should be questioned whether the complication developed after the

previous surgical procedure. 18 Applying a safe surgical checklist for patient safety also reduces the risk of possible complications. In a study conducted, the rate of complication development in children receiving a control list was 4.3% compared with 14% in nonreceiving children.<sup>19</sup> The potential risk should be determined in advance, as complication development will adversely affect the home care process. A safe surgical checklist will be effective in preventing unwanted situations, as well as informing parents about their use and making them feel more confident. Also, the collaborative work between staff, patients and families promotes safer care, reduces children's anxiety and increases the satisfaction of patients and families. Thus, the use of preoperative interventions checklists can be a tool for interaction between professionals, children and families.<sup>20</sup>

In the study conducted by Tabrizi et al.<sup>21</sup> including 30 participants (control group: 15, experimental group: 15) from pediatric surgery patients and their mothers, pre-test, training (information booklet, given information from anesthesiologist) and post-test were applied to experimental group and for the control group only pre-test and post-test were applied. In their study, it was stated that the concerns of children and mothers in the experimental group were reduced, that the cause of the concerns arises from the lack of information about the surgery and anesthetic fear and lack of information about the process, and that the healthcare providers should sympathize and empathize in reducing anxiety.

## **Conclusion**

One of the most remarkable results in our study is that parents are not content with the information they receive from physicians and health care providers, they apply to the internet for more information, and the videos they watch on the internet increase their concerns and fears. Starting from the facts that the needs of each individual is unique, the needs of each child and his/her family may be very different from each other even in the same situation, thru giving priority and importance to family-centered care practices by health professionals and especially nurses should prevent by using face to face informing method to families from entering into searches that do not address their own needs.

Ethical Approval: Given

Conflict of Interest: The authors declare no conflict

of interest

Funding Source: None

### References

- 1. Unver S, Yıldırım M. Approach to Pediatric Patients during Surgical Interventions. The Journal of Current Pediatrics. 2013;11(2):128-133.
- 2. Binici Y. Determination of information and anxiety levels of mothers whose children were going to have an pediatric daily surgey about surgical operations Master Thesis, Ataturk University, Institute of Health Sciences, Department of Pediatric Nursing. 2015.
- 3. Bereket D. Day Surgery Patients About Surgery Methods Knowledge Level, After Surgery And Related Concerns Evalution Of Satisfaction In Terms Of Nursing Master Thesis, Inonu University, Institute of Health Sciences, Department of Nursing. 2014.
- 4. Gol I, Onarici M. Nurses' Knowledge and Practices About Pain and Pain Control in Children. Journal of Hacettepe University Faculty of Nursing. 2015;3(2): 20-9.
- 5. Camur Z. The Effect Of Parental Participation In The Care Of Hospitalized Child On Parental Satisfaction And Anxiety Of Both Parent And Child. Master Thesis, Adnan Menderes University, Institute of Health Sciences, Pediatric Nursing Master Program. 2017.
- 6. Ciftci EK, Aydin D, Karatas H. Determining the Reasons of Anxiety and Anxiety States of the Parents with Children Undergoing a Surgical Intervention. J Pediat Res. 2016;3(1):23-9.
- 7. Altay NC. Preoperative Preparation for Children. Hacettepe University. Faculty of Health Sciences Nursing Journal. 2008;15(2):68-76.
- 8. Fortier MA, Kain ZN. Treating perioperative anxiety and pain in children: a tailored and innovative approach. Paediatr Anaesth. 2015;25(1):27-35.
- 9. Deliktas HK, Acikgoz T, Celik S. The effect of waiting periods for premedication room on the anxiety levels of scheduled elective surgery patients. The Medical Bulletin of Sisli Etfal Hospital. 2017; 51(4):283-92.
- 10. AL-Sagarat AY, Al-Oran HM, Obeidat H, Hamlan AM, Moxham L. Preparing the family and children for surgery. Crit Care Nurs Q. 2017;40 (2):99-107.
- 11. Dwairej D, Obeidat H, Khalaf I. The effectiveness of video distraction on children preoperative anxiety: an integrative literature review. Open Journal of Nursing. 2018;8(3):171-87.

- 12. Ozturk O, Andsoy II. A Pat ient with Special Needs Group: Pediat ric Pat ient With Down Syndrome and Perioperative Nursing Approaches. Surgical Diseases Nursing. 2015;6(2):79-84.
- 13. Franzoi MAH, Martins G. Children's anxiety in surgical situation and emotional perceptions reported by their companions in the preoperative stage: an exploratory study. REME Rev Min Enferm. 2016; 20(4):1-8.
- 14. Daglı S, Demirci M, Kavalci A, Kol N, Sahin E, Uyanik E et al. The Effects On Preoperative Anxiety And Postoperative Attitudes Of The Children And The Parents Who Were Informed About Outpatient Surgeries. Journal of Anesthesia. 2016;24(1):13-17.
- 15. Gurol A, Binici Y. Determination of anxiety levels of the mothers whose children will undergo day care surgery and the effective factors. Journal of Dr. Behcet Uz Children's Hospital. 2017;7(1):29-38.
- 16. Oguzalp H, Pamuk AG, Ocal T. Evaluation of Parental Anxiety and Desire in Day Case Surgery Unit. J Turk Anaesth Int Care. 2010;38(3):208-16...

- 17. Turan NK, Acaroglu R. The Relationship Between Anxiety Levels Of Adolescents Who Undergo Surgical Interventions and Their Parents And Analysis Of Anxiety Causes. Türkiye Klinikleri J Med Sci. 2012; 32(2):308-15.
- 18. Yilmaz E, Aydin E. The Effect of Pre and Postoperative Anxiety in Quality of Recovery in Patients Undergoing Surgery. First University Medical Journal Of Health. 2013;8(23):79-95.
- 19. Mantar NT, İntepeler SS. Effect of Using Pediatric Perioperative Safe Surgical Checklist on Complication Development. DEUHFED. 2016;9(2): 38-44.
- 20. Pires MP, Pedreira ML, Peterlini MA. Safe pediatric surgery: development and validation of preoperative interventions checklist. Rev. Latino-Am. Enfermagem. 2013;21(5):1080-7.
- 21. Tabrizi JS, Seyedhejazi M, Fakhari A, Ghadimi F, Hamidi M, Taghizadieh N. Preoperative Education and decreasing preoperative anxiety among children aged 8-10 years old and their mothers. Anesth Pain Med. 2015;5 (4): e25036.