

**THERAPEUTIC STRATEGIES USED IN THE NURSING APPOINTMENT OF
PATIENTS WITH HEART FAILURE OF CHAGASICAL ETIOLOGY****ESTRATÉGIAS TERAPÊUTICAS UTILIZADAS NA CONSULTA DE
ENFERMAGEM A PACIENTES COM INSUFICIÊNCIA CARDÍACA DE
ETIOLOGIA CHAGÁSICA****ESTRATEGIAS TERAPÉUTICAS UTILIZADAS EN LA CONSULTA DE
ENFERMERÍA DE PACIENTES CON INSUFICIENCIA CARDÍACA DE
ETIOLOGÍA CHAGÁSICA**

Larissa dos Santos Brandão¹, Tayne Fernanda Lemos da Silva², Maria Beatriz de Araújo Silva³, Cristina de Fátima Velloso Carrazzone⁴, Sílvia Marinho Martins Alves⁵, Wilson Alves de Oliveira Júnior⁶, Carolina de Araújo Medeiros⁷

How to cite this article: Brandão LS, Silva TFL, Silva MBA, Carrazzone CFV, Alves SMM, Oliveira Júnior WA, Medeiros CA. Therapeutic strategies used in the nursing appointment of patients with heart failure of chagasical etiology. Rev Enferm Atenção Saúde [Internet]. 2022 [access:____]; 11(2):e202251. DOI: <https://doi.org/10.18554/reas.v11i2.5951>

¹ Nurse Resident in Cardiological Care of the Emergency Department of Pernambuco Prof. Luiz Tavares-University of Pernambuco - PE. University of Pernambuco- PE. <https://orcid.org/0000-0003-4040-6315>

² Nurse Resident in Cardiological Care of the Emergency Department of Pernambuco Prof. Luiz Tavares-University of Pernambuco - PE. University of Pernambuco- PE. <https://orcid.org/0000-0002-0197-825X>

³ Professor of the Faculty of Nursing Nossa Senhora das Graças- FENSG- University of Pernambuco, Recife, Pernambuco, Brazil. Faculty of Nursing Nossa Senhora das Graças- FENSG- University of Pernambuco-PE. PhD in Parasitic Biology from the Oswaldo Cruz Institute, Fiocruz, Recife, Pernambuco, Brazil. <https://orcid.org/0000-0002-5730-5425>

⁴ Medical Hematologist. Ambulatory of Chagas Disease and Heart Failure - Cardiological Emergency Department of Pernambuco - PROCAPE, University of Pernambuco, Recife, Pernambuco, Brazil. Master in Public Health by the Aggeu Magalhães Research Center. Ambulatory of Chagas Disease and Heart Failure - Cardiological Emergency Department of Pernambuco - PROCAPE. <https://orcid.org/0000-0002-2747-3540>

⁵ Cardiologist. Ambulatory of Chagas Disease and Heart Failure - Cardiological Emergency Department of Pernambuco - PROCAPE, University of Pernambuco, Recife, Pernambuco, Brazil. PhD in Senso Est Cardiology Graduate Program at Faculdade de Medicina - USP, São Paulo, Brazil. Ambulatory of Chagas Disease and Heart Failure - Cardiological Emergency Department of Pernambuco - PROCAPE. <https://orcid.org/0000-0002-3093-9743>

⁶ Cardiologist and Coordinator of the Ambulatory of Chagas Disease and Heart Failure - Cardiological Emergency Department of Pernambuco - PROCAPE, University of Pernambuco, Recife, Pernambuco, Brazil. Master in Tropical Medicine from the Federal University of Pernambuco, Recife, Pernambuco, Brazil. Professor of Cardiology at the Faculty of Medical Sciences - FCM, University of Pernambuco, Recife, Pernambuco, Brazil. Ambulatory of Chagas Disease and Heart Failure - Cardiological Emergency Department of Pernambuco - PROCAPE. <https://orcid.org/0000-0002-0178-5589>

⁷ Nurse of the Ambulatory of Chagas Disease and Heart Failure - Cardiological Emergency Department of Pernambuco - PROCAPE, University of Pernambuco, Recife, Pernambuco, Brazil. Professor at the Faculty of Nursing Nossa Senhora das Graças- FENSG- University of Pernambuco, Recife, Pernambuco, Brazil. Master and PhD student of the Graduate Program in Health Sciences, University of Pernambuco, Recife, Pernambuco, Brazil. Ambulatory of Chagas Disease and Heart Failure - Cardiological Emergency Department of Pernambuco - PROCAPE. <https://orcid.org/0000-0002-8681-3285>

ABSTRACT

Objective: This study aims to describe the therapeutic strategies used in nursing appointments given to patients with heart failure of Chagas etiology. **Method:** This is a descriptive study, with a qualitative perspective, designed from descriptive and observational methods on therapeutic strategies used in the nursing appointments of patients with Heart Failure of Chagas etiology in a reference clinic in the State of Pernambuco, Brazil. **Results:** Through anamnesis and physical examination, intervention strategies related to the correct use of medications, diet, physical activity and vaccination are used. There are given orientations about the disease and healthy habits in order to strengthen self-care and improve therapeutic adherence. **Conclusion:** It is known that the treatment of these patients must be similar to the ones of Heart Failure of other etiologies, but the Chagasic etiology requires detailed data collection, so that care is more individualized and comprehensive, considering the complexity and neglected context of this disease.

Descriptors: Cardiovascular Nursing; Heart Failure; Chagas Disease.

RESUMO

Objetivo: O objetivo desse trabalho é descrever as estratégias terapêuticas utilizadas na consulta de enfermagem a pacientes com Insuficiência Cardíaca de etiologia Chagásica. **Método:** Trata-se de um estudo descritivo, com olhar qualitativo, desenhado a partir de métodos descritivos e observacionais sobre estratégias terapêuticas utilizadas na consulta de enfermagem a pacientes com Insuficiência Cardíaca de etiologia chagásica em um ambulatório referência do Estado de Pernambuco, Brasil. **Resultados:** através da anamnese e do exame físico, são utilizadas estratégias de intervenções relacionadas ao uso correto das medicações, dieta alimentar, atividade física e vacinação. Realizam-se orientações sobre a doença e hábitos saudáveis, a fim de fortalecer o autocuidado e melhorar a adesão terapêutica. **Conclusão:** sabe-se que o tratamento a esses pacientes deve ser similar ao de IC de outras etiologias, porém a etiologia chagásica exige uma coleta de dados minuciosa, para que o cuidado seja mais individualizado e integral, considerando o contexto complexo e negligenciado desta doença.

Descritores: Enfermagem Cardiovascular; Insuficiência Cardíaca; Doença de Chagas.

RESUMEN

Objetivo: El objetivo de este trabajo es describir las estrategias terapéuticas utilizadas en las consultas de enfermería de pacientes con insuficiencia cardíaca de etiología chagásica. **Método:** Se trata de un estudio descriptivo, con perspectiva cualitativa, diseñado a partir de métodos descriptivos y observacionales sobre las estrategias terapéuticas utilizadas en las consultas de enfermería de pacientes con Insuficiencia Cardíaca de etiología chagásica en un servicio ambulatorio de referencia en el Estado de Pernambuco, Brasil. **Resultados:** A través de la anamnesis y la exploración física se implementan estrategias de intervención relacionadas con el correcto uso de medicamentos, dieta, actividad física y vacunación. Se dan orientaciones sobre la enfermedad y los hábitos saludables con el fin de fortalecer el autocuidado y mejorar la adherencia terapéutica. **Conclusión:** Se sabe que el tratamiento de estos pacientes debe ser similar al de la IC de otras etiologías, pero la etiología chagásica requiere que se realice una recolección de datos detallada, para que la atención sea más individual e integral, considerando el contexto complejo y lo desatendida que está dicha enfermedad.

Descritores: Enfermería Cardiovascular; Insuficiencia Cardíaca; Enfermedad de Chagas.

INTRODUCTION

Heart failure (HF) is a complex syndrome caused by a series of structural and functional changes that culminate in reduced cardiac output and/or high filling pressures at rest or during exertion.¹ Despite therapeutic advances, HF is considered a public health problem by presenting high rates of morbidity and mortality and, consequently, high hospital costs due to the high rate of readmissions (around 50% of patients are readmitted 90 days after hospital discharge).²

The ischemic etiology is the most prevalent in the aged with the chronic profile of the disease, but in Brazil, HF is generally related to inadequate management of arterial hypertension and diabetes, in addition to the persistence of some neglected diseases, such as Chagas disease (CD) and rheumatic heart disease.¹

Cardiac impairment is the most common manifestation of CD, with HF being the most common complication, presenting the first symptoms on average 20 years after infection.³ HF of chagasic etiology has a worse prognosis when compared to other causes and the treatment follows the recommendations of other etiologies, as these patients are generally not covered by large studies; therefore, they continue with no advances in diagnosis/treatment due to this lack of investment.^{3,4}

The BREATHE study, which aimed to describe the clinical characteristics, including treatment and prognosis of patients hospitalized with acute HF in Brazil, concluded that the decompensation of the disease is related to several factors, mainly poor adherence to drug therapy, pointing out that this is not exclusively the patient's fault, since just over 50% of the patients in this study received guidance on the correct intake of medications and only 43.5% received guidance on symptoms of decompensation and the importance of future appointments.²

Chagas disease is a neglected, complex disease that involves social, economic and psychological conditions, requiring comprehensive care, following a biopsychosocial approach.⁴ To improve the quality of care for patients with HF of Chagas' etiology, it is necessary to invest in evidence-based therapies, in addition to intensifying the orientations at the time of hospital discharge.² In this context, nurses play a fundamental role in care, focusing on therapeutic interventions, educational activities, minimizing complications, improving the quality of life and enabling them to be active participants in their own health care.⁵

As an example, we can mention the HELLEN II study, which aimed to evaluate the clinical effectiveness of a strategy led by nurses, focused on post-hospital discharge,

which significantly reduced morbidity from HF and promoted an increase in knowledge about the disease and self-care actions.⁶ Therefore, nurses generate a positive impact not only for the patient, but also for society by reducing the number of hospitalizations, reducing mortality and, consequently, the costs of health services.⁵

Given this context, this study aims to describe the therapeutic strategies used in nursing consultations with patients with Chagasic Heart Failure in a specialized reference outpatient clinic in the State of Pernambuco, Brazil.

METHOD

This is a descriptive study, with a qualitative approach, designed from descriptive and observational methods on therapeutic strategies, used in nursing consultations with patients with Chagasic Heart Failure in a specialized outpatient clinic, a reference in the State of Pernambuco, Brazil.

The outpatient clinic relies on the work of a multidisciplinary team made up of physicians, nurses, nursing technicians, occupational therapist and psychologist, focusing on comprehensive care and education for patients and their families.

Today, the service is responsible for the pharmacological and non-pharmacological treatment of patients with Chagas disease, HF of Chagasic and non-

Chagasic etiology, indication/monitoring of patients with pacemakers, implantable cardioverter defibrillators and resynchronizers.⁴

It is observed that the majority of patients in the outpatient clinic follow the following profile: most women, born in endemic areas in the interior of the State of Pernambuco, brown, with incomplete primary education and income of up to one minimum wage. The sociodemographic profile is similar to that described years ago by Carlos Chagas, except for the more advanced age of the patients.⁴

RESULTS

The patient's routine upon arriving at the outpatient clinic begins with the reception by the nursing team, performing the electrocardiogram before the consultations, moving on to a socialization space until the time of the medical consultation, where health education projects are developed by the multidisciplinary team. After the medical consultation, patients are referred to the nursing consultation.

The first approach taken by the nurse is more in-depth, starting with the collection of sociodemographic data through variables such as city of birth and origin, marital status, race, education level, income, number of residents in the same household, work situation and profession. In addition,

the recording of previous history of the disease, such as living in a mud house and/or rural area, if there was an animal breeding site, history of blood transfusions and CD in the family.

Then, the collection of personal and family history, such as the presence of comorbidities, previous surgery and use of invasive devices (pacemaker, implantable cardioverter-defibrillator, resynchronizer). Subsequently, a physical examination and anamnesis are performed, including signs and symptoms and patient complaints at the time of consultation, vital signs and anthropometric assessment.

Patients with suspected CD can be referred by other health services such as primary care, general outpatient clinics, a blood bank in the State of Pernambuco or even by spontaneous demand to perform serology for CD. At this time, general guidelines regarding the disease are carried out, all the data mentioned above are collected, the epidemiological form for CD is filled out, a blood sample is collected,

centrifuged and sent to the Central Laboratory of Pernambuco (LACEN-PE).

Upon completion of the care flow, the patient can access the result within 30 days after collection by returning to the outpatient clinic. Depending on the result and the stage of the disease, the patient continues to be followed up by the outpatient clinic or is counter-referenced to the service of origin.

Through data collection, intervention strategies related to the correct use of medications, diet, physical activity and vaccination are used. Based on the medical prescription, an illustrative worksheet (Figure 1) is created, standardized in the service, which, in a more playful way, aims to facilitate the understanding of patients and their families about all prescribed medications.

Considering the individuality of the patient, the best therapeutic plan is established, encouraging him to make lifestyle changes by focusing on lifestyle habits, such as: smoking cessation, alcoholism reduction and practice of physical exercises (when indicated and respecting the general condition of the patient). It is also important to reinforce the importance of a hyposodic diet and water restriction, when necessary.

Concomitantly, health promotion and education is carried out with guidance on the disease and healthy habits through educational booklets (Figure 2), seeking to sensitize the patient about his condition and sharing the responsibility of care with him and his family, in search of better therapeutic adherence.

Figure 2– Educational booklets for patients with Chagas disease, HF and pacemaker carriers prepared by the reference service for Chagas disease and Heart Failure



In addition, during the nursing consultation, the patient's vaccination card is checked, explaining the importance of adherence due to heart disease and, if necessary, they are referred to another service for influenza and pneumococcal vaccines, or any other that is indicated for their age group. Today, the vaccine against COVID-19 is also included.

Another strategy used as a non-pharmacological measure of treatment is to explain to the patient the importance of controlling weight and blood pressure at home. Patients who are financially able are advised to purchase scales and digital pressure gauges. These actions, added to the patient's knowledge about the signs of decompensation, aim to make him aware of his health status, encouraging self-care.

Moreover, patients and their families have the possibility of contacting the outpatient nurse through the IC Dial, which is an exclusive communication telephone line used as a strategy to reinforce guidance on treatment and manage any sign or symptom of decompensation in the best possible way.

DISCUSSION

The use of therapeutic strategies that aim to minimize the changes suffered with the illness process and socioeconomic problems in HF is highly relevant. Nurses play a fundamental role in this process by

implementing specific care, focusing on pharmacological and non-pharmacological treatment, using tools that encourage self-care, increase adherence to treatment and, consequently, improve quality of life and reduce the rate of hospitalizations.⁶

The scarcity of studies on the care of patients with heart failure of chagasic etiology is noted; however, the 2018 Brazilian Guideline on Chronic and Acute Heart Failure suggests, based on studies, that the treatment of HF in patients with CD be similar to that of patients with other etiologies.¹

Regarding medication adherence, the instrument used in the outpatient clinic corresponds to a strategy that uses communication to establish a bond, thus ensuring effectiveness in the treatment of the disease. It is a low-cost, didactic, easily accessible strategy to be used mainly in patients with low educational level and difficulty in understanding.

The use of these tools and practice fits what is called light technology, which has been widely discussed in the health area. The professional nurse builds relationships, builds knowledge through structured knowledge and uses instruments that facilitate and help in the daily actions of the individual. Therefore, the application of both care, with educational technology becoming a unique opportunity for

development in the search for greater results between professional and patient.⁷

A multidisciplinary HF clinic in Portugal uses a similar strategy when delivering a HF self-monitoring calendar, where the patient enters daily data on body weight, edema, HF zones (which correlates symptoms with severity) and furosemide dose. In this same clinic, the nurse is responsible for using several instruments to assess functional capacity, quality of life, level of anxiety or depression and cognitive capacity.⁸

The Brazilian Guideline for Heart Failure presents some evidence-based recommendations for treatments that improve the morbidity and quality of life of these patients, including annual vaccination for influenza and periodic vaccination for pneumococcus, which is also considered a non-pharmacological treatment of HF, as well as: multidisciplinary care programs, sodium restriction, smoking cessation, reduction in alcohol use and cardiovascular rehabilitation.¹

Evidence from a systematic review showed that educational interventions during follow-up consultations reduce not only readmissions, but also length of stay, proposing a restructuring of nursing care where the patient will continue to be a priority and responsibility of the health institution after discharge in order to avoid readmissions. This review also

reinforced the importance of the role of the nurse educator and the effect that educational interventions, carried out mostly by these professionals, have on adults with HF.⁹

Still considering the educational role of nurses, in addition to the importance of encouraging self-care, it is important to inform patients about weight fluctuations (greater than or equal to 2 kg per week), especially when added to progressive dyspnea, orthopnea and paroxysmal nocturnal dyspnea.⁶

Telemonitoring is also another important tool that can be used in favor of caring for this patient. The HELLEN-II study, previously mentioned, proved that its strategy is viable and beneficial for the Unified Health System (SUS). The intervention group of this study received 4 home visits 10, 30, 60 and 120 days after hospital discharge, combined with 4 phone calls to reinforce the guidelines given in the home visits. During visits, nurses guided patients, caregivers and family members about the disease, encouraged self-care and medication adherence.⁶

It is important to mention that there are studies that evaluate some tools that promote self-care in patients with heart failure, such as the Heart Well Cared for: a national, multicenter, randomized clinical trial that began in 2018 and is ongoing. Patients in the experimental group benefit

from a multifaceted strategy, with: telemonitoring, medication reminders, weight monitoring/decompensation symptoms, and educational content about the disease.¹⁰

CONCLUSIONS

It is evident that multidisciplinary care, and especially nursing care, is extremely important for patients with heart failure. There is a wide range of articles that report the strategies used by nurses in consultation with these patients, but when talking about HF of Chagas' etiology, these studies are scarce.

It is known that the treatment recommendation for these patients to be similar to that of HF of other etiologies, but the patient with a chagasic etiology requires a thorough data collection, so that care is increasingly individualized and integral, also considering the whole complex and neglected context of this disease.

Describing the nursing care provided to patients with HF of Chagas' etiology is also a way to give more visibility to the subject, disseminate strategies already recognized as beneficial and encourage further studies to prove others.

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RECEIVED: 12/01/21

APPROVED: 06/14/22

PUBLISHED: Oct/22