

## PATIENT FEELINGS DURING THE PREOPERATIVE PERIOD FOR CARDIAC SURGERY<sup>1</sup>

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*This qualitative study aimed to identify the feelings patients presented when confronted with the news about the need to undergo cardiac surgery and, later, during the preoperative period. Twenty male patients were interviewed. The case study methodology was adopted and the analysis process resulted in two theme categories: Feelings of apprehension (fear, worry, anxiety, suspicion and jittery) and Positive and hopeful feelings. We observed that, although both categories were present at the two moments, over time, during the preoperative period, the need for surgical intervention was accepted better and the Feelings of apprehension started to be mentioned less, while the Positive and hopeful feelings were most frequently mentioned by the patients.*

*DESCRIPTORS: thoracic surgery; perioperative care; emotions; nursing*

## SENTIMIENTOS DE LOS PACIENTES EN EL PREOPERATORIO DE CIRUGÍA CARDÍACA

*Fueron entrevistados a 20 pacientes del género masculino con objeto de identificar los sentimientos demostrados tras la noticia a cerca de la necesidad de realizar una cirugía cardíaca y, posteriormente, en el período de internación preoperatoria. La metodología utilizada fue la del estudio de caso y el proceso de análisis resultó en dos categorías temáticas: Sentimientos de aprensión (miedo, preocupación, ansiedad, recelo, desconfianza y nerviosismo) y Sentimientos positivos y de esperanza. Constatamos que, aunque esas dos categorías estuvieron presentes en los dos momentos, a lo largo del tiempo, en el período de internación preoperatoria, los pacientes aceptaron mejor la necesidad de la intervención quirúrgica y los Sentimientos de aprensión pasaron a ser menos citados, mientras los Sentimientos positivos y de esperanza eran los más relatados por los pacientes.*

*DESCRIPTORES: cirugía torácica; atención perioperativa; emociones; enfermería*

## SENTIMENTOS DE PACIENTES NO PRÉ-OPERATÓRIO DE CIRURGIA CARDÍACA

*Com o objetivo de identificar os sentimentos apresentados frente à notícia da necessidade de realização de uma cirurgia cardíaca e, posteriormente, no período de internação que a antecede (pré-operatório), foram entrevistados 20 pacientes do sexo masculino. A metodologia foi a de estudo de caso, e o processo de análise resultou em duas categorias temáticas: Sentimentos de apreensão (medo, preocupação, ansiedade, receio, cisma, e nervosismo) e Sentimentos positivos e de esperança. Constatamos que, embora essas duas categorias estivessem presentes nos dois momentos, com o passar do tempo, no período de internação pré-operatória, os pacientes aceitaram melhor a necessidade da intervenção cirúrgica e os Sentimentos de apreensão passaram a ser menos citados enquanto os Sentimentos positivos e de esperança eram os mais relatados pelos pacientes.*

*DESCRIPTORES: cirurgia torácica; assistência perioperatória; emoções; enfermagem*

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## INTRODUCTION

The perspective of being submitted to heart surgery frightens any human being. The heart has a cultural meaning as an organ that is responsible for emotions and controls life, and surgery of this organ emotionally wears out patients and their families, due to the threat it poses to the future and to the restructuring of daily life<sup>(1)</sup>.

Heart disease and its surgical treatment can represent an abruptly imposed, new reality that destructures patients, who feel threatened in their self-image, are afraid of their health state and is at the mercy of professionals who do not always transmit security and empathy. This health threat also provokes anxiety in these persons, who are already weakened by their clinical condition<sup>(2-3)</sup>.

When heart surgery is indicated, it is usually experienced with ambivalent feelings. On the one hand, patients perceive a magical, miraculous intervention that will free them from the risk of an infarction. On the other, there is the fear of death, during and after the anesthetic-surgical procedure, and of suffering irreversible damage. In this kind of situations, it is common for patients' minds to be occupied by a range of fantasies and feelings<sup>(4-6)</sup>.

Patients' expectations about myocardial revascularization surgery were surveyed in a study<sup>(6)</sup> that showed that many patients expressed fear and apprehension towards the need for surgery. These feelings were even more frequent among individuals who were going to be submitted to a surgical procedure for the first time<sup>(6)</sup>.

Of all diagnoses made during the preoperative period of heart surgery, anxiety is probably one of the most common ones. It is a universal phenomenon and an emotional reality experienced by almost all surgical patients. Anxiety can influence patients' response to surgical treatment and cause negative effects on postoperative recovery<sup>(7)</sup>. High anxiety levels before myocardial revascularization are associated with postoperative depression, precarious recovery and pain aggravation<sup>(8)</sup>. Moderate levels of preoperative anxiety can help patients to prepare for surgery and reduce the stress of the situation<sup>(8)</sup>.

Anxiety and fear diagnoses have been defined<sup>(9)</sup>, respectively, as "a vague and disturbing feeling of discomfort or fear, accompanied by an

automatic reply (the source is frequently non-specific or unknown to the individual); a feeling of apprehension caused by the anticipation of danger. It is a sign of alert that attracts attention to an imminent danger and allows the individual to take measures to deal with the threat" and "response to a perceived threat that is knowingly recognized as danger."<sup>(9)</sup>.

For both diagnoses, anxiety and fear, some factors can be related, such as: death threat, threat of change in health condition, threat of change in the environment. With respect to fear, we can also highlight the separation from the support system in a potentially stressing situation, like during hospitalization for example<sup>(8)</sup>.

Identifying patients' preoperative feelings before heart surgery is very important because, in the hospital environment, nurses play a broad role in care for people submitted to complex surgical procedures like cardiac surgeries. Nursing care ranges from delivering preoperative care and carefully monitoring for early detection of postoperative complications to offering emotional and psychological support to patients and their families throughout the post-surgical recovery period<sup>(10)</sup>.

We believe that reducing patients' anxiety and preparing them for surgery are preoperative nursing targets. The contents and teaching approach in patient education should always be individualized, and one of its objectives should be to reduce the fears that contribute to preoperative patient anxiety. These fears are: fear of the unknown, of death, anesthesia and of changes in one's body image.

Identifying how patients face and cope with the situation of awaiting heart surgery is an important aspect for the professionals who are delivering care. They should know about the presence of defense mechanisms and how patients respond to the situation in the pre-and postoperative periods<sup>(11)</sup>. There is a range of anxiety that should be considered desirable and will stimulate patients to act, for example: asking questions to the team, meeting with relatives and accepting the restrictions imposed by preoperative preparation. However, when anxiety levels are high, patients can demonstrate apathy. This would cause difficulties to learn the verbal orientations received from the team. Low anxiety levels, on the other hand, can indicate a lack of introversion, leading to resistance against understanding and reaffirming oneself towards the situation<sup>(11)</sup>.

Thus, considering the assessment of patients' preoperative feelings before cardiac surgery as an important aspect for nursing care, we decided to carry out this assessment as one of the goals of a larger research project called *"Proposal of a teaching protocol for patients during the preoperative period for heart surgery: a pilot study"*.

## OBJECTIVE

This study aims to identify the feelings male patients presented when confronted with the news about the need to undergo cardiac surgery and, later, during the hospitalization period that precedes the heart surgery (preoperative).

## METHODOLOGY

### Population and place of study

The potential study population consisted of patients hospitalized for heart surgery. The following inclusion criteria were established: men, over 21 years old, who were hospitalized in the preoperative period for heart surgery; did not have a history of psychiatric diseases like dementia, depression or schizophrenia; were oriented in time and space; had not been submitted to previous heart surgeries and agreed to participate in the study.

Heart diseases more frequently affect men than women. Considering this aspect and in order to limit selection errors resulting from existing differences between men and women's reactions and perceptions towards a stress situation, we decided to include only male patients.

In view of these criteria, the study sample consisted of 20 adult patients with coronary artery disease or valvar diseases (valvar insufficiency or stenosis) who would be submitted to heart surgery. Participants were hospitalized in the cardiac surgery and cardiology wards, located, respectively, on the 9th and 5th floor of the University of São Paulo at Ribeirão Preto Medical School Hospital das Clínicas (HCFMRP-USP) between May and November 2003.

This study was approved by the Research Ethics Committee of the University of São Paulo at Ribeirão Preto Medical School Hospital das Clínicas. Potential participants were invited to participate in the

study and received an information document that presented the research objectives and process. After they agreed, each participant signed the free and informed consent term together with the researcher. All participants received the guarantee that their anonymity would be respected in the research results.

### Study design

We carried out a qualitative study, following the principles of case studies. Data were collected through individual semistructured interviews, based on a script that contained data for the participants' sociodemographic and clinical characterization, and also on the following guiding questions: *"What did you feel when you found out that you had to do this surgery on your heart?"*, *"How are you feeling now?"* and *"What are you thinking about your experience of being hospitalized for a heart surgery?"*.

### Data analysis

Data analysis involved different steps: a) reading all collected information; b) organizing the material in codes (units of meaning), considering a number of aspects: exhaustive contact with the material to become deeply accustomed with its contents; organization of the material to comply with the following validity standards: exhaustiveness, representativeness, homogeneity, pertinence; c) determining the recording unit, context unit and cuts; and, finally, d) grouping the codes into categories<sup>(12)</sup>. To allow us to check the created codes and categories more than once, we asked another researcher with experience in this kind of studies to do the same procedure with all of our data. No modifications were made as a result of this process.

## RESULTS AND DISCUSSION

Patients' ages ranged from 39 to 89 years (mean age 60.6 years). Fourteen participants (70%) had not finished primary education and 13 (65%) were married. As to their clinical situation, a majority (16 patients) would undergo coronary artery bypass graft surgery and 10 persons (50%) had between 3 and 4 comorbidities. Table 1 presents the participants' sociodemographic and clinical data.

Table 1 - Sociodemographic and clinical characteristics of the study sample. Ribeirão Preto-SP, 2004

| Variable                                 | N  | (%)  |
|--|----|------|
| <b>Age</b>                               |    |      |
| Until 49 years                           | 2  | (10) |
| Between 50 and 60 years                  | 8  | (40) |
| Over 61 years                            | 10 | (50) |
| <b>Civil status</b>                      |    |      |
| Single                                   | 2  | (10) |
| Married/living with a partner            | 13 | (65) |
| Widowed                                  | 3  | (15) |
| Separated/divorced                       | 2  | (10) |
| <b>Education</b>                         |    |      |
| Illiterate                               | 3  | (15) |
| Unfinished primary education             | 14 | (70) |
| Finished primary education               | 2  | (10) |
| Unfinished secondary education           | 0  | (0)  |
| Finished secondary education             | 0  | (0)  |
| Higher education                         | 1  | (5)  |
| <b>No of comorbidities</b>               |    |      |
| 1-2                                      | 3  | (15) |
| 3-4                                      | 10 | (50) |
| > 4                                      | 7  | (35) |
| <b>Type of surgery</b>                   |    |      |
| CABG*                                    | 16 | (80) |
| Heart valve replacement                  | 2  | (10) |
| CABG + Heart valve replacement           | 1  | (5)  |
| CABG + Surgical treatment of heart valve | 1  | (5)  |

\* CABG – coronary artery bypass graft

When inquiring about what patients felt when they were informed about the need to undergo a heart surgery, answers led to the identification of two large categories: *Feelings of apprehension* and *Positive and hopeful feelings*. These categories were found when patients received the news about surgery as well as after hospitalization, during the preoperative period.

The *Feelings of apprehension* category included feelings of fear, worry, anxiety, suspicion and jittery towards the news. We observed that this category stood out in relation to the moment patients were informed about the need of heart surgery. In this case, the most mentioned feeling was fear. The following statements are examples: *I felt a sudden breakdown, a pain in my heart and fear of opening my chest (patient 2).*

*I felt fear and I am still scared. Just fear of doing the surgery because meddling with the heart and the head...? (patient 6).*

Other patients also mentioned the feeling of fear but denied its presence: *I didn't get scared, I thought I should do the surgery as soon as possible to be able to lead a normal life soon (patient 4).*

*I didn't get scared, just a little worried... (patient 1).*

Besides fear, we found other feelings that made patients afraid of the future surgical experience.

These were expressed, for example, as worry, anxiety, suspicion and jittery towards the news, as shown next: *I felt two things, I felt relief because I have to do it, not that I don't want to, but I have to do it, and I felt apprehensive, anxious about undergoing a surgery. But now I'm convinced that it is going to work out... (patient 5).*

*The first impact of the moment... I felt that distrust, that fear. Sometimes we even think about things that don't exist... (patient 17).*

These results are in line with other studies<sup>(6-7)</sup> about preoperative feelings. Basically, there are three sources of preoperative anxiety before heart surgeries: separation from home, family and one's environment; being forced to play a more passive role, that of being "patient" and, finally, fear related to life itself<sup>(11)</sup>. This was observed in the interviewed patients' discourse.

Another aspect is that, in the preoperative period, patients' depression and anxiety levels are altered, as well as those of their relatives, mainly their partners<sup>(11)</sup>. It should be highlighted that depression levels are significantly higher than average rates in the general population and that, after the surgery, these levels should return to the rates common in their community<sup>(11)</sup>.

Various studies<sup>(8,14-15)</sup> have investigated heart patients' manifestations of fear and anxiety when they are submitted to diagnostic procedures<sup>(13)</sup> and in the preoperative period, with different approaches. Authors who selected a more quantitative approach have used instruments like the *Bypass Grafting Fear Scale*, *State-Trait Anxiety Inventory e Anxiety Specific to Surgery Questionnaire*, for example, which measure fear and anxiety, respectively<sup>(8,14)</sup>. Other authors<sup>(15)</sup> used not only a quantitative, but also a qualitative approach, in the attempt to identify what actually causes patients' anxiety during this period. In our study, we chose a qualitative approach to identify which were the actual feelings patients presented.

Although we also found other *Feelings of apprehension*, besides anxiety and fear, these have received little attention from other authors, which turned our discussion about them more difficult.

As observed by patient 5, feelings and emotions are dual when the actual need for the surgery is certified. Thus, besides *Feelings of apprehension*, we also found *Positive and hopeful feelings*.

The category of *Positive and hopeful feelings* included hope (towards the possibility of cure and

rehabilitation), tranquility (arising from faith in God, from seeing other patients who already underwent surgery and from knowing that the risk of death is higher without the surgery) and relief (because the surgery is necessary to live), as shown by the following statements: *I calmed down because, if I don't get the surgery, the risk is higher. This can improve my condition. I have faith in God that it's going to work out fine (patient 3).*

*I felt very satisfied because I was suffering so much, because I couldn't sleep anymore. When I ate I used to feel a swelling in the mouth of my stomach and that made me feel a lack of air (patient 11).*

*Look, I felt relieved, very happy, because it's a serious problem, so I'm very happy because when you have a family you are worried, the surgery is going to be good. (patient 12).*

*...I hope I will be happy, I hope that, after I get out of here, I believe in God, that I'm going to work a little more, at least to have fun (patient 18).*

The above examples also reveal that many patients look for strength/hope in religiousness, affirming that they have faith in God and that everything will work out fine. These feelings at the same time express hope and disclose preoccupation with the surgery, as patients look for support in a supreme being to overcome the problem.

Besides religiousness, during preoperative hospitalization, patients sought strength in the successful surgeries in other patients at the same ward. As patients were hospitalized in nursing wards with other heart patients, they used to exchange experiences and obtain help from these colleagues, as demonstrated by the following examples: *I didn't get scared, just a little worried, but my roommates who already did the surgery tranquilized me (patient 1).*

*I think I'm gonna be fine during the surgery, seeing my roommates who were already operated on. I'm confident (patient 4).*

We found that, over time, during preoperative hospitalization, patients gradually accepted the idea of the surgery better. Hence, the negative feelings included in the Feelings of apprehension category became less mentioned and Positive and hopeful feelings stood out in this period, as shown next: *Now my children are in favor, before they were afraid that I would do the surgery. My spirits are high to get the surgery (patient 4).*

*I'm thinking about getting well, about the surgery being successful so that we get peace (patient 12).*

*I think it can be a good thing because I can get better... get well (patient 19).*

The statements presented by patients 12 and 19, both submitted to coronary artery bypass graft surgery, reveal not always realistic perceptions about the results of heart surgery. Coronary artery disease is a chronic illness. Hence, there is no cure, but its progression can be controlled. Patients often believe that myocardial revascularization has cured their disease and do not adhere to other treatment forms, such as medication intake and the acquisition or maintenance of a healthy lifestyle. Similar expectations, such as the cure of a heart disease, were also found in another study<sup>(6)</sup>. In valvular surgeries, the improvement or even disappearance of limiting symptoms like dyspnea and tiredness also favored this expectation of "being cured forever".

Our literature review revealed many studies<sup>(8,14-16)</sup> about patients' preoperative feelings which, however, always emphasize the *Feelings of apprehension* like anxiety and fear. *Positive and hopeful feelings*, on the other hand, have received little attention until now, which turned the comparison of our results more difficult.

Although at the start of the interview, when we asked patients what they felt when they discovered the need to undergo a heart surgery, we observed the predominance of patients mentioning *Feelings of apprehension*, we found that, after some time, during preoperative hospitalization, this predominance changed to patients talking about *Positive and hopeful feelings*.

## CONCLUSION

Based on these findings, we conclude that patients, when they receive the news about the need for heart surgery, present many *Feelings of apprehension*, such as: fear, worry, anxiety, suspicion and jittery towards the news. Over time, in the preoperative period, these feelings are inverted and *Positive and hopeful feelings* become predominant, such as: feelings of hope towards a possible cure and rehabilitation, feelings of tranquility (coming from faith in God, from seeing roommates who already underwent surgery and from knowing that death risk is higher without the surgery) and relief (because the surgery is necessary to live). We verified that patients started to accept the need for treatment and attempted to be optimistic about the surgery.

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