Abstract

**Objective:** to identify how health education actions performed by the nursing professional contribute to the improvement of the quality of life of patients with heart failure.

**Method:** Integrative review built from the following question: What contributions of the nurse in the health education of patients with heart failure? Made in the PUBMED, LILACS and SciELO Virtual Library databases. The studies were analyzed and presented in a descriptive and table format.

**Results:** 8 studies were the sample. It was possible to identify that the actions of health education developed by nurses to patients with heart failure provide integration of the patients with the family, behavior change and acquisition of healthy habits.

**Contributions of Nurses in Health Education of Patients with Heart Failure**

Maurício Caxias de Souza¹, Sérgio Ribeiro dos Santos², Ericka Silva Holmes³, Wilma Dias de Fontes Pereira⁴, Aurilene Josefa Cartaxo Gomes de Arruda⁴, Leila de Cássia Tavares da Fonsêca⁴, Felicidade Ferreira Amorim Casanova⁵, Thássia Christina Azevedo da Silva⁶, Thais Dandara Azevedo da Silva⁶, Gerson da Silva Ribeiro⁷, Nereide de Andrade Virginio⁸, Claudia Germana Virgínia de Souto⁸, Giselda Leite da Silva⁹, Leandro Bulhões de Lemos Moraes⁹, Marília Roberta Freitas de Vasconcelos⁹, Gyl Dayara Alves de Carvalho⁵, Laura Cristhiana Mendonça Rezende Chaves⁷, Kirlene Scheyla Viana Chianca⁷, Luciara Cristina Ferreira dos Santos⁷, Saneyde de Carvalho Almeida¹⁰, Rozileide Martins Simões Candeia¹¹

1 Nurse. Member of the Group of Studies and Research in Administration and Informatics in Health, Federal University of Paraíba (GEPAIE/UFPB), *.
2 Nurse. Doctor of Sociology. Doctor of Health Sciences. Full Professor of the Clinical Nursing Department of the UFPB. Leader of GEPAIE. Effective Professor of Nursing Graduate Programs (PPGENF/UFPB) and Decision and Health Models (PPGMD/UFPB), *.
3 Nurse. Family Health Specialist (UFPB). PhD student in Decision and Health Models by PPGMD/UFPB, *.
4 Nurse. Professor Doctor. Department of Clinical Nursing. Health Sciences Center (CCS) UFPB, *.
5 Nurse. Master in Human Health and Environment by the Pernambuco Federal University (UFPE). Recife, Pernambuco, Brazil.
6 Nurse. Graduated by the Maurício de Nassau College. Brazil.
7 Nurse. Master of Nursing. Postgraduate Program in Nursing of the UFPB. *.
8 Nurse. Nova Esperança Nursing College. *.
9 Nurse. Residency of Cardiology Nursing at the University of Pernambuco. Recife/PE, Brazil.
10 Nurse. Nurse of the Family Health Program of the Municipality of João Pessoa/Paraíba. *.

*: João Pessoa/PB, Brazil

**Contact information:**

Ericka Silva Holmes.

✉ ericka_holmes@hotmail.com
**Introduction**

Heart Failure (HF) is a chronic and progressive syndrome, evidenced through signs and symptoms of pulmonary and systemic congestion, characterized as the last stage of cardiovascular diseases. [1] It is a disease responsible for high mortality rates, developing both chronic and decompensated, leading to disabling symptoms, frequent hospitalizations, reduced quality of life and a complex therapeutic regimen. [2, 3]

In general, those affected by this pathology undergo transformations in their lifestyle due to the growing inability to perform their daily activities. These are due to signs and symptoms of the disease manifested by pain, precordial discomfort, dyspnoea, orthopnea, tachycardia, syncope, fatigue and edema. [4]

This syndrome affects about 2% of the world population and its incidence has increased in the last three decades, especially in the elderly population, where the average age is over 65 years. Despite advances in the treatment of HF, there are high mortality rates and a decrease in the functional capacity of its patients. This increase may be related to the increase in the life expectancy of the elderly person, since HF affects mainly the individuals within this age group. [5, 6]

In Brazil, there are about two million patients with HF, with 240,000 cases diagnosed per year. Projections indicate that, in 2025, Brazil will have the sixth largest population of the elderly, approximately 30 million people (15% of the total population). This should result in the multiplication of cases and public spending on this syndrome. [7]

Considered as one of the major public health problems, the IC generates high costs for the health system, collaborating with the increase of readmission rates. [1] With regard to these rates, the expenditure becomes even more worrying when data indicate that the number of patients readmitted with this pathology reaches almost 50% soon after the first hospitalization due to decompensation, mainly in the period from 30 to 90 days after discharge. This return is considered one of the main risk factors for death in this disease, associated with inadequate therapy, lack of adherence to treatment or worsening of cardiac function. [1, 5]

The treatment of HF includes non-pharmacological measures, pharmacological and in some cases, depending on the stage of the syndrome, surgical measures. However, it is necessary that the nursing orientations are based on self-care teaching, because in this way the individual will become independent and will have autonomy over their treatment. [8, 9]

Health education is conceptualized as the dialogue between professionals and patients that allows building knowledge and increasing the autonomy of people in their care. It also allows the debate among population, managers and workers, in order to enhance popular control, becoming a mechanism to encourage social management of health. [10]

Among the actions in education and health stand out the participatory activities, whose great differential is the process of interaction between technical knowledge and popular knowledge. Being of fundamental importance that the professional recognizes that the population has a knowledge that

**Conclusions:** The nurse is a protagonist in the dissemination of knowledge through consultations with people with HF, actions that stimulate self-care, promoting changes that impact on the quality of life of these patients.

**Keywords**

Cardiac Insufficiency; Health Education; Nursing.
must be valued during the construction of the educational work, thus favoring the awakening of the autonomy of the patient. [11]

In this context, it is necessary for health professionals to recognize HF patients as active subjects in their own health and capable of changing their history, because when the individual understands their reality, he can raise solutions to transform it. [12] Nurses play an important role in this scenario insofar as they develop health education strategies aimed at patients and their families, aiming to provide a better quality of life for patients with HF. [8]

The high morbidity and mortality rates of patients with HF expose the need for intervention measures through health education by the nursing professional in order to control the signs and symptoms of the disease and a higher quality of life for patients with HF pathology. [8, 11]

Thus, the present study has the objective of identifying how health education actions performed by the nursing professional contribute to the improvement of the quality of life of patients with heart failure.

Method
This is an integrative review of the current literature, which enables the analysis of relevant research that contributes to the improvement of clinical practice, as well as providing the synthesis of knowledge about a given subject, including the knowledge gaps that need to be fulfilled through new searches. It shows a valuable method for nursing, considering the lack of time of the professionals to carry out the reading and analysis of all the literature of the currently available scientific knowledge. [13]

The following steps were taken to construct an integrative review: establishment of the review objective, selection of articles through inclusion and exclusion criteria, organization of information to be extracted from articles, analysis and presentation of results. [14]

The purpose of the present study was to answer the following guiding question: What are the contributions of the nurse in the health education of patients with HF?

The selection of articles was carried out from August 2015 to August 2016 in the databases: National Library of Medicine (PUBMED), Latin American Literature in Health Sciences and the Caribbean (LILACS), and Scientific Virtual Library Eletronic Library Online (SciELO), using the Health Sciences Descriptors (DeCS): “Health Education”, “Heart Failure” and “Nursing”, combined by the Boolean operator AND.

The selection criteria of the articles defined for the construction of this integrative review were: articles published in Portuguese, English and Spanish, available in full in the referred databases, between 2010 and 2016, using as descriptors: Health Education AND Insufficiency Cardiac AND Nursing. The exclusion of articles was carried out in those who did not respond to the objective of the review and those who did not present in a clear and objective way the criteria of the research design.

Combining the descriptors, 248 scientific productions were obtained. After applying the inclusion and exclusion criteria, there were 41 articles, 10 in PUBMED, 8 in LILACS and 22 in SciELO. After reading the articles in full, only 8 scientific productions met the objectives of this review.

Results and Discussion
In the present study, eight articles were analyzed that met the established inclusion criteria, as shown in Table 1.

Through the results, it was possible to perceive that studies have been developed with the purpose of investigating the contributions of the nurses in the health education of patients with HF. Through the titles of the scientific productions, it is observed that these educative actions are directed mainly towards adherence to the treatment and change in the way of life.
Table 1. Distribution of articles collected, according to the title, year of publication and name of the periodical/database.

<table>
<thead>
<tr>
<th>Title</th>
<th>Year</th>
<th>Journal</th>
<th>Data base</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health education of patients with heart failure</td>
<td>2014</td>
<td>Nursing Journal UERJ</td>
<td>PUBMED</td>
<td>Synthesis on health education, through nursing consultations with patients with HF.</td>
</tr>
<tr>
<td>Factors associated with beliefs about adherence to non-drug treatment of patients with HF</td>
<td>2013</td>
<td>USP Nursing School Journal</td>
<td>PUBMED</td>
<td>To evaluate the beliefs regarding benefits and barriers to adherence to daily self-monitoring of weight / edema in patients with HF.</td>
</tr>
<tr>
<td>Education and telephone monitoring of patients with heart failure: Randomized Clinical Trial</td>
<td>2011</td>
<td>Brazilian Society of Cardiology</td>
<td>PUBMED</td>
<td>To compare two groups of nursing educational interventions among hospitalized patients with HF.</td>
</tr>
<tr>
<td>Heart failure: expressions of people’s knowledge about the disease</td>
<td>2013</td>
<td>USP Nursing School Journal</td>
<td>LILACS</td>
<td>To analyze the knowledge of people with HF on the disease and treatment.</td>
</tr>
<tr>
<td>Effectiveness of an educational program in nursing in the self-care of patients with heart failure: a controlled clinical trial</td>
<td>2012</td>
<td>American Journal of Nursing</td>
<td>LILACS</td>
<td>To evaluate the effectiveness of a nursing education program in improving the treatment behaviors with HF.</td>
</tr>
<tr>
<td>Discharge plan for patients with congenital heart failure</td>
<td>2011</td>
<td>American Journal of Nursing</td>
<td>SCIELO</td>
<td>To identify in the literature how nurses have planned the discharge of patients with CHF.</td>
</tr>
<tr>
<td>Improvement of self-care behaviors after. A nursing educational intervention with Patients with heart failure</td>
<td>2012</td>
<td>Research and Education in Nursing</td>
<td>SCIELO</td>
<td>To evaluate the improvement in self-care behaviors after an educational intervention. Nursing in patients with heart failure.</td>
</tr>
<tr>
<td>Heart failure: strategies used by the elderly in the search for quality of life.</td>
<td>2011</td>
<td>Brazilian Journal of Nursing</td>
<td>SCIELO</td>
<td>To describe the strategies used by the elderly in the face of HF and to know the perceptions about Nursing Care.</td>
</tr>
</tbody>
</table>

Source: Survey data, 2016.

Regarding the periodicals of publication, we highlight the Revista Escola de Enfermagem of USP and the Revista Latino Americana de Enfermagem; As for the databases, the ones that presented the greatest productions on the subject were: PUBMED and LILACS. The year 2011 presented a greater number of publications.

It should be pointed out that, among the 8 studies included in this integrative review, 7 of the authors are nurses and one was performed by nurses and physicians. Of the 8 articles, 6 were conducted in Brazil, while the other (2) are of international character, carried out in Colombia.

Regarding the contributions of nurses to health education of patients with HF, the main aspects highlighted by the studies can be seen in Table 2.

It was possible to observe in the analysis of the articles that the educational actions of nursing professionals vis-a-vis patients with HF are extremely important in the adequate coping of the disease by these individuals. Among the most outstanding actions by the studies, are the nursing orientations regarding lifestyle changes and self-care behaviors, emphasized by 4 studies.

Table 2. Distribution of the articles surveyed, according to the contributions coming from the use of PEP.

<table>
<thead>
<tr>
<th>Contributions of nurses in health education of patients with heart failure</th>
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<tbody>
<tr>
<td>Increased adherence to treatment</td>
</tr>
<tr>
<td>Weight control and edema</td>
</tr>
<tr>
<td>Understanding the pathophysiology of the disease</td>
</tr>
<tr>
<td>Changes in eating habits</td>
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<tr>
<td>Improvement of self-care behaviors</td>
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</tbody>
</table>

Source: Survey data, 2016.
Educational interventions regarding the adherence of medication/non-drug therapy to patients with HF in geriatrics and cardiology outpatient clinics of a university hospital in the interior of the State of São Paulo. It was evidenced that patients with HF perform little weight control and edema, reaching only once a month to verify these measures. The main barrier perceived in the study for adherence to these non-drug measures was pointed out as the forgetfulness and the availability of material, since most of the patients did not have a balance in their homes. [15]

This research concluded that health education programs that employ strategies to identify barriers and benefits for self-care contribute to the understanding that daily weight check and edema can alert the patient to the signs of HF decompensation and avoid hospitalization, bringing a relevant contribution to the quality of life of these patients. [15]

In relation to health education, in the extra-hospital context, another article shows that a clinical trial was conducted in a university hospital in the city of Porto Alegre, in patients with HF, which were divided into two groups, where G1 received educational intervention of nursing during hospitalization, followed by telephone monitoring after hospital discharge, and G2 received only hospital intervention. In this case, it was verified that the in-hospital nursing educational intervention benefited all patients with HF in relation to the knowledge of the disease and self-care, independent of the telephone contact after discharge. [16] This demonstrates the relevance of the role of nurse educator and the repercussions of this for the quality of life of patients. What should be encouraged not only in primary care but also at the hospital level. [7]

Telephone monitoring can be considered as an additional method of patient investigation, when used to reinforce care plans and the educational process, it is usually used after hospital discharge and in home visitation interventions. Despite the results obtained in this study in Porto Alegre, other experimental studies have shown that HF patients who received this type of education had lower hospital readmission rates when compared to the control group. [17]

Regarding the well-being of these patients, the studies show that the impacts of the disease on the quality of life of people with HF are enormous, besides the physical affections also occur emotional repercussions and even in the financial life of these patients. Welfare is altered, generating incapacities, restrictions on routine habits, limitation of autonomy and independence, especially in the elderly. [16, 17, 19]

A study carried out with elderly patients with HF demonstrated the perception they have regarding the nursing professionals who carry out activities in health education. These patients have reported perceptions related to the affective level, such as attention and affection, empathy in the nursing field is something essential, taking into account that individuals are dealt with in moments of fragility not only biological, but also psychic. It was also verified that the social, educational, economic and cultural context are variables that directly influence the strategies of coping with the disease by those with HF. [12]

In all of the studies analyzed, it was observed that nursing education interventions aim not only to improve knowledge about HF but also, the behaviors that influence the illness. [15-21]

Patients are given nursing care related to medication, food, rest, physical activity, as well as special care referring to the particular conditions of each patient. [20, 21]

**Conclusion**

Knowledge about the disease facilitates the adherence of HF patients to the treatment and allows them to develop methods to cope better with the disease, which involves the restriction of liquids and salt in the diet, daily monitoring of weight, physical activities and Regular use of medications.
The literature has confirmed the benefits related to health education in the various environments where HF can be handled. All the articles analyzed suggest in their results that the nursing educational intervention has a beneficial effect on the self-care behaviors of people with HF and they reveal a significant improvement in the patients' quality of life after being submitted to some type of activity related to health education.

The studies show that in promoting the health of patients with HF, it is not only the administration of medication or the execution of techniques. The educational action and the teaching of new knowledge and behavioral patterns are necessary and the nurse has been acting in a primordial way in the needs and emotions that mediates such knowledge and practices, in order to obtain the best results.

It was possible to verify that the participation of nurses in the practice of educational activities with patients with HF is extremely important in improving the quality of life of these patients, besides contributing to the development of self-care, introducing changes in lifestyle and facilitating their treatment adherence. The educational actions developed provide integration of the users with the family, change of behaviors and acquisition of healthy eating habits.

The nurse is the protagonist in the dissemination of education through consultations with patients with HF that goes beyond the simple transmission of knowledge, contextualizing the treatment and promoting changes that affect the quality of life of these patients.

References


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