



MEANING AND FEELINGS ARISING FROM PATIENTS TO BE SUBMITTED TO CARDIAC CATHETERIZATION

SIGNIFICADOS E SENTIMENTOS EMERGENTES DE PACIENTES QUE SERÃO SUBMETIDOS AO CATETERISMO CARDÍACO

SIGNIFICADOS Y SENTIMIENTOS DE LOS PACIENTES QUE SERÁN SOMETIDOS AL CATETERISMO CARDÍACO

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ABSTRACT

Objective: to know the feelings and meanings of patients who will undergo cardiac catheterization. **Methods:** it is a descriptive study of a qualitative approach. There were 16 patients interviewed through semi-structured interview. To organize the data descriptive statistics and content analysis were used. The research project was approved by the Research Ethics Committee, protocol 763/2011. **Results:** the age ranged from 48 to 85 years old, predominantly females (56.26%), most patients held the first procedure (87.5%). Some of the patients knew the reason that led them to perform the CAT, such as: (22.22%) expressed chest pain, and (11%) mentioned different reasons. Participants were nervous; afraid; worried and apprehensive; that they cannot be afraid; quiet, calm and relaxed; distressed, with tight chest, eager and anxious to submit to CAT. **Conclusion:** it was evidenced the need to devise strategies to quality of care focusing on specific and individual care of the patient. **Descriptors:** Feelings; Cardiac Catheterization; Hemodynamics.

RESUMO

Objetivo: conhecer os sentimentos e significados de pacientes que serão submetidos ao cateterismo cardíaco. **Método:** estudo descritivo e exploratório, de abordagem qualitativa. Foram entrevistados 16 pacientes por meio de entrevista semiestruturada. Para organização dos dados, utilizou-se a estatística descritiva e a Análise de Conteúdo. O projeto de pesquisa foi aprovado pelo Comitê de Ética em Pesquisa, protocolo nº763/2011. **Resultados:** a idade oscilou entre 48 a 85 anos, predominando o sexo feminino (56,26%), a maioria dos pacientes realizou o procedimento pela primeira vez (87,5%). Parte dos pacientes sabiam o motivo que os levaram a realizar o CAT, a saber: (22,22%) expressaram dor no peito e (11%) mencionaram motivos diversificados. Os participantes expressaram nervosos; com medo; preocupados e apreensivos; que não podem ter medo; tranquilos, calmos e relaxados; angustiados, com peito apertado, ansiosos e aflitos ao se submeterem ao CAT. **Conclusão:** evidenciou-se a necessidade de traçar estratégias para atendimento de qualidade focando nos cuidados específicos e individuais do paciente. **Descritores:** Sentimentos; Cateterismo Cardíaco; Hemodinâmica.

RESUMEN

Objetivo: conocer los sentimientos y significados de pacientes que irán someterse al cateterismo cardíaco. **Método:** estudio descriptivo y exploratorio, de enfoque cualitativo. Fueron entrevistados 16 pacientes por medio de entrevista semi-estructurada. Para organización de los datos se utilizó la estadística descriptiva y el Análisis de Contenido. El proyecto de investigación fue aprobado por el Comité de Ética en Investigación, protocolo nº 763/2011. **Resultados:** la edad osciló entre 48 a 85 años, predominando el sexo femenino (56,26%), la mayoría de los pacientes realizaron el procedimiento por primera vez (87,5%). Parte de los pacientes sabía el motivo que los llevaría a realizar el CAT: (22,22%) expresaron dolor en el pecho, y (11%) mencionaron motivos diversificados. Los participantes se mostraron nerviosos; con miedo; preocupados y apreensivos; que no pueden tener miedo; tranquilos, calmos y relajados; angustiados, con pecho apertado, ansiosos y aflitos al someterse al CAT. **Conclusión:** se vio la necesidad de trazar estrategias para atención de calidad enfocando en los cuidados específicos e individuales del paciente. **Descritores:** Sentimientos; Cateterismo Cardíaco; Hemodinámica.

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INTRODUCTION

Cardiovascular diseases (CVDs) are a major cause of mortality worldwide, responsible for 30% of all deaths, and in 2030, the estimate will be 35 milhões.¹ Given the increasing rate of coronary heart disease worldwide and the great demand for more detailed examinations, the Cardiac Catheterization (CAT) stands out as an examination of high demand.

Among the major discoveries and developments in cardiovascular medicine and after research and study of cardiovascular physiology, made sure that the CAT allows an accurate diagnosis of a large number of heart diseases, being considered a routine exam once it has boosted survival and provided better quality of life for people with heart disease, such as coronary artery disease, myocardial dysfunction, valvular disease and congenital abnormalities of the heart. The procedures are performed in hemodynamic units through radiopaque catheters, radioactive substances (contrast) with diagnostic and therapeutic purposes.

The completion of the invasive procedure, in which the heart and its major vessels are affected, usually exacerbate feelings such as fear, anxiety, fear, worry, insecurity, among others, by the symbolism of being the motor organ of life, representing patients a troubling experience and a bit unpleasant because it makes them feel as if their lives were ameaçadas.² Anxiety is different from fear. Fear is distinguished to be a threat to a known response, whereas the anxiety is seen as a response to a threat unknown.³

Given the above, one notes the importance of the approach and the medical assistance and hemodynamic nurse, opposite the CAT, and the creation of strategies that can contribute to decreasing the level of anxiety of these patients, contributing to an improvement in the quality of care.

OBJECTIVE

- To know the feelings and meanings of patients who will undergo cardiac catheterization.

METHOD

An article elaborated from the monograph << Meanings and emerging feelings of patients undergoing cardiac catheterization >> presented to the Graduate Program in Emergency Department and Intensive Care School of Nursing Wenceslau Braz (EEWB). Itajubá-MG, Brazil, in 2013.

This study is descriptive, exploratory and cross-sectional with a qualitative approach, projected/intentional sampling during the Hemodynamics Institute in the city of Lavras in southern Minas Gerais (HEMOSUL).

The study population was 16 patients who would undergo the CAT procedure in that Institute.

The inclusion criteria of the study participants were to agree to participate in the study, be over 18, any gender, be ambulatory patient or be hospitalized patient, hemodynamically stable and sign the consent form. The exclusion criteria were against the inclusion.

Data were collected in May and June 2012, through a questionnaire of personal characterization and a semi-structured interview guide. After that, the study was approved by the Ethics Committee of the Wenceslau Braz Nursing School under protocol 763/2011, and the consent of the Technical responsible from HEMOSUL.

For data analysis, descriptive statistics was used, through absolute and relative frequencies and the technique of content analysis.

This study followed the precepts established by Resolution 196/96 of the National Health Council. The Consent form allowed the decision of the respondent to participate in the study, in a freely and spontaneously way, and they could give up if they wished. It is also respected, the anonymity of each participant in the study, each of which was identified by encoding P1, P2, P3, from the patient and sequential ordinal number according to the number of respondents.

RESULTS AND DISCUSSION

It was found that of the 16 participants interviewed, eight (50%) were in the age group of 48-65 years old and eight (50%) in the age group of 68-85 years old. Considering the eight periods of human development, it can be said that half of the respondents are in the middle adulthood, ranging from 40-65 years old and the other half in late adult life ranging from 65 years old and over.⁴

The process of aging is associated with significant cardiovascular changes, arteries tend to become stiff with aging, decreasing elasticity and compliance of the aorta and large arteries. Further, the myocardial contractility does not change significantly depending on age, but by associated diseases, especially hypertension and coronary artery disease, common in the elderly population.⁵

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Cardiac output tends to remain normal at rest, during exercise. However it is observed reduced ability to reach maximum heart rate and maximum oxygen uptake in elderly compared to younger subjects.

As for the sex of participants, 9 (56.25%) were female and 7 (43.75%) were male. Ischemic heart disease is the first cause death for women aged between 50 and 59 years old in Brazil and in the Northeast, Southeast and South.⁶

Regarding the marital status of the participants, there was a predominance of married with 10 (62.5%) participants, followed by widowed with 3 (18.75%), 2 singles (12.5%) and only 1 (6.25%) divorced. The Southeast region is the Brazilian region with the largest married people in the civil and religious (51.5%).⁷

Regarding the education level of the participants, 7 (43.75%) had completed elementary school, 5 (31.25%) had completed high school and 4 (25%) university graduates. A similar study also showed that the level of education among the participants ranged from elementary and higher education.⁸

It is observed that 5 (31.25%) participants are retired, two males and 3 females, 2 (12.5%) housewives and 9 with a percentage of 6.25% each, as: a farmer, a seamstress, a cook, dentist, day laborer, a mechanic, one micro-entrepreneur, a driver and a locksmith. The study showed a wide range of occupations, but the number of retirees was very significant because of the age range of participants involved in the research.

Concerning the place of origin of the participants to perform the CAT, 15 (93.75%) were of ambulatory origin and only one (6.25%) from the hospital. As most patients are ambulatory, it should be reflected on the passing on of information, because, as long as the patient remains in the unit is short, usually patients come from their direct homes for the hemodynamic laboratory, providing little relationship between the nurse and the patient.⁸

It was found that 14 (87.5%) participants were performing the first CAT and only two (12.5%) for the second time, and one performed the CAT two years ago and another one three years ago. Making an analysis of patients who underwent CAT for the first time and those who were conducting the second time, it was observed that those who were for the second time were less anxious and more confident in the procedure. The patients performed better the second time around

because they had received information on the first procedure.⁷

Of the nine patients who know the reason that led them to do the CAT, two (22.22%) expressed chest pain and the other patients (seven), representing a percentage of each participant (11.11%), diversified mentioned reasons such as: "Taking care for health", "unclog the vein of the heart", "heart murmur", "post-infarction", "exam treadmill", "angina and angioplasty". It is shown that cardiovascular diseases are a main cause for the individual passing through the CAT procedure.

Regarding the results of the semi-structured interview guide, referring to the first open question, "What does it mean for you, having to undergo cardiac catheterization", the following categories showed up:

◆ 1st category: Taking care of health

For patients having to undergo the CAT, it means health care, as expressed in the statements:

I'll take care of the health [...].
(P1)

I'll be straight taking care of my heart [...]. (P10)

I can know how this coronary's health is [...]. (P13)

The CAT is an invasive procedure used for assessment, diagnosis and management of patients with heart disease, held at the hemodynamic laboratory in outpatient or inpatient and its indication confirm or define the extent of disease, determine the severity of the disease and to analyze the presence or absence of related conditions.¹⁰

◆ 2nd category: Get well, stronger, improve and heal

It is noticed a significant number of participants who reported their desire to look good, strongest and cured when examined:

[...] It means it'll be good [...]. (P1)

[...] I will get stronger and heal, get well. (P4)

I will be cured [...]. (P5)

[...] To improve all what I'm feeling [...]. (P16)

Through the speeches of patients, it is found out that there are many questions and fears related to the CAT procedure, but even with all of these symptoms, patients expressed their desire to get cured and get back to their daily activities. Fear, apprehension and insecurity feelings are present in most patients, and this may negatively interfere in the procedure, which are more likely to have complications.² Based on the major complications, it is understood that the nursing staff can act effectively to

minimize them. To this end, assistance aimed at reducing potential damage starts in patient preparation for the procedure with the host. It is then that the nurse evaluates and guides, facilitating the development of subsequent activities.

3rd category: Unclog the veins of the heart

It is possible to see, from the lines of two interviewees, their lack of knowledge about the exam that will perform:

To unclog the vein of the heart [...]. (P2)

It means that the veins of the heart are clogged and will unclog, and after examination of the heart veins will be good. (P5)

The CAT is seen by some patients as a surgical procedure, and in this context it is very important the role of the health team, especially the nurse on the previous guidance to these patients, focusing on the difference between the diagnostic and therapeutic procedure. Patients should be counseled about the general aspects of hemodynamic procedure to be submitted, because in this way they can demystify preformed images arising from the lack of prior knowledge on such procedure.¹¹ It is important to highlight that the patient must be treated individually according to their ability to assimilate information.¹²

4th Category: Knowing the correct treatment to be followed

Through the speeches of three informants, there is how is important to conduct CAT for them, considering when doing it, they will know the correct treatment to be followed, and thus be taking better care of their health:

Perform correct treatment [...]. (P6)

I will have to look after myself better after the procedure [...]. (P12)

I can find the right treatment to be followed [...]. (P13)

While some patients have knowledge deficit about the examination under study, others know that the result can bring improvement to their quality of life because the medical staff will know what is the patient's problem and so the appropriate treatment to use. The CAT is an invasive test that can be performed electively, to confirm the presence of coronary artery obstructions or evaluate the operation of the valves and cardiac muscle - especially when it is being programmed intervention (angioplasty or more invasive procedure) - or in emergency situations, to determine the exact location of the blockage that is causing acute myocardial infarction and plan the best intervention strategy.¹³

5th Category: I do not know

It is noticed the deficiency of knowledge about the CAT by patients, because a respondent is radical to say:

I do not know what it means [...]. (P7)

In this sense, it is emphasized the importance of hemodynamic team performance, especially the nurse, the patient approach, to reach the Hemodynamics unit, clarifying their doubts with regard to the examination that will hold. Because they are not used to the procedure that will experience, patients and family members cannot understand what is being done and give their own definition. Hemodynamics in a unit is essential to greater communicative interaction between nursing professional and patient with clear and objective language to promote greater understanding by the patient and solving their doubts.¹⁴

6th Category: That I did not care right

Only one respondent said that having to undergo the CAT means he did not take care of him right:

Ah! I think it was because of the fat, salt and eating too much fat things. It means that I did not take care of me right, so I'm here. (P8)

It is noted that at this point the patient begins to analyze his day to day in searching for what he did or does to explain the fact of being there and having to perform the highlighted exam. He is aware of the importance of healthy eating, although not to put into practice. He knows that his diet contains foods that can harm him. The most obvious factors listed in the panorama of cardiovascular health in Brazil are: smoking, high blood pressure (hypertension), diabetes mellitus, obesity and dyslipidemia.¹⁵ Although physical inactivity has not been stratified on the national scene, sometimes it has been mentioned by several authors as an important factor related to cardiovascular disease. Addition of excess sodium, the lack of certain minerals such as potassium, calcium and possibly magnesium has been associated with higher levels of blood pressure, which reinforces the need for diets containing adequate amounts of fruits, vegetables and low-fat dairy or low fat content.

Analyzing the responses of study participants regarding the second open question of semi-structured interviews: "How do you feel about having to undergo cardiac catheterization", the following categories have emerged:

1st category: Nervous

Reflecting on this category, it can be seen the emotional and psychological state of the patients, since three participants reported being nervous:

We get nervous [...]. (P1)

At this point my feeling is pure nervousness [...] not knowing what will happen. (P7)

Even having been through this, I still feel a little nervous. [...]. (P16)

The nervousness of the patient certainly occurs to feel weakened before the procedure to take place, for even what ever experienced, reports being nervous. In addition, one respondent stated that he was nervous about not knowing what will happen. This underscores the importance of adequate guidance to the patient who will undergo the CAT. The health team should pay attention to this, especially the nurse. It is noteworthy that the nurse has the perception to notice the patient's needs, which is one of the characteristics of the care process, which is intertwined to the humanized care as the basis of profession and being a nurse.⁸

2nd category: With fear

Investigating this category, it is ascertained that the participants felt fear of having the CAT:

We are [...] scared, but you have to do it, right? (P1)

Ah! I think I'll be all right after that, fear [...] we have, but we have to do it, we do it. (P2)

[...] These things to operate the heart is scary, right? (P5)

Look, fear, right? We do not know what will happen, but it has to do. (P11)

I'm afraid, right? Wobbly legs and a dry mouth, I think my heart will come out in the mouth. (P14)

Fear can be alleviated with the establishment of a comprehensive dialogue between the healthcare team and the patient, taking him an opportunity to express their needs and receive information about the unknown. Thus, increase cooperation, trust and security, favoring the person's well-being. It is considered, then, that among the nursing actions, there are the guidelines given to the patient, which added to the warmth will help him overcome fear in this difficult and uncertain time, giving him relief and comfort.² Pre-procedure guidelines aim to promote encouragement, tranquility and enlightenment, thus minimizing the fears and anxieties about what will take place.¹⁶

3rd category: Worried and apprehensive

Evaluating the testimonies of three patients that illustrate this category, there is

the importance of individualized, effective and quality care, because the concern involves not only the unknown but also with relatives who stayed at home waiting for their return.

[...] Concern we have, but we have to do it, we do it. (P2)

I'm [...] worried about my grandson, he's too scared to go back I not coming back "laughs", but I'll return. (P4)

What is not known always causes [...] apprehension, but it will be all right. (P13)

It is believed that the nursing actions, designed to meet the concern and apprehension of the patient, enable the development of positive attitudes, contributing to accept perform without fear or concerns procedure, following information received from professionals. Providing information and explanations to the problem and medical management, is extremely important in the phase preceding the procedure, as well as comfort the patient, gives him security, reducing confusion, it helps him to face the situation and enabling better performance of their sick role.¹⁷

4th category: I can not be afraid

The testimony of a participant showed there has been an attempt to overcome the fear of the procedure to be submitted:

I need to take the exam, I cannot be afraid, I was feeling very poorly, you known [...]. (P3)

This reaction of the patient can be explained by his confidence in the benefits that the CAT will bring that is clarifying what he has and then receiving the proper treatment, solving the malaise that had felt. Fear is something indifferent, because while it drives to advance, it pulls us back, requires a certain object, but the danger can be an unknown factor and cause a wait state and preparation.¹⁸

• 5th category: Quiet, calm and relaxed

Two participants mentioned being quiet, calm and relaxed in the face of procedure they have to perform:

I'm quiet [...]. (P4)

Look, I fee calm and relaxed. (P8)

It should be noted that even in these cases, appropriate, clear and objective communication is needed, explaining always the whole procedure to be performed for the patient to feel increasingly secure. During this period, the orientation is fundamental about what will be done so that the patient has a better understanding of the procedure, and thus, decrease their anxiety, fear and insecurity, providing a pleasant, quiet, peaceful and less stressful experience.²

6th category: Distressed, with tight chest, anxious and distressed

The feelings referred to this category certainly are related to their weakness when they experience something new and necessary at that time.

I feel anguish, chest tight, you cannot know what will happen there in that operating room [...]. (P5)

Look [...] anguish is what I'm feeling, just know that I cannot wait to finish it all. (P6)

I feel good, but a little distressed by not knowing the exam, but why not even know. (P9)

I feel a bit anxious, all this causes a very great anxiety. (P12)

The period before the procedure generates anxieties and fears, and can interfere with the recovery of the patient. However, effective guidance in the pre-period reduce anxiety and stress-related psychological responses both before and after the procedure.¹⁹⁻²⁰

CONCLUSION

There was diversity of meanings and feelings expressed by patients when they experience the examination of cardiac catheterization, which, in most cases, they should have been worked aiming to improve the quality of care that would be offered to them. The nurse who works with care must seek qualification to enable improvements in the application of technical and scientific knowledge and use of nursing care in a systematic way to achieve quality and efficiency care for the patient.

While some participants demonstrated appropriate knowledge of the reason that led them to be performing the exam, others do not know or have inadequate information, others, to having to carry the CAT showed up nervous, scared, worried, apprehensive, anxious, eager and afflicted. The minority was quiet, calm and relaxed. One patient reported that he could not be afraid. In this context, it is emphasized the effectiveness of an educational communication in the pre-examination period of the CAT with an individualized care to every patient, providing him with support, comfort and well-being. Thus, it can be minimized situations of stress and anxiety caused by the unknown, causing the patient understands certain situations necessary for this examination.

It is known that care is the essence of nursing, and therefore, the nurse is essential in health care processes. The role of the nurse can become even more relevant when caring for patients who are in pre-examination period.

Data from this study may provide support for health professionals to develop strategies for the most appropriate and humane care, that meets the real needs of patients, always focusing on improving the quality of care.

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