ON THE THRESHOLD OF HOPE: THE FAMILY’S PERCEPTION IN THE TRANSOPERATORY OF HEART SURGERY

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ABSTRACT

Objective: To know the perception of the family regarding the transoperative period of cardiac surgery. Method: Qualitative, descriptive, and family-related research, carried out with ten people of nine families of patients who underwent cardiac surgery. Data collection took place through an unstructured interview in a public hospital in the interior of Rio Grande do Sul. Data were subjected to content analysis based on Bauer's propositions. Ethical precepts were respected. Results: The data were organized in the category: “On the threshold of hope: waiting in the waiting room”, which expresses the fine line of the experiences of families in the transoperative period of cardiac surgery, understanding their perceptions and feelings about the waiting period for the surgical outcome from the family member. Conclusion: The transoperative period of cardiac surgery is perceived as a unique moment, generating emotional instability and ambivalence of feelings, being permeated with anxiety and linked to the constant fear of loss, concomitant with the hope of a new life provided by the surgery.

Keywords: Family. Thoracic surgery. Life change events. Nursing.

INTRODUCTION

In demographic terms, the epidemiological transformations in Brazil have a high incidence and prevalence of Chronic Non-Communicable Diseases (CNCDs), which have a high mortality rate that impacts public health, as they affect different socioeconomic strata of the population, especially more vulnerable groups, having as factors associated with education, age, gender, living conditions and access to health services(1).

Among the CNCDs, we highlight Cardiovascular Diseases (CVDs)(2) that affect the heart and blood vessels, with Ischemic Heart Diseases and Cerebrovascular Diseases as the most prevalent.

CVDs are characterized by slow progression and absence of apparent symptoms in early stages, and are the main cause of death in the national territory (20%), especially in the population over 30 years old, with complications such as ischemic heart disease, heart failure, stroke and chronic renal failure(3). When the patient realizes that the symptoms are related to the heart, conflicting feelings related to the vulnerability of life can often emerge, and also anguish and fear in the face of the unknown due to the stigma associated with these diseases(4).

Among the treatment, modalities are drug therapy, angioplasty, and/or surgical intervention(5). Cardiac surgery consists of opening the chest, usually by median longitudinal sternotomy, with an incision from the sternal notch to the xiphoid appendix. The procedure aims to restore the functionality of the heart and, in most cases, it allows the patient to regain his capacity and autonomy(6).

The need for cardiac surgery can cause a set of emotions to the patient and his family since the heart is a vital organ. Through its manipulation in the surgical act, it puts them in a situation of vulnerability, generating questions...
regarding the success or not of the surgical procedure\(^7\). Thus, feelings such as anxiety, depression, and fear may be present\(^8\).

The surgical procedure imposes physical, social, and psychological changes on the patient\(^7\). This situation affects the family dynamics in a way that roles need to be resized, considering that the illness experiences involve the entire family context, characterized as a collective experience\(^9\).

The concept of family is not restricted to blood ties. It also encompasses affective bonds and/or affinities\(^10\). It is characterized by its unique value and, therefore, it occupies a primordial place as the primary unit of life and care for its members. Thus, during situations of illness, the family nucleus is intrinsically involved, making it necessary to recognize it as an ally during the perioperative period\(^11\). In this context, nursing has a fundamental role with the patient and their family, recognizing them as a care unit, identifying their difficulties and also their potential, ensuring that care is directed to their needs.

Considering the exposure of the family unit to illness, hospitalization, and the discovery of a serious health condition, it is important to understand how families perceive and behave in cardiac surgery, considering that it will enable nursing to develop intervention strategies that, effective and qualified, will help to restore balance and family well-being. Furthermore, the study may support new knowledge for the scientific community, in addition to serving as a basis for future investigations.

Given the above, this study has the following research question: What is the family’s perception of performing cardiac surgery in one of its members? The objective was to know the perception of the family regarding the transoperative period of cardiac surgery.

**METHOD**

This is a qualitative, descriptive, and family-related study. Its investigation and analysis focus is the perspective presented by one or more family members about the experienced event, and the answers are considered individually\(^12\).

The research setting was the Intensive Cardiology Unit (ICU) of a public hospital in the interior of Rio Grande do Sul, Brazil. The inclusion criteria were: family members of a patient undergoing cardiac surgery who were awaiting completion of the procedure in the waiting room, aged 18 years or over. The exclusion criteria were: family members who did not have physical and/or cognitive conditions to understand and participate in the research.

The location of possible participants occurred during the previous contact with patients in the preoperative period of cardiac surgery, to get to know this person and promote a closer relationship with their families. From the moment the sick person entered the operating room, the families were approached and invited to participate in the research. Nine families of patients undergoing cardiac surgery comprised the study population, totaling ten people. All patients who underwent the surgical procedure during the data collection period were invited to participate, with no refusals.

Data collection was performed by two previously trained researchers. It took place in a single meeting with each family member, from August to September 2017, in a private room attached to the operating room. First, the objective of the research was explained and the ethical aspects involved were clarified. Participants signed the Informed Consent Form (ICF) and answered a sociodemographic questionnaire containing questions such as age, gender, education, and income to characterize them. To get to know the patients, we collected questions such as age, education, time since diagnosis, and preoperative hospital stay.

Sequentially, an unstructured interview was carried out with each participant, guided by the following question: “Please tell me how it is being for your family to have (patient’s name) performing surgery in the heart at that moment”. We used a digital recorder for the interviews with an average duration of 46 minutes, which is fully transcribed in a Word document, generating a total of 81 pages. The transcript of the interviews was not returned to the participants for possible comments and/or changes.

Two researchers carried out data analysis following the content analysis based on Bauer's propositions\(^13\). Initially, the material was organized and read repeatedly to allow for the
appropriation of data. Subsequently, these were manually organized into codes and, by the convergence of meaning, grouped into subcategories, so that they became exclusive and independent from each other and represented the perception of the lived experience\(^{(13)}\). Thus, the category “On the threshold of hope: waiting in the waiting room” was organized, which consists of the following subcategories: a moment of transition; waiting for news; on the threshold of hope; and ambivalent feelings. The analysis of the results, inferences, and discussion were carried out to integrate them into the collating literature relevant to the theme.

The research project was approved by the Research Ethics Committee, under Opinion No. 2,178,326. To protect the anonymity of the participants, alphanumeric codes were used, with families identified by F1, F2, F3, and so on.

**RESULTS**

The participating families were represented by four spouses, two parents, two brothers and two children, seven women and three men. The age of the family members ranged from 21 to 72 years, with an average of 55 years old. As for education, five had incomplete primary education and income ranged from half to three and a half minimum wages.

Regarding sick people, the average age was 56 years, and the education level of the majority comprised incomplete primary education. Regarding the clinical aspect, the time of diagnosis of heart disease ranged from eight days to 15 years. The preoperative hospitalization time ranged from three to 15 days, with a mean hospital stay of nine days. Of the nine cardiac surgeries followed, two patients died, one in the intraoperative period and the other in the immediate postoperative period.

**On the threshold of hope: waiting in the waiting room**

The discovery of heart disease, associated with the need for surgery, comprises a unique experience in the sick person's life that impacts the family unit. The transoperative period of cardiac surgery helps the family when experiencing a moment of crisis, to experience a range of feelings, perceptions, hope, and uncertainties related to the surgical act and the outcome of the illness.

The experience of families with cardiac surgery in one of their members is based on the family member leaving the intensive cardiology unit, followed by transfer to the operating room and entrance to the operating room. The sick person is placed under the care of a specialized team and sent to a closed unit, away from their family, who start to wait for the surgery to take place in the waiting room.

Admission to the operating room is considered a time of transition for the family, in which cardiac surgery can determine the farewell of the disease and the possibility of a new life. This moment comprises an analogy between “being unwell” and “becoming well”, bringing positive expectations regarding the surgical outcome.

It's like a landmark. Saying goodbye to evil to go to good. And we hope it comes to good. We hope he can handle the surgery. (F3)

Entering the operating room represents the reality of the family's experience of cardiac surgery. Based on data analysis, it is clear that this can show a duality of feelings. Family members consider this moment as the moment of greatest need for emotional stability, to offer support and not only to the sick person but also to other members of the family unit.

It was sad! It made me want to cry at that time. I was trying to be strong for her in her room, I was kidding. But when it came to entering the operating room, it was heavy. (F1)

We even try to be a little cold, not get emotional. We try to let him think we're okay. We cannot break down with crying and despair, because there is a mother who needs us a lot, she needs us to be firm by her side. (F4)

The statements reveal that the family sought to appear to be in control of the situation, as a way to maintain balance and stability in the face of difficulties. Even in the face of the suffering and anxiety generated by the surgical procedure, they sought to promote comfort, strength, and safety to the patient, in addition to transmitting confidence to family members who were not present.

We observed that the fragility caused by the
illness triggers in the family the need for reorganization in the face of surgery. After the patient is admitted to the operating room, the family remains in the waiting room for news about the course and outcome of the surgery, starting a new moment in the experience, permeated by expectations, anguish, and reflections about what they are experiencing.

Waiting suffocates! If there was a way for us to be seeing, I don't mean to see the surgery directly, but to be aware of what is happening inside... (F7)

It's a drama to wait, it's horrible! It's difficult, because it's not the lack of food, it's not the lack of money, it's the lack of health, what's worse! (F6)

Everyone's nervous now, but we're not showing... We're not crying or anything. But we are nervous! This waiting time is not easy! (F5)

The waiting period is a source of anguish, which can reveal the vulnerability of the family unit, resulting from the absence of news during the surgery. This context full of questions provides explicit or implicit reflections among family members waiting in the waiting room, characterized as a unique moment, together with tension, nervousness, sadness, and expectations. Despite the stress experienced by the family, it is evident that, when they are informed about the surgical procedure, feelings of confidence, relief, and hope emerge, because of the surgical procedure.

We are both excited and happy to have the surgery. It's an anxiety that gives you emotion. We have always believed that surgery will work! We are absolutely sure! The whole family is rooting for this. (F8)

The family experiences feelings related to the anxiety of waiting and also hopeful expectations regarding the surgery, although they are aware of the complexity of the procedure. Given the circumstances, the family perceives living on the threshold of hope, which can be reinforced when the information is promising or weakened in unwanted complications.

Although the families consider the patient's degree of clinical weakness a factor that may influence the outcome of the procedure, the fact that they have already experienced cardiac surgery in one of their members serves as a criterion to guide the current situation. Thus, satisfactory past experiences are a resource used to convey security to the person who will be operated on and also to strengthen the family's feeling of hope.

Today it's been more difficult because before he was stronger, he was reacting better, and soon he was fine. Now it's being heavier. God knows, we deliver it into God's hand. (F9)

(Note 5.a) I said, “Dad, we have a pretty big example at home. Look at your great-granddaughter, she was eight months old when she had the surgery. Basically, it's the same, because they cut her chest too, and she won, she's with us! So, think about it when you go to the operating room, her great-granddaughter won and you'll win too.” (F4)

Cardiac surgery experienced effectively and successfully is a source of courage and motivation for the sick person and their families, promoting hope and confidence in a new surgery. However, when the family is aware of the seriousness of the clinical condition, it oscillates between hope and hopelessness, in which the fear of loss often overwhelms the hope of a cure.

Corroborating the fear of loss, there is the influence of symbology attributed to the heart, an essential organ for the maintenance of life. In this sense, a surgical procedure that needs to “touch the heart” can often make the family overestimate the risks given the importance of this organ.

People say it's simple, but in the heart, it can't be simple! Anything is going to be complicated in heart surgery. (F1)

Doctors talk, warn that it is a risky surgery. We know that there is a risk, that the moment you move your heart, there is a risk. Today there are a lot of things that are very different from the past. So, we are rooting for this side. (F2)

The statements reinforce the importance of the heart as an organ that symbolizes vitality and health. Thus, cardiac surgery is understood as delicate and life-threatening. Although they recognize technological and medical advances as beneficial, which represent security, there are still doubts and fears. Thus, cardiac surgery triggers **ambivalent feelings**, with manifestations of fear related to death, associated with beliefs and hope for a new beginning.
I'm afraid of losing, very afraid! So, the fear of losing is constant, but we have faith that he will be fine, that he will get better. The surgery represents my father's rebirth, the second chance he is getting to live and do everything differently. A new life! (F4)

I have hope because he's strong, he's been through that and he was strong. We are hopeful that he will get out of this! (F9)

The possibility of undergoing cardiac surgery can be perceived by families as a motivator of hope for the illness and the limitations arising from the disease. In this sense, it is referred to as an analogy to rebirth and a new opportunity to live.

**DISCUSSION**

We understood that the intraoperative period of cardiac surgery is perceived by the family as a unique moment, which causes emotional imbalance and ambiguity of feelings, permeated with anguish, in addition to being related to the constant fear of loss, concomitant with the hope of a new life provided by the procedure.

The changes experienced as a result of the disease and the performance of cardiac surgery by a family member expose its members to a fragile situation, making them vulnerable to the disease and therapy. The illness generates collective repercussions in the family unit; however, it tends to seek a new position of balance and reorganization⁹.

Considering the family as a structure characterized by mutual support to its members, it represents an important source of care for those who are ill. Faced with vulnerability, it seeks to provide support for coping with health problems, a circumstance that generates a synergy of efforts to overcome¹⁴.

The surgical moment is a unique experience, promoting ambiguous feelings, permeated by the fear of loss, concomitant with the hope of a new life. Waiting for the end of the surgery is understood as a period of anguish and reflection, with memories emerging related to the discovery of heart disease and the challenges experienced until the surgery was performed¹⁵.

The vulnerability expressed by family members when waiting for news about the surgical procedure is similar to a study¹⁶ that aimed to assess the stress and coping of family members during the perioperative period of cardiac surgery. They conclude that, when waiting in the waiting room, they experienced feelings of anguish, loneliness, helplessness, and fear in the procedure. As a way to alleviate suffering, nursing can keep the family informed about the progress of the surgery, including it in the care and the patient's recovery process.

Therefore, nursing professionals need to recognize and value the presence of family members in the waiting room, seeking to strengthen ties through welcoming and approaching the health/disease process. The restlessness arising from waiting can be minimized through clarifying information, words of comfort, or welcoming gestures and facial expressions¹⁷. Such actions arouse feelings of respect, unity, and humanity in the family, which are essential for nursing care.

Reinforcing the findings, a study¹⁸ that aimed to understand the feelings of family members in the waiting room concluded that they referred to anxiety that was heightened by the memory of the necessary changes in the family's life routine since the period in which the sick person was diagnosed. Before the surgery, feelings of distress associated with fears of possible complications emerge, such as those evidenced in this study.

From this perspective, when evaluating the stress and coping of family members of patients in the transoperative period of cardiac surgery, a study identified that 60% of the participating family members were in the intermediate phase of stress. Also, the most used coping style was supportive, in which the person uses personal, professional, and spiritual support systems to face the problem¹⁹.

In this context, the emotional preparation of the family and the patient is necessary, as knowing the surgical therapy will reflect in the positive coping with the situation experienced, in improving the lifestyle, and in recovery after surgery. Furthermore, proper preparation provides greater adherence to treatment and minimizes symptoms related to anxiety and stress. Thus, it is necessary to consider the singularities of each family and understand their subjectivities, and not just the surgical procedure¹⁹.
In research\(^{(20)}\) that aimed to evaluate the effectiveness of nursing intervention in the anxiety levels of family members of patients undergoing cardiac surgery and waiting in the waiting room, the intervention group received collective audiovisual guidance, in which possible conditions were demonstrated in which the family members would be in the first hours after surgery, using illustrative images of equipment and devices present. After the intervention process, we concluded that there was a significant decrease in family members' anxiety levels.

The inclusion of family members in the perioperative guidelines can prepare them to feel secure in the surgery and also in the postoperative period. When properly oriented, family members support and encourage the sick person, transmitting security and comfort. However, the apprehension present in this context cannot be eliminated\(^{(21)}\).

Previous experiences of successful surgeries, as reported by the study participants, are a source of courage, motivation, and hope, which favor the ability to adapt and manage stress-generating situations, being related to the family's resilience. Resilient people have greater motivation and positive thoughts to face adversities such as illness, seeking to solve problems, and change attitudes\(^{(21)}\).

The ambivalence of feelings experienced by families, expressed in hope for a cure and insecurity arising from the risk of complications that can result in the death of the sick family member, adds to the representations present in society that cardiac surgery will affect the "center of life", which, in a way, induces the family involved in this context to have "fantasies" and fears related to death\(^{(22-23)}\). Thus, in surgical treatment, the hope of recovering the quality of life and health lost due to the disease process is deposited, which becomes a positive attitude capable of offering strength and encouragement to face difficult times\(^{(23)}\).

Considering that the fear of death is a constant feeling in the transoperative period, it is associated with a lack of knowledge and lack of news and is a cause of insecurity and concern for the family\(^{(18)}\). The role of nursing can contribute to identifying signs and symptoms of anxiety and confronting the understanding of information with the routine of communications made by the health team. This strategy enabled them to correct any distortions and encourage manifestations of their concerns and fears\(^{(17)}\).

In this sense, researchers\(^{(24)}\) verified the importance of communication between the nursing professional and the patient undergoing cardiac surgery regarding the guidelines provided, revealing the influence of the nurse, the professional closest to the patient and their family, to generate a process of trust and help neutralize levels of anxiety and suffering in the face of the unknown. Also, communication constitutes one of the main elements of nursing care, as it is a strong ally in coping with the difficulties arising from illness and the need for cardiac surgery\(^{(25)}\).

Assessing and working with the negative expectations of patients and family members\(^{(1)}\) is important to propose techniques that help in managing anxiety-causing situations. As an example, we can mention the offer of spaces to carry out coping strategies, which include praying, spiritual practices, using the cell phone, and talking to other people seeking to exchange experiences\(^{(18)}\).

From this perspective, the importance of care strategies aimed at welcoming the family, reducing the impacts caused by the transoperative period, and promoting comfort and safety for those waiting for news is highlighted. It is up to the nurse to perceive and understand the concerns and anxieties of the families facing the surgical moment, considering the uniqueness of each one and understanding them as a member and co-participant in the care process, allowing for a satisfactory experience.

**CONCLUSION**

The transoperative period of cardiac surgery is perceived by the family as a moment of transition between being sick and the possibility of being cured, being a period of waiting for news permeated by ambivalent feelings, which generate anguish, anxiety, reflections on the trajectory experienced with the sick person and optimistic expectations regarding the surgical outcome. The threshold of hope for a new life after surgery coexists with the constant fear of
losing a family member.

The study shows that the family is an important base of support for the sick person and also for other family members, from the diagnosis of cardiovascular disease, including the performance of cardiac surgery. The family unit makes up a network that seeks balance to face the difficulties arising from this process.

Thus, knowing the family’s perception of the transoperative period enables the qualification of actions to be taken, meeting the biopsychosocial demands of the patient and their families. In addition to expanding the team’s modes of action and management in the face of illness, it allows for the organization of specific care interventions for the singularities and needs of the family nucleus.

The study has as a limitation the data collection with a small population, attended in a public hospital, a factor that can restrict the generalization of the perception of families to others that face the same situation; however, in different contexts. However, its contribution lies in deepening the studied theme, in addition to subsidizing knowledge for the scientific community, enabling the development of investigations that address nursing strategies and interventions that promote a less distressing experience for families while waiting for the transoperative period.

REFERENCES


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