

KNOWLEDGE OF WOMEN WITH HEART FAILURE CONHECIMENTO DAS MULHERES COM INSUFICIÊNCIA CARDÍACA CONOCIMIENTO DE LAS MUJERES CON INSUFICIENCIA CARDÍACA

Natália Pinheiro Braga Sposito ¹
Rika Miyahara Kobayashi ²

¹ RN. MS in Health Science. Professor. University City of São Paulo, Nursing Course. São Paulo, SP – Brazil.

² RN. PhD in Nursing. Institute Dante Pazzanese of Cardiology. São Paulo, SP – Brazil.

Corresponding author: Natália Pinheiro Braga Sposito. E-mail: nataliabraga@gmail.com

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ABSTRACT

Heart failure is responsible for many hospitalizations and high costs in the hospital. This descriptive study was developed in the cardiologic hospital and aimed to characterize women with heart failure, their knowledge about the disease and to identify nursing diagnoses and prescription. Data was collected with a sample of 44 hospitalized for Heart Failure. The most of the women have incomplete elementary school level (26; 59.1%), and their prevalent factor of risk was menopause (32; 72.7%) and hypertension (26; 59.9%). Among those who reported having knowledge of their disease (24; 54.5%), most (16; 84.2%) were orientated by a doctor (16; 84.2%) and by nurses (13; 68.4%). The prevalent nursing diagnoses were activity intolerance, impaired physical mobility and self-care deficit for bathing/hygiene. The nursing prescriptions were related to hygiene and meal, and it is necessary more intervention related to education for health care.

Keywords: Heart Failure; Women's Health; Self Care; Nursing.

RESUMO

A insuficiência cardíaca é responsável por numerosas internações e elevados custos hospitalares. Este estudo descritivo realizado em hospital cardiológico de São Paulo objetivou caracterizar mulheres com insuficiência cardíaca e seu conhecimento sobre doença e identificar diagnósticos e prescrições de enfermagem durante a internação. Os dados foram coletados com 44 mulheres internadas por insuficiência cardíaca. A maioria apresentava ensino fundamental incompleto (26; 59,1%), menopausa (32; 72,7%) e hipertensão (26; 59,1%). Das que tinham conhecimento sobre a doença, a maioria das orientações foi realizada por médicos (16; 84,2%) e enfermeiras (13; 68,4%). Os diagnósticos de enfermagem prevalentes foram intolerância à atividade, mobilidade física prejudicada e déficit no autocuidado para banho/higiene. As prescrições de enfermagem relacionavam-se ao cuidado com higiene e alimentação, requerendo mais intervenções relativas a ações educativas para o cuidado à saúde, com ampliação da atuação preventiva.

Palavras-chave: Insuficiência Cardíaca; Saúde da Mulher; Autocuidado; Enfermagem.

RESUMEN

La insuficiencia cardíaca es responsable de una gran cantidad de internaciones y de altos costos hospitalarios. El presente estudio descriptivo se llevó a cabo en un hospital de cardiología de San Pablo con miras a caracterizar a las mujeres con insuficiencia cardíaca, su conocimiento sobre la enfermedad e identificar los diagnósticos y prescripciones de enfermería durante la internación. Los datos se recogieron con 44 mujeres internadas por insuficiencia cardíaca. La mayoría (26) tenía enseñanza básica incompleta (59,1%), 32 estaban en la menopausia (72,7%) y 26 tenían hipertensión (59,1%). La mayoría de las orientaciones de aquellas (16) que tenían conocimiento sobre la enfermedad había sido transmitida por médicos (84,2%) y a 13 por enfermeros (68,4%). Los diagnósticos de enfermería más prevalentes fueron intolerancia a la actividad, movilidad física perjudicada y déficit en el autocuidado para el baño y la higiene. Las prescripciones de enfermería se referían al autocuidado con la higiene y la alimentación. Se requirieron otras intervenciones relacionadas con las actividades educativas para cuidar de la salud, con énfasis en la actuación preventiva.

Palabras clave: Insuficiencia Cardíaca; Salud de la Mujer; Autocuidado; Enfermería.

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INTRODUCTION

It is estimated that about 26 million people in the world population have a diagnosis of heart failure (HF)¹ and according to the Ministry of Health², this disease is the ninth leading cause of death in Brazil, representing the sixth position when only women are considered.

It is a progressive, systemic disease, considered the final common pathway of most heart diseases, as well as the costliest clinical condition.³ It is associated with worsening functional capacity, quality of life and increased morbidity and mortality, being a major challenge in the health area. Also, it is the main cause of hospitalization in patients over 65 years old.⁴ Thus, the high rates of HF, together with the progressive increase in the elderly population, reveal that this theme deserves attention from professionals and organs of health.

Also, 36.7% of women deaths due to defined causes in the Southeast region were from diseases of the circulatory system⁵, reflecting the importance assumed by cardiovascular diseases in a situation of Brazilian morbidity and mortality, configured in the female context.

Regarding cardiovascular diseases in women, it is worth mentioning that, when compared to men, they take about 10 years to develop the manifestations of the disease.⁶ This is related to the loss of estrogen protection caused by menopause. Thus, women experience a significant increase in morbidity and mortality due to cardiovascular diseases as they age, especially after 50 years old.^{3,5}

Women with HF have less quality of life, more impairment of functional capacity and more depression symptoms than men. Also, they show more severe clinical signs and more frequent signs and symptoms.⁶ Another aspect that cannot be ignored is the reduced involvement of women in clinical trials in clinical failure, with 17-23%, being significantly lower than men.⁷

According to the American Heart Association,⁸ self-care for patients with HF requires several actions, such as correct medication follow-up, low sodium diet, preventive behaviors, and attention to the signs and symptoms presented. Therefore, it is necessary for the patient and his caregiver to be engaged and to be actors of the whole process related to the disease, with the family as the most common scenario found in the actions of the woman in her self-care.

Thus, the choice of the female population in this study is justified and it is essential to know the profile, knowledge, and performance on HF of the population assisted in allowing the development of educational measures aimed at reducing hospitalizations through promoting the patient's knowledge about the disease and his self-care, as well as improving his quality of life.

The purpose of this study was to characterize the profile of adult women hospitalized in a public cardiology hospital located in the city of São Paulo, Brazil, who had a medical diagno-

sis of hospitalization for HF; to identify the knowledge of these patients about the disease and its treatment; and to describe nursing diagnoses and nursing prescriptions related to HF during hospitalization.

METHODOLOGY

An exploratory and descriptive study was carried out in the wards of a medium-sized public hospital, a reference in the Cardiology area, located in the city of São Paulo.

Female adult patients hospitalized in the ward between October 2010 and September 2011 who presented HF as a diagnosis of hospitalization were invited to participate in the study. The exclusion criteria were: to be less than 18 years old, to not have physical and/or psychological conditions to answer the questionnaire or to have participated in the survey before, for those who had more than one hospitalization during the collection period. For them, only one collection was performed referring to the first hospitalization.

Thus, one out of 50 women meeting the criteria described was excluded for refusal and five for having more than one hospitalization during the study period. Therefore, the sample consisted of 44 patients.

Before the data collection, the study was submitted and approved by the Research Ethics Committee under protocol number 3.975, by ethical principles.

The knowledge about HF was defined as a dependent variable. Socio-demographic data (gender, age, natural and marital status), socioeconomic variables (education and family income) and risk factors for cardiovascular disease were the independent variables.

The data were collected through the application of a form prepared by the researcher and by the medical record. The data collected in the medical records were: current medical diagnosis and other diagnoses described in the medical clinical evolution, diagnoses and nursing prescriptions identified in the nursing care systematization forms.

The interview was composed of open and closed questions, grouped into four main topics: characterization of the sociodemographic profile, recognition of risk factors for cardiovascular disease and HF, knowledge about HF and self-care.

The data were tabulated and submitted to statistical analysis through the Statistical Package for Social Sciences (SPSS) version 19. The mean and median values of the continuous variables were used for the descriptive analysis, and a frequency study was performed for the discrete variables.

The Fisher exact test was applied to verify the association between the categorical variables analyzed, for which a significance level of 5% ($p < 0.05$) was adopted. The relationship between the following variables was analyzed: knowledge about

HF and education; Knowledge about the diagnosis and guidance received during hospitalization; Knowledge about HF and guidance received during hospitalization; Performing treatment and knowledge about the diagnosis; Performing treatment for HF; And knowledge about what is HF.

RESULTS

The main sociodemographic characteristics of women are presented in Table 1.

Table 1 - Sociodemographic characteristics of women hospitalized with heart failure. São Paulo, SP, Brazil, 2011

Characteristics	N (%)	Mean (SD)
Age (years old)		56,7 (11,27)
Family income (Brazilian currency, reais)		1.497 (1.148)
Incomplete elementary school	26 (59,1)	
Coming from the Southeast	22 (50)	
Retired	20 (45,4)	

Besides to HF, the most frequently described medical diagnoses were hypertension (29; 59.1%), myocardiopathy (27; 61.4%), diabetes mellitus and renal insufficiency (17; 38.6%), dyslipidemia (16; 36.4%) and atrial fibrillation (13; 29.5%).

RISK FACTORS FOR HEART DISEASES KNOWN AND PRESENTED BY WOMEN

Most women reported having knowledge of risk factors for cardiovascular disease (37; 84%), and 31 of them reported preventing their family, while the other six were unable to prevent them due to the absence of close or living relatives or due to the family does not consider it as important information.

The risk factors presented by the women were: menopause (72.7%), family history of cardiovascular diseases (68.2%), arterial hypertension (59.1%) and diabetes (40.9%).

When questioned about which factors believed to contribute to the onset or worsening of HF, 42 women (95.4%) reported hypertension and smoking, 40 (90.9%) said it was obesity, 38 (86, 4%) said alcohol, 36 (81.8%) dyslipidemia and 35 (79.5%) diabetes and a family history of cardiovascular disease. The least known risk factor was menopause, cited by 25 (56.8%) women.

KNOWLEDGE ABOUT HEART FAILURE

Among women, 28 (63.6%) reported being aware of their inpatient diagnosis. Of them, 24 (85.7%) stated that the diagnosis consisted of HF and 17 (60.7%) said they had knowledge about HF. Knowledge about HF was vague, described regarding the symptoms of the disease. Thus, tiredness, lack of air, swell-

ing, weakness, difficulty performing some activities and lying down/sleeping were mentioned.

Also, a statistically significant relationship was found between education and knowledge about HF ($p=0.013$). However, the relationship between knowledge about HF and treatment for HF presented p -value equivalent to 0.075.

It is noteworthy that 16 (36.4%) women did not know their inpatient diagnosis, and 14 of them would like to learn "everything about the disease," how it appears, what symptoms and what to do to avoid it, while two women said they did not have an interest in knowing.

KNOWLEDGE ABOUT THE TREATMENT OF HEART FAILURE

When the women were asked if they were or were not taking HF treatment, 36 (81.8%) answered affirmatively, six (13.6%) negatively and two (4.6%) did not know. In 36 who were receiving treatment, the answers varied when asked to specify it. Medication therapies, medical appointments, examinations, changes in eating habits/having healthy eating habits and a decrease in water intake were identified.

No statistically significant relationship was found between doing treatment for HF and having knowledge about the diagnosis of hospitalization ($p=0.383$).

With the treatment, 23 (63.9%) women expected to "get better, to get well, to have some evolution", six (16.7%) expected to resume their daily activities, domestic and/or leisure, four (11.1%) expected to receive heart transplantation and three (8.3%) had the expectation of having their disease cured.

When questioned about health care, 43 (97.7%) reported taking the medications correctly, 42 (95.4%) did not smoke, 38 (86.4%) took care of food through less salt intake, 30 (68.2%) observed the appearance of signs and symptoms of the disease, 29 (65.9%) maintained the vaccines in day, four (9.1%) practiced physical exercise and four (9.1%) had water restriction/reduction of water intake.

GUIDELINES RECEIVED

Of 19 (43.3%) women who received guidelines during hospitalization, the main professional categories mentioned were: doctors (84.2%), nursing (68.4%) and nutritionists (36.8%).

The most cited themes were the reduction of water intake (11, 57.9%), change in eating habits (8 – 50%) and adherence to drug treatment (five – 26.3%). Also, there were guidelines related to rest, physical activity, cardiac transplantation, symptoms of the disease and others of an emotional nature with the intention of promoting the coping of the disease and therapeutics.

Regarding the statistical analysis, no relation was found between knowledge about the diagnosis of hospitalization and

guided during hospitalization ($p=0,113$) or knowledge about HF and guided during hospitalization ($p=0,766$).

NURSING CARE

The nursing diagnoses described in medical records and related to the diagnosis of HF were: risk of decreased cardiac output (97.7%), activity intolerance (61.4%), impaired physical mobility (40.9%), self-care for bathing and hygiene (34.1%), excessive fluid volume (20.4%) and self-care deficit for food (15.9%).

Considering the diagnoses above, the most frequent nursing prescriptions were related to direct care, such as referring to the bath, placing pyramidal mattress, registering acceptance of diet and hygiene conditions.

None of the patients identified nursing diagnoses or prescriptions related to their knowledge about the disease and health care.

DISCUSSION

The profile of women was 56.7 years old, close to the average found in another national study⁹ and lower than the averages observed in developed countries as a consequence of more exposure to risk factors and standard of living.¹⁰ The average family income was R\$ 1,293 (Brazilian currency), and 50% came from the Southeast and 43% from the Northeast.

Most women were retired or housewives, postmenopausal (72.3%), hypertensive (59.1%), and a previous family history of cardiovascular diseases (68.2%), corroborating the literature.³ About 40% had diabetes and dyslipidemia. These data show that a large part of the prevalent risk factors and recognized factors as aggravating the disease is modifiable, and it is necessary to adopt measures of intervention and education of the population.

In a follow-up study of 84,537 postmenopausal American women, it was reported that increased healthy lifestyle was associated with a decreased risk of developing HF¹⁰. Therefore, the knowledge of the risk factors added to the knowledge of the population were an essential aspect of the development of strategies to prevent the disease, as well as its complications.

This is a field in which nurses can perform well through the elaboration and execution of health education activities, which should not be restricted to outpatient and pre-hospital care, and may also be developed during the hospitalization period to allow continuity of care and a better post-discharge quality of life.

Regarding the low level of education presented by the women included in this study, the statistically significant relationship between education and knowledge about HF reinforces the importance of public efforts and investments in reducing illiteracy rates and raising the level of education.

In this study, about 40% of women who reported having knowledge about their diagnosis did not know what HF was. This may be related to the level of education presented by this population and to the fragility in the health team's performance in explaining the diagnosis to the patient, either due to the use of inappropriate language, as too technical, leading to patient misunderstanding or even absence guidance.

It is noteworthy that a statistically significant relationship was found between education and knowledge about HF ($p=0.013$), allowing to infer that knowledge about the disease increases according to the years of study. This result, together with the fact that between 30 and 50% of readmissions of these patients are caused by to lack of information or understanding, as well as low adherence to prescribed regimens⁸, there is the need for effective communication between the health team and the patient. This communication should be adapted to suit the technical and scientific knowledge in a simple and easy-to-understand language, either during the daily physical examination, in verbal orientations or leaflets/posters. Also, professionals should validate the understanding of what has been said, since clinical practice enables to perceive that some patients feel ashamed or even deprived of the right to ask the health professional.

The contrast between the best known and the presented factors is interesting. The figures cited probably reflect the diffusion of knowledge by the media and the outcome of government educational campaigns. However, although most women recognize the main risk factors for cardiovascular disease, analyzing the answers given to the open questions, it is perceived that it is knowledge that most of the time, it is at a superficial level. Perhaps this is attributed to many of these campaigns being merely informational, rather than working the perception as an actor in the health-disease process.

However, the literature reveals that educational strategies as a single measure are not enough to achieve a positive impact, but should be part of a set of interventions.^{8,11} When added to social support measures, behavioral strategies and reinforcement of the guidelines lead to better results in adherence and self-care behaviors.^{9,11} Another study reinforces this idea by arguing that educational, behavioral and psychosocial interventions as being necessary to achieve greater adherence to self-care measures.¹²

The dissemination of disease management and self-care programs, as well as the combination of interventions, are the acceptable approach to effectively improving adherence to self-care behaviors, reducing costs, and using resources.¹²

In this study, a divergence was identified between what the patients would like to know and the guidelines received during the hospitalization, since most of them would like to know subjects related to the disease, while the guidelines are most of the time focused on feeding and water intake.

It is noticed that there is often divergence among patients, nurses, and physicians regarding educational needs.¹¹ It will be necessary to elucidate which reasons lead to divergence, as well as structuring an educational program based on demands reported by the affected population, aiming for more success intervention. However, this is only possible if the nurses establish clear and effective communication and they are willing to listen to the patient.

However, no relation was found between knowledge about the diagnosis and being guided during hospitalization ($p=0,113$) or knowledge about HF and guided during hospitalization ($p=0,766$). Besides to the already mentioned issues related to the language and thematic approach, these values allow health professionals to reflect on the receptivity of the patient in the guidelines performed and on the existence of an adequate moment to perform them. Thus, it is of great value for nurses to carry out the "situational diagnosis" of each patient at the time of admission to the unit, identifying the knowledge and deficiencies presented, in which they will guide their interventions.

The promotion of self-care is an important area of nurses' insertion, corroborated by studies that report that their performance results in improvement of clinical evolution, reduction of hospitalizations, knowledge about the disease, self-care and, consequently, improvement of their quality of life.¹³⁻¹⁹ In a Brazilian study conducted with patients on HF treatment accompanied by outpatients, inadequate self-care was observed. However, patients who had the diagnosis longer and were followed by a physician and a nurse had better rates of self-care.⁹ Thus, the rate found in this study where only 43% of patients reported having received guidance, is far below the desired level, considering the significant contribution that the performance of the multidisciplinary team can bring to patients with HF.

Another way to promote the patient's knowledge and self-care are to identify the knowledge deficit in the nursing diagnosis, based on which the nurse can prescribe actions aimed at patient guidance and education. According to a review study, although patients with HF have difficulties in adapting self-care guidelines to daily life, they develop strategies based on previous experiences.²⁰

Gonçalves²¹ advocates education for the knowledge of the disease as the key to coping with adversity in HF. Thus, it is essential to evaluate educational measures considering the needs identified by patients, also aimed at promoting self-care and, especially, extrapolating the hospital scenario to include actions to support home education. Also, the most appropriate educational strategies for each approach must be considered.

Studies have shown home visits and telephone contacts as efficient methods to promote knowledge about the disease and adherence to treatment to reduce hospital admissions and improve the quality of life of patients with HF.¹³⁻¹⁸ Thus,

the interrelation and continuity between the work carried out in basic care and the intra-hospital context is fundamental to achieving advances in care and self-care in HF.

The responses obtained of what is expected from the treatment about the expectation of cure indicate a field where the nurse's role is essential since it is inadmissible that patients with HF do not know that it is a chronic disease and they will have to live for the rest of their lives. Therefore, it is up to the nurse to show the patient that self-care is a key element in facilitating this coexistence.

As for the women who said they wanted to get well, they meant able to go back to doing leisure and domestic activities and not overloading family members. This scenario shows a much more present reality in the feminine universe, from a sense of responsibility for the maintenance of the organized house and the well-being of the family and even the feeling of guilt in the face of the perception that the incapacities and difficulties generated by the disease harming their relatives.

It is also important to consider the particularity of the women in this study, as described in a review study that they have a more pessimistic view of the future and with less family support in the performance of self-care measures²². Therefore, they are in an even more vulnerable situation and deserve attention by the health professionals regarding the implementation of strategies for self-care at home, worked during hospitalization. Thus, female patients may require approaches different from those directed at the male population by health professionals. In this aspect, besides the collection in a single institution, the non-inclusion of the male population was a limitation of the study, since the comparison of the results between men and women contributes to the understanding of gender differences related to HF.

Also, regarding the treatment of HF, heart transplantation cannot be ignored as a possibility for patients with refractory advanced HF or meeting these criteria. As seen in the answers obtained in this study, the expectation of the transplant was mentioned by four patients, demonstrating that this is a subject that must also be approached by the nurse, even regarding the proposition of specific diagnoses and nursing prescriptions.

Considering the nursing diagnoses and prescriptions raised during hospitalization, it is noticed that they are very concentrated in the symptoms of the disease, that is, only in the physical limitations presented at the hospitalization. The prevalent nursing diagnoses for HF were activity intolerance, impaired physical mobility and excessive fluid volume, and self-care deficit for bathing, hygiene, and feeding. Nursing prescriptions were related to direct care such as referring to the bath, to place a pyramidal mattress, to register acceptance of diet and hygiene conditions.

The importance of the systematization of nursing care is undeniable. However, it is essential that nurses broaden their as-

assessment in a way that does not limit the symptoms presented during the hospitalization period, and the prescribed and performed interventions can cover not only symptom-related issues but also knowledge, coping and support, resulting in permanent transformations in the biopsychosocial context of this patient.

CONCLUSION

It was concluded that most women hospitalized for HF were older than 50 years old, family income of about 2-3 minimum wages, considering the values of the time that the data were collected, low educational level, as well as other chronic diseases associated with hypertension. As for the knowledge about the disease and its treatment, despite identifying the risk factors, its knowledge about HF is fragile, since the vague response was obtained and more than half reported not having been guided during hospitalization. Therefore, it is the responsibility of the multi-professional health team to extend its performance beyond the curative aspect.

With the nursing diagnoses, no reference was found to the patient's knowledge deficit or nursing prescriptions aiming at the educational intervention, requiring new studies with the nurses to elucidate the reasons to occur.

In this sense, it is observed that, despite the importance of the subject studied, there are still deficiencies in nursing work. Therefore, it is important that future researches identify the educational needs of the patients and evaluate the most effective teaching tools for each population. As for the systematization of nursing care, it is necessary to identify the difficulties in its realization in a more complete and individualized way.

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