

Unveiling the Meanings of Coronary Artery Disease for Menopausal Women: A Descriptive Study

Liscia Divana Carvalho Silva^{1*} and Marli Villela Mamede²

Universidade Federal do Maranhão. São Luís, MA, Brazil

*Corresponding author: Rua Parnaíba, 1 Apt. 700 - Casa do Morro, Torre Marcos Regadas, CEP: 65075-839. São Luís, MA, Brazil, Tel: +55 98 3272-8000; E-mail: liscia@elointernet.com.br

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Abstract

Objective: To understand the meaning attributed by menopausal women to coronary artery disease.

Method: A descriptive and exploratory study of qualitative - quantitative approach, carried out between June and August 2013 in the cardiology service in north eastern Maranhão - Brazil. It was used the symbolic interactionism and the method of content analysis. In the quantitative phase, the data collection instrument was the Menopause Rating Scale with forty (40) women; from these 40 women, twenty five (25) took part in the qualitative phase.

Results: The coronary artery disease is described as a serious and incurable manifestation of multifactorial nature, with intense symptoms, feelings and emotions (rapid heartbeat, palpitations, fatigue, pain, disability, dependence).

Discussion: A change is revealed in their daily lives, what turns them into fragile, insecure women. A conflict between the desirable world and the real world, endowed with meaning and significance.

Conclusion: Heart disease is responsible for the biggest changes in their lives, a threat to their physical and emotional integrity, placing them in the sick role.

Keywords: Climacteric; Menopause; Coronary disease

Introduction

In the Brazilian population, women are more numerous and have higher life expectancy. From a total of 195.2 million people, 100.5 million (51.5%) are women, a higher number than the 94.7 million men (48.5%). The female gender is not only more expressive; there are 5.8 million more women; they are also in older age groups. Women predominate among the population above 30 years old, unlike men, who stand out in the younger segments of the population [1].

Cardiovascular disease remain the main cause of women's morbidity and mortality in many countries, especially among those above 50 years of age and, with an increasing elderly population, it is conceivable that it will continue to remain as the main cause of morbidity and mortality [2]. In this age group there are more deaths of women from cardiovascular disease (41.3%) than the next seven causes of death together, a risk six times greater of dying from the disease than from breast cancer. Recent data from the American Heart Association (AHA) show that only 46% of women are aware of this fact. Studies suggest that, when receiving therapy with estrogen and progesterone, post-menopause women has an increased risk of coronary artery disease (CAD), while others warn that the risk is no longer present when women start hormone replacement right after the menopause [3].

The increased risk of CAD in women over the age of 50 appears to be related to menopause because of the consequent estrogen

deprivation, since the advantages related to cardioprotection offered by estrogens gradually cease in the climacteric [4]. However, the relationship between menopause and risk factor for CAD is still unclear. The high prevalence of hypertension, hyperglycemia and endothelial dysfunction in postmenopausal women may be related to obesity and not only to menopause [5].

The hospital mortality rate of the DAC is higher in women; they have twice the chance of death, have narrower lumens of the coronary artery and less collateral circulation when compared to men, which can lead to an increase in ischemia, especially during actions that require effort or stress [6]. Such evidence has caused a great worldwide interest in understanding how heart disease is present in the female population. Increasingly, studies are echoing this reality and trying to approach the way men and women experience and feel their illness as a means to improve the efficiency in the fight against diseases and especially against the CAD [7].

The answer to the question: "What meaning climacteric women attribute to coronary artery disease?" was the challenge of this research, with the assumption that not always the CAD-related symptoms are perceived by women as a sign of the disease, but it is often confused with the climacteric, so the symptoms is often undervalued by women themselves. The aim of the study was to understand the meaning assigned by menopausal women with coronary artery disease by analyzing the relationship they establish when experiencing these episodes: climacteric and CAD.

Method

A study conducted at the University Hospital of the Federal University of Maranhão (HUUFMA), an agency of the federal government, from the city of São Luís - Maranhão, Brazil, which operates in the areas of care, teaching, research and extension in the area of health and the like; it is a state reference for highly complex procedures in the cardiovascular area. Study participants were women seen in HUUFMA Cardiology Clinic between June and August 2013, aged between 45 and 65 years, referencing climacteric symptoms, with CAD confirmed by examination of coronary arteriography. Confirmation of climacteric symptoms was made by applying the instrument Menopause Rating Scale – MRS [8]. The participants were also investigated about their menopausal status and history of depression.

Forty women were identified with climacteric symptoms according to MRS; three of which (03) were excluded from the study because they had been previously submitted to oophorectomy, and five (05) because they have undergone hysterectomy. It was also considered as an exclusion criterion women with speech difficulties, mental disorders, those submitted to oophorectomy and hysterectomy; hormone replacement therapy users (HRT) in the last five years; and those who have not identified any climacteric symptoms in MRS scale.

The study was conducted in two phases. In the first one, a quantitative and recruitment phase, forty women (40) participated, when it was investigated the menopausal status and history of depression. The second one, a qualitative phase, which was conducted through focus groups, there were twenty five (25) participants of the first phase. It was used as an eligibility criterion for the second phase the following: the women who had participated in the first phase were randomly contacted by phone and invited to participate in focus groups to continue the research. The determination of this quantity was given by the data saturation criterion and the satisfactory service to the proposed objectives. Focus groups took place in the same sector of the hospital at a time and date previously scheduled. Six (06) sessions of the focus group were performed and the central theme for them was directed to understand what women know about

perimenopause/menopause and CAD, seeking the meanings that they construct in relation to heart disease and his own life.

For the analysis and interpretation of the qualitative data, it was used the symbolic interactionism [9] supported by the Bardin [10] content analysis method. The use of interactional perspective aimed to apprehend behaviors, feelings and expectations in the perception of the dynamic interactive processes among women experiencing CAD; how the environment, other people and the social context, endowed with value and meaning, revealing the meanings women attach to the situation they experience. The project was submitted for the consideration of the Ethics in Research Committee of the Ribeirão Preto Nursing School of the University of São Paulo, having received an opinion under number 293900.

Results

Summarizing the sociodemographic characteristics of the participants, they were women with a mean age of 58 years, with a stable union, low education, housekeepers, Catholics, the average age of menarche was 13 years and the menopause age was 45 years old; they had no more than three abortions and ten children, and only one used HRT for more than five years.

The climacteric symptoms most often reported were, according to the MRS scale, anxiety, heart complaints, irritability, muscle and joint problems, shortness of breath, sweating, hot flashes, physical and mental exhaustion, sleep problems, depressed mood, sexual and bladder problems, as well as vaginal dryness. Analyzing the answers to the MRS and the intensity of the symptoms, it is observed that in descending order there were the muscle and joint problems, followed by anxiety, uneasiness of the heart, physical and mental exhaustion, irritability and shortness of breath, sweating, hot flashes, depressed mood, sleep problems, sexual problems, bladder problems, and, the less intense, vaginal dryness. It was verified that despite that the muscle and joint problems were not the most frequent symptom when analyzed by the intensity (score), they were considered as the most intense by most participants (Table 1).

Symptoms	Frequency n=40	Percentage	Score	Average score
1. Shortness of breath, sweating, hot flashes	35	87	22.8	0.57
2. Malaise heart	38	95	25.6	0.64
3. Sleep problems	34	85	19.7	0.49
4. Depressive mood	32	80	21.9	0.55
5. Irritability	38	95	23.1	0.58
6. Anxiety	39	97	26.2	0.65
7. Physical and mental exhaustion	35	87	24.1	0.6
8. Sexual problems	30	75	18.5	0.46
9. Bladder problems	20	50	11.6	0.29
10. Vaginal dryness	15	37	6.7	0.17

11 Muscle and joint problems	36	90	26.4	0.66
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Table 1: Frequency, percentage, score and average score of climacteric symptoms in women in the Cardiology Clinic of the University Hospital of UFMA. Sao Luis - MA, 2013, Menopause Rating Scale (MRS).

With regard to qualitative data, in order to understand the significance of CAD for climacteric women, four categories were identified: The first category was "serious and incurable problem"; the second category "the trigger process of CAD", with the following subcategories: "heredity and emotional changes" and "diet, hypertension, diabetes, smoking and physical inactivity"; the third category was "significant changes in coping with the disease", which have as a subcategory "lifestyle changes"; the fourth category was "fragility".

a) A serious, incurable problem

Finding the seriousness of the problem and the high value added to the chronicity and severity of CAD has proven to be, in many cases, one of the most difficult times of their lives. It meant therefore a serious and incurable problem that shook their physical and emotional conditions, as reported:

- It is very bad. It is an incurable disease. I say so because it has no cure, it is very bad. It is not easy, if you do not have a medicine to cure it, heal it, then we depend on it all the time. All my time I depend on the medicine. I am still depending on the medicine for blood pressure, cholesterol, diabetes and heart - the four, all the time (P25).

b) The DAC triggering process

- Heredity and emotional changes

Women identify within their subjective reality signs of the origin of their CAD episode, among which they highlight heredity and emotional stress, classifying them as important components that triggers this disease, as reported:

- In my family this heart problem is hereditary. My father died of heart problem, as well as my grandmother, my aunt and my sister. I have an 11 year old nephew who makes treatment; my sister has died one year ago from heart problem, two months after she had a baby. In my family it is hereditary (P21).
- I worried a lot about my son. He went to the street; I did not know what time he would come, I stayed awake till one, two hours in the morning. My mother always said, 'You should want to be a child, but should not want to be a mother' ...I think that all this stirred my heart, which gave this heart problem. I think it's when you have a very large family problem (P3).

In the speaking of some women, it is evident the multifactorial nature involved, such as genetics, lifestyle and environmental conditions. It was perceived that while identifying changes in their emotional condition as responsible for the ACD episode, women announced different positions for this marker, connecting and taking sometimes a position that this was the cause of the ACD and in another as the very symptom of the disease, as suggested by the following depositions:

- My sister, my problem is nervous. I cannot be nervous because I get accelerated; I feel a burning sensation in the chest, feel that thing tighten me here (in the chest); I have to cry out for it to get

out. If someone gives me bad news, I get stressed. I have to cry out for it to get out (P13).

- I'm nervous, but I find it is caused by my heart. I did two catheterization and one angioplasty. It is a very serious problem, we live in a bad expectation all the time, we are never quiet (P24).

Besides heredity and emotional stress, women reported the existence of other causative factors of CAD such as diet, hypertension, diabetes, smoking and physical inactivity, which shows that, for them, the disease brings with it a multifactorial nature and that developing CAD can be seen as part of a process:

- For me I think that the main cause of heart problems is cholesterol and also some family problems that we have. (P2).
- For me, heart trouble is because of high blood pressure and these foods of today, which have too much fat, many things that formerly we did not have; now we have so much trouble that it helped a lot in these diseases, and also a very thick blood...I think a clot is formed in the arteries, in the passages, the thick blood. (P3)

However, in a tireless attempt to reconcile the performance of their roles and the social responsibilities, the experience has shown the recurrence of the symptoms of CAD even when following appropriate treatment, as described as follows:

- I felt a pain here (in the back). I think it was no back problem; it was already a heart problem (P7).
- I feel very tired. When I walk a lot, climb a hill, I have to stop in the middle of the slope to rest to be able to go ahead. That strong palpitation, a strong beat, so quickly, I feel it from time to time, not so much (P19).

Tachycardia, palpitations, fatigue and especially chest pain and back pain were the most reported symptoms besides other less common symptoms reported such as dizziness and pain in the left arm.

c) Significant changes in coping with the disease

- Change in lifestyle

- The changes happen from beliefs and values, which are built and resized. The change of some habits precedes a process of awareness that can transform not only the person, in a narrower sense, but the family, the community, the society, thus helping to promote a healthier life, as the psychological meanings are also social meanings. The findings showed that for women, living healthily inevitably refers to the past, which is expressed through the memories of a way of life that they had before the disease. A normal life without restrictions, limitations and care is confronted with a conscious and permanent reality of the seriousness of being a carrier of CAD. The women's report indicates changes in lifestyle, especially those related to diet:
- Another thing I liked was fried food. I stopped eating fried food; I had to eliminate this frying stuff. The flour, frying, I quit for my own well; drinking too (P21).

d) Fragility

What comes to anchor the meaning of CAD in these women's life seems to be a deep sense of helplessness and vulnerability due to the disease process, which is represented as something that limits life itself, as described:

At that stage now, things are getting more complicated, because we will become increasingly more fragile even physically, psychologically. Now the trend is gradually to get worse and worse (P8).

Discussion

In view of the prospect that the symbols can be considered as images or signs of psychological realities of many species, these women perceive the situation that they experienced as a serious and unsolvable problem. People do not have a collection of random, confused thoughts about themselves, rather they organize their view of the "I" that each one is in consistent schemes that influence the way that they interpret new things that happen to them [11]. In the speaking of some women, it is made evident the multifactorial nature involved in the coronary artery disease, such as genetics, lifestyle and environmental conditions.

The similarity of depression, anxiety and ACD symptoms can further complicate the diagnosing process of heart disease in women [12]. The diagnosis of depression in the presence of heart disease is complicated by the similarity of symptoms, because lack of energy, sadness, appetite and fatigue, insomnia and difficulty concentrating are related to both conditions, and often also to menopause [13]. Stress becomes a negative factor to the body when a person feels she cannot face the environment, and therefore, the stress is related to the way the person understand the objective world [14].

The changes that arise from the knowing the causes of the illness may influence the performance of roles, providing an atmosphere conducive to awareness of health. It is understood that the experiences are unique, that is, each person perceives the sensations that cause them malaise and name them according to their understanding and interpretation of the differences of their health status, giving meaning to their own experience with the illness. The women's attitude towards their health condition reveals the level of assessment that they make on the significance of CAD in their lives. Man is not a neutral observer of the world, but a constant evaluator of what he sees and the social experience of each one plays an important role in shaping attitudes.

There is a need to pay attention to the symptom time interval related to CAD, particularly when symptoms are prodromal or acute, since little has been described when patients are women [12]. The presence of pain in the dorsal region is twice as big in women than in men; in addition, women are more prone to certain types of symptoms when they are under emotional stress, as well as to disregard for themselves the possibility of health problems and are more likely to incorporate the symptoms of coronary disease as inherent to the stage of life that they are experiencing, as in the case of climacteric [15,16]. "Back" pain can be understood as lower back pain and not evoke an understanding or discomfort description in the upper back rear shoulder, whose description is relevant in the definition of cardiac disease suspicion.

Changes happen from beliefs and values, which are built and resized. The change of some habits precedes a process of awareness that can transform not only the person, in a narrower sense, but the family, the community, the society, thus helping to promote a healthier life, since psychological meanings are also social meanings. The discovery

of heart disease caused a significant change in these women's behavior, influencing decisively in it. The ACD presents itself as an incurable disease that triggers intense feelings and emotions that interfere with daily life.

All human life is a result of the conflict between the world of desires and the real world that does not bend to these desires. In this conflict there is also a precarious balance. The conflict between the desire for independence and the reality of dependence, lived deeply, is distressing [17]. Suffering of any kind is a singular space of search for meaning. Faced with suffering, the human being prove for himself his ability to resist, to face the toughest and adverse situations, to assign a meaning to the reality that he lives and that surrounds him; it is an essential school for the discovery of meanings and senses [18]. Hope reflects the desire for a better future, whose expectation is needed to help people not to give up on their goals and to move forward toward fulfilling their dreams and be happy, despite their health condition. The ability to give great value to what one have or want is a virtue that cannot be missed and professionals should encourage it.

Frailty is a present feeling when women perceive themselves as limited to perform daily activities with the same quality they used to perform before, and so they feel sick, sad and unhappy, changing the image of their role in the professional, social and family contexts [19]. This can lead to internal conflicts. Studies reveal that the frailty is not necessarily related to aging or to a specific disease condition, but may be worse in people with diseases [20,21]. The meaning of fragility as expressed by these women is present probably because of the imminent fear of a threat, specifically the proximity of aging or, in fact, its very existence, of complications of the disease and the appearance of others or even death. Coronary artery disease reveals the close contact with finitude, because of the constant threat of death that it provides, reflecting in a rather negative way at that stage of life.

The concept of malaise does not refer to disease perception models, but to the sociocultural process of interaction and negotiation throughout the episode. It can then be understood that, for women, the experience of menopause/perimenopause through the malaise manifestations, predicted the presence of the CAD episode, but without the clarity and awareness about the possibility of getting the disease. So the episode of the disease is not a diagnosis or a category or a perceptual model, but a process that emerges through the interactions of the actors involved throughout its duration [22].

When talking about the CAD, the participants configured their roles in the social space as "sick" persons, since they described clearly the sick role that they represent in the social context, that is, they enjoy the rights associated with "being sick". Thus, being excluded from the obligations of the activities related to their social roles and having the obligation as a sick person to seek professionally competent assistance are required to assume the sick role, since spontaneous recovery cannot be expected quickly [23].

Conclusion

Menopause was defined for women as a difficult phase, steeped in physical and emotional symptoms - locomotor, vasomotor, cardiac, emotional symptoms, etc. - revealing that this is a major health status change marker, i.e. a period in which they are very prone to consider themselves as ill (disease). The symptoms related to the climacteric and menopause seem to be confused with the problems of age and perceived more strongly in the presence of musculoskeletal diseases, hypertension, diabetes or coronary artery disease itself.

The experience of menopause/perimenopause through the manifestation of malaise predicted the presence of the ACD episode, but without the clarity and awareness about the possibility of getting the disease. So even though these women may identify a number of complaints when speaking about their menopause experience, only from the diagnosis of ACD they assume the sick role. When talking about the CAD, the participants set themselves in the social space as "sick" persons, since they described clearly the sick role that they represent in their social context, that is, they enjoy the rights associated with "being sick".

The discovery of the CAD proved to be one of the most critical and difficult moments of their lives, translated as a serious and incurable problem, which brings restrictions, limitations and requires care, so being a condition that defined them as being sick. They recognize the multifactorial nature of ACD and emphasize transformations after the discovery of the disease such as the change in their diet and role. The experience of this situation goes beyond the physical suffering, but also involves psychological, emotional and social suffering; they show themselves physically debilitated and psychologically vulnerable.

This sense of instability and imbalance imposes limits, restrictions, anguish and frustration, which turns them into fragile, insecure women. It proves to be a conflict between the desirable world and the real world, a concrete reality of limitations, a threat to their lives and physical and emotional integrity. It results in a reworking of their identity process and consolidation of the self, placing them in the sick role. Suffering drives them to reach the limits of the perception of the disease severity and the importance of changing their behavioral habits.

As a limitation in this study, it is emphasized the peculiarities of a qualitative research as the knowledge of a reality of a specific group, the fragment cut and specific and pre-defined moments, the geographic region and the data collection where the study was conducted. Therefore, the generalization of the findings of this study shows limitations, but it is suggested that this research proposal be expanded to other realities, services and other social markers such as family members or health professionals.

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