

Demand and Supply of Palliative Care in Patients with Heart Failure in a Reference Hospital

Demanda e Oferta de Paliatividade em Pacientes com Insuficiência Cardíaca em um Hospital de Referência
Demanda y Oferta de Cuidados Paliativos en Pacientes con Insuficiencia Cardíaca en un Hospital de Referencia

RESUMO

Objetivo: Avaliar a demanda e disponibilidade de necessidades paliativas no grupo de indivíduos portadores de insuficiência cardíaca, em um hospital de referência cardiológica no Pará. **Método:** Estudo transversal, observacional, retrospectivo, sendo avaliado prontuário de pacientes admitidos por insuficiência cardíaca no Hospital de Clínicas Gaspar Vianna, de janeiro a junho de 2023, baseando a necessidade de cuidados paliativos no instrumento SPIC-T-BR. **Resultados:** A maioria dos pacientes são do sexo masculino (68,5%), na faixa etária de 61 a 70 anos (28,8%), com Fração de Ejeção do Ventrículo Esquerdo menor que 40% (57,5%), apresentando insuficiência cardíaca ou doença coronariana extensa e intratável (13,7%). Dos pacientes analisados, 38,3% apresentaram positividade no instrumento SPICT-BT, sendo que destes, 92,8% receberam medidas clínicas para controle de sintomas e 89,2% receberam suporte psicossocial. **Conclusão:** Ressalta-se a necessidade de uma equipe multiprofissional e educação continuada para melhor condução desses pacientes.

DESCRITORES: Insuficiência cardíaca. Cuidados paliativos. Cardiologia.

ABSTRACT

Objective: To assess the demand and availability of palliative care needs in a group of individuals with heart failure at a cardiology referral hospital in Pará. **Method:** Cross-sectional, observational, retrospective study, evaluating the medical records of patients admitted due to heart failure at the Hospital de Clínicas Gaspar Vianna, from January to June 2023, basing the need for palliative care on the SPICT-BR instrument. **Results:** Most patients were male (68.5%), aged 61 to 70 years (28.8%), with Left Ventricular Ejection Fraction less than 40% (57.5%), presenting heart failure or extensive and untreatable coronary disease (13.7%). Of the patients analyzed, 38.3% tested positive on the SPICT-BT instrument, of which 92.8% received clinical measures to control symptoms and 89.2% received psychosocial support. **Conclusion:** The need for a multidisciplinary team and continuing education to better manage these patients is highlighted.

DESCRIPTORS: Heart failure. Palliative care. Cardiology.

RESUMEN

Objetivo: Evaluar la demanda y disponibilidad de necesidades paliativas en un grupo de personas con insuficiencia cardíaca, en un hospital de referencia en cardiología de Pará. **Método:** Estudio transversal, observacional, retrospectivo, que evaluó las historias clínicas de pacientes ingresados por insuficiencia cardíaca en el Hospital de Clínicas Gaspar Vianna, de enero a junio de 2023, con base en la necesidad de cuidados paliativos en el instrumento SPICT-BR. **Resultados:** La mayoría de los pacientes son del sexo masculino (68,5%), con edades entre 61 y 70 años (28,8%), con una Fracción de Eyección del Ventrículo Izquierdo menor del 40% (57,5%), que presentan insuficiencia cardíaca o enfermedad coronaria extensa e intratable (13,7%). De los pacientes analizados, el 38,3% resultó positivo en el instrumento SPICT-BT, de los cuales el 92,8% recibió medidas clínicas para el control de síntomas y el 89,2% recibió apoyo psicossocial. **Conclusión:** Se destaca la necesidad de un equipo multidisciplinario y educación continua para un mejor manejo de estos pacientes.

DESCRIPTORES: Insuficiencia cardíaca. Cuidados paliativos. Cardiología.

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**Felipe Reschke De Araújo**

Physician graduated from the University Center of the State of Pará (CESUPA). Specialist in Internal Medicine from the Gaspar Vianna Clinical Hospital.
ORCID: <https://orcid.org/0000-0002-7657-8074>

**Gislanne Dos Santos Aguiar**

Physician graduated from the Federal University of Amapá (UNIFAP). Specialist in Internal Medicine from the Gaspar Vianna Clinical Hospital. Cardiology resident at the Gaspar Vianna Clinical Hospital.
ORCID: <https://orcid.org/0000-0002-2625-1938>

**Carla Helena Xavier Wanderley Rocha**

Physician graduated from the State University of Pará (UEPA). Specialist in Internal Medicine from the Ophir Loyola Hospital. Postgraduate in Palliative Care from the Brazilian Union of Colleges.
ORCID: <https://orcid.org/0009-0007-5716-1023>

**Antônio Maria Zacarias Araújo Monteiro**

Physician graduated from the University Center of Pará (CESUPA). Specialist in Internal Medicine from the João Barros Barreto University Hospital. Specialist in Cardiology from the Gaspar Vianna Clinical Hospital. Postgraduate in Heart Failure from the Brazilian Society of Cardiology.
ORCID: <https://orcid.org/0009-0007-8102-3464>

INTRODUCTION

Heart failure (HF) is considered the final stage of several cardiac and non-cardiac diseases that cause anatomical and/or functional changes in the heart, either due to increased intracardiac pressure or reduced cardiac output. These changes generate symptoms such as dyspnea, lower limb edema and fatigue, in addition to clinical signs such as increased central venous pressure and pulmonary crepitus.¹

The prevalence of HF is directly proportional to age, with European data indicating that less than 1% of adults under 55 years of age are affected, rising to more than 10% of elderly people over 70 years old.¹

Several cardiac and non-cardiac diseases are considered causes of heart failure, the most prevalent being: systemic arterial hypertension; valvular diseases; arrhythmias; congenital heart diseases; endocarditis; drug-induced heart disease and infiltrative diseases.¹

Heart failure can be classified in several ways, and is often classified by echocardiographic assessment of left ventricular ejection fraction (LVEF), which is considered preserved when LVEF is greater than or equal to 50% (with evidence of structural and/or functional abnormality), intermediate when it is between 41 and 49%, and reduced if values are less than or equal to 40%. Another important classification method is related to the symptomatic severity of the disease, which is the New York Heart Association (NYHA) functional clinical classification, as shown in Table 1.¹

TABLE 1 - New York Heart Association (NYHA) functional classification

Class I	No limitation of physical activity. Ordinary physical activity does not cause undue dyspnea, fatigue or palpitations
Class II	Mild limitation of physical activity. Comfortable at rest, but ordinary physical activity results in undue dyspnea, fatigue, or palpitations
Class III	Severe limitation of physical activity. Comfortable at rest, but has undue dyspnea, fatigue, or palpitations before ordinary activities
Class IV	Unable to perform any physical activity without discomfort. Symptoms may be present even at rest and increase with any activity

Source: European Society of Cardiology (2021).

The World Health Organization (WHO) defined the term palliative care in 1990, revising it in 2002 and 2017, establishing it as:

Palliative care is an approach that improves the quality of life of patients (adults and children) and their families who are facing problems associated with life-threatening illness. It prevents and relieves suffering through the early identification, correct assessment and treatment of pain and other problems, whether physical, psychosocial or spiritual.²

A concept initially created in the 1980s for the care of patients with advanced cancer, there is currently great progress on the subject of palliative care, adapting practices based on principles such as: early recognition of the possibility of palliative treatment in conjunction with curative treatment; reaffirming life and its importance; understanding death as a natural process; alleviating symptoms that generate discomfort; assessing psychosocial and spiritual aspects; offering support to improve quality of life; and including family members and other

companions as part of the process, offering them support and assistance.^{3,4}

Several instruments have already been created and validated to assist health professionals in the indication and follow-up of palliative care. Among the instruments for indication, the Supportive and Palliative Care Indicators Tool (SPIC-T-BR) stands out, which had its first conceptual publication in 2010 at the University of Edinburgh, Scotland, with a version currently in use from 2022, being used in more than 30 countries. SPIC-T-BR has been translated into Portuguese, validated in the Brazilian population, and in the hospital environment.^{5,6}

The SPIC-T-BR is a tool used to identify people with deteriorating health due to one or multiple health conditions, and/or who are frail/old. It consists of six general indicators of worsening health, in addition to specific indicators of the main progressive diseases (cancer, cardiovascular disease, kidney disease, dementia/frailty, respiratory disease, liver disease and neurological disease), and has a theme of recommendations for actions, aiming at a holistic approach to the patient and family members, making it a complete instrument.^{7,8}

Quadro 2 - Instrumento <i>Supportive and Palliative Care Indicators Tool</i> (SPICT-BR™)		
Supportive and Palliative Care Indicators Tool (SPICT-BR™)		
<p>Look for general indicators of worsening health</p> <ul style="list-style-type: none"> Unplanned hospital admissions. Poor or declining functional capacity with limited reversibility (person spends more than 50% of the day in bed or chair). Dependent on others for personal care due to physical and/or mental health problems. Increased caregiver support is needed. Significant weight loss in the past 3-6 months and/or a low body mass index. Persistent symptoms despite optimal treatment of underlying conditions. The person or their family requests palliative care, interruption or limitation of treatment, or a focus on quality of life.. 		
<p>Look for any clinical indicators of one or more of the advanced conditions</p>		
<p>Cancer Declining functional capacity due to progression of cancer. Physical condition too weak for cancer treatment or treatment to control symptoms.</p>	<p>Cardiovascular disease NYHA functional class III/IV - heart failure or extensive, intractable coronary artery disease with: <ul style="list-style-type: none"> shortness of breath or chest pain at rest or with minimal exertion. Severe, inoperable peripheral vascular disease.</p>	<p>Kidney Disease Stages 4 and 5 chronic kidney disease (GFR < 30 ml/min) with clinical worsening. Renal failure Compelling other limiting conditions or treatments. Decision to discontinue dialysis due to clinical worsening or intolerance to treatment.</p>
<p>Dementia/frailty Unable to dress, walk or eat without assistance. Reduced food and fluid intake and difficulty swallowing. Urinary and fecal incontinence. Unable to maintain verbal contact; little social interaction. Fractured femur, multiple falls. Frequent episodes of fever or infections; aspiration pneumonia.</p>	<p>Respiratory disease Severe chronic respiratory disease with: <ul style="list-style-type: none"> Shortness of breath at rest or with minimal exertion between exacerbations. Need for long-term oxygen therapy. Has ever required ventilation for respiratory failure or ventilation is contraindicated</p>	<p>Liver Disease Advanced cirrhosis with one or more complications in the last year: <ul style="list-style-type: none"> Diuretic-resistant ascites Hepatic encephalopathy Hepatorenal syndrome Recurrent bleeding from esophageal varices bacterial peritonitis. Liver transplantation is contraindicated.</p>
<p>Neurological disease Progressive deterioration of physical capacity and/or cognitive function even with optimized therapy. Speech problems with progressive difficulty in communication and/or swallowing. Recurrent aspiration pneumonia; shortness of breath or respiratory failure.</p>	<p>Others Deterioration and at risk of death from any other condition or complication that is not reversible.</p>	
Review current care and plan for future care		
<p>Reassess current treatment and medication so that the patient receives optimal care. Consider referral for specialist evaluation if symptoms or needs are complex and difficult to manage. Agree on goals of current and future care and plan care with the person and their family. Plan in advance if the person is at risk of cognitive loss. Document, communicate and coordinate the overall care plan.</p>		

Source: SPICT-BR.

It is important to emphasize that the individual is considered a candidate for palliative care according to the positive SPICT-BR concept, when he/she has two or more general indicators of worsening health or one or more clinical indicators of an advanced health condition.⁵

Thus, it is clear that heart failure is a serious, highly prevalent, potentially fatal and incurable disease, and should be diagnosed early and assessed, togeth-

er with the appropriate instruments, for the presence of advanced stage disease, in order to optimize palliative care provision. Thus, this study aims to evaluate the demand and supply of palliative care in patients with heart failure in a referral hospital in the state of Pará.

METHOD

This is an observational, cross-sectional, retrospective epidemiological study, based on the medical records

made available by the Medical and Statistical Archive Service (SAME - *Serviço de Arquivo Médico e Estatístico*) and the electronic medical record system (MV PEP) of patients admitted to the Fundação Hospital de Clínicas Gaspar Vianna (FHCGV) in the first half of 2023.

The inclusion criteria were: patients admitted to FHCGV with a diagnosis of Heart Failure, ICD-10: I50, I50.0 and I50.9, aged 18 to 80 years, treated at FHCGV between January 2023 and

June 2023. The exclusion criteria were: medical records with insufficient clinical information (absence of at least one of the study variables). Of the 89 medical records available in the selected study period, only 73 met the proposed criteria.

All data were allocated using spreadsheets from the Google Sheets® electronic program, containing the following variables: age; sex; length of hospital stay; left ventricular ejection fraction; comorbidities; clinical indicators of advanced heart or kidney disease; use of optimized treatment for heart failure; use of medications to control symptoms; general indicators of worsening health; and use of palliative measures. Data for completing the SPICT-BR will also be collected with a focus on advanced heart disease.

In the application of Descriptive Statistics, tables and graphs were constructed to present the results. Analytical statistics were used by calculating the G and Chi-Square Adherence tests.

Descriptive and analytical statistics were performed using BioEstat 5.4 software. For decision-making, the significance level adopted was $\alpha = 0.05$ or 5%, with significant values being marked with an asterisk (*).

RESULTS

The sample consisted of 73 patients, the majority of whom were male (68.5%) and statistically significant (* $p = 0.0016$) in relation to females (31.5%).

Ages ranged from under 40 years (17.8%) to over 70 years (19.2%), with no statistically significant difference between age groups ($p = 0.3466$).

The most frequent left ventricular ejection fraction was reduced (57.5%), which presented a statistically significant proportion (57.5%) in the sample, as shown in Table 1.

Table 1 - Profile of patients participating in the sample, FHCGV, 2024

Variables		N	%	p-value
Sex	Male*	50	68.5%	0.0016*
	Female	23	31.5%	
Age group (years)	≤ 40	13	17.8%	0.3466
	41 - 50	10	13.7%	
	51 - 60	15	20.5%	
	61 - 70	21	28.8%	
	≥ 71	14	19.2%	
Left ventricular ejection fraction	Reduzida*	42	57.5%	< 0.0001*
	Intermediária	10	13.7%	
	Preservada	21	28.8%	

*Chi-Square Adherence Test.

Source: Prepared by the authors.

In the evaluation of indicators of renal, cardiac and other insufficiency in advanced conditions, the most prevalent was heart failure or extensive and untreatable coronary disease (13.7%),

followed by deterioration and risk of death due to irreversible condition/complication (11.0%). There was no statistically significant proportion ($p > 0.005$) among the indicators evaluated, as shown in Table 2.

Table 2 - Profile of patients participating in the sample, according to indicators of renal failure, FHCGV, 2024

Variables	N	%
Indicators of renal, cardiac and other failure in advanced conditions		
Extensive and untreatable heart failure or coronary artery disease	10	13.7%
Deterioration and risk of death due to irreversible condition/complication	8	11.0%
Stage 4 and 5 chronic renal failure with clinical worsening	5	6.8%
Severe and inoperable peripheral vascular disease	1	1.4%

*G Adherence Test

Source: Prepared by the authors.

Regarding the individuals in the sample, Table 3 shows those who have a positive SPICT-BR concept, that is,

one or more clinical indicators of an advanced health condition (heart failure, clinical indicator and extra), or two or more general indicators of worsening health.

Table 3 - Sample participants who meet positive SPICT-Br criteria, FHCGV, 2024

Variables		N	%
Sample	Negative	45	61,6%
	Positive	28	38,3%

Source: Prepared by the authors.

Sample participants who meet positive SPICT-Br criteria, FHCGV, 2024

Table 4 - Profile of patients participating in positive SPICT-Br and palliative measures, FHCGV, 2024

Variables		N	%
Palliative measures used	Clinical measures for symptomatic control	25	92,8%
	Psychosocial support	26	89,2%
	Family conference	1	3,57%
	Others	1	3,57%

Source: Prepared by the authors.

DISCUSSIONS

After collecting and analyzing the data collected in the research, and comparing them with the literature, some similar and conflicting situations were identified. Initially, regarding the gender variable, our study showed that, of a total of 73 patients, there was a predominance of 68.5% (50 patients) of males, a figure similar to that found in the HF-PATHWAYS study⁹, which assessed the presence of 53% of men.

Unlike what was reported in the article by Soares et al.¹⁰, in which it is shown that, in relation to hospitalizations due to heart failure, between 2019 and 2023, in Brazil, there was an increase as age advanced. In our study, it was seen that the age group with the highest hospitalization rate was between 61 and 70 years old (28.8%), followed by the sixth decade (20.5%) and, in third place, the eighth decade (19.2%).

When evaluating the left ventricular ejection fraction of patients hospitalized with heart failure, results similar to those of the HF-PATHWAYS study were identified 9, in which 57.5% of patients have reduced EF (less than 40%), followed by preserved EF (28.8%) and, less frequently, intermediate EF (13.7%).

Regarding clinical indicators of advanced disease, it was identified that almost one third of the individuals (32.9%) presented indicators of worsening health, and 10% presented only advanced cardiac condition due to the presence of symptoms of the disease with minimal effort or at rest, and one patient presented severe and inoperable peripheral vascular disease. In addition, two patients presented both conditions (cardiological and renal). Six patients presented exclusively signs of clinical deterioration or another irreversible condition. This number may be underestimated due to the lack of informa-

tion described in the medical records. These data reflect the national scenario, in which cardiac patients have multiple comorbidities and, sometimes, there is advanced clinical disease, cardiovascular or renal, requiring palliative measures, measures that are not usually accessible to the vast majority of individuals.

The hospital admission process awakens many feelings, such as fear, anxiety and worry. These feelings are focused on the disease and/or diagnosis, the results of tests or even the desire to be discharged from hospital.¹¹ In the present study, 91.8% of individuals received psychosocial care, either through an approach with a psychology team or social services, which involved: offering support; offering qualified listening; assisting in the process of coping with illness; understanding the demands of the patient and family; assessing the perception of the current illness; understanding previous experiences and aligning expectations; exploring the support network; in addition to assisting the team in understanding and planning appropriate therapeutic measures.

Therefore, it is imperative to have a psychosocial approach to strengthen the strategy of humanized and comprehensive care. In this study, almost all patients received this approach adequately, with only 8.2% of individuals not receiving psychosocial care. However, it is believed that this data is overestimated due to the lack of adequate recording of information in medical records.

The lack of action covering palliative care is due to several reasons, for example: pejorative and prejudiced connotation with the expression "palliative care", associating it with end-of-life care. There is also poor teaching on this topic in undergraduate courses, the inexperience of health professionals in identifying patients who require this management, advising the need for this approach only when the patient becomes refractory to all measures. Thus, among the 73 individuals in the study, only 1 explicitly received palliative care,

that is, it was formally elected and described in the medical record, communicating it to the team, the family and the patient through a family conference. Despite this, another 27 patients would have indications for these measures because they were included in the positive SPICT-BR concept, but the service was not offered to them.

CONCLUSION

Based on the results, it is possible to identify that the incidence of heart failure is more prevalent from the fifth decade of life onwards, with the intensity of the clinical presentation depending on the etiology, duration of the disease and associated comorbidities.

There is a need for palliative care beyond the scope of oncology, where it was initially created. In various areas of medicine, patients with palliative care

demands are found, however, some factors make it difficult to offer such therapy, such as: lack of education of professionals and pejorative connotation by the general population. As a result, patients are subjected to invasive exams and procedures, increasing the suffering of the patient and family members.

In order to better identify patients suitable for this type of care, provide technical support and assist in the early identification of this target audience, it is necessary to use validated instruments, for example: SPICT-BR.

Palliative care is a treatment approach that depends on a multidisciplinary team, which must be composed of at least one physician, one psychologist, and one social worker. These professionals' activities are based on aligning the therapeutic strategy with the patient and family members, clarifying doubts about the disease, helping to resolve psy-

chological and religious obstacles, and maintaining precise communication with other health professionals who will accompany the patient in outpatient and hospital care.

This study revealed that, although medication and non-medication treatments were prescribed for palliative care purposes, in most cases there was no description of family consultation or identification of the stage of care in which the patient was found, leading to fragility in care and the possibility of futile measures being taken for a given patient, prolonging suffering.

From a management point of view, it is essential to optimize investments in this area, both in stimulating a minimum palliative care team in each hospital institution, in addition to the continuing education of these professionals, which must begin early, starting with training courses.

REFERENCES

1. European Heart Journal, Volume 42, Edição 36, 21 de setembro de 2021, Páginas 3599–3726.
2. Krakauer EL, Daubman BR, Aloudat T. Integrating palliative care and symptom relief into responses to humanitarian crises. *Med J Aust.* 2019 Sep;211(5):201–203.
3. D'Alessandro MPS, Messias AAM, Maiello APMV, Coelho FP. Manual de Cuidados Paliativos. São Paulo: Hospital Sírio-libanês; Ministério da Saúde; 2020.
4. Worldwide Hospice Palliative Care Alliance (WHPCA). Global Atlas of Palliative Care (2nd edition), Londres: WHPCA, 2020.
5. Mira MACSRC. Tradução e validação da escala SPICT™ (Supportive & Palliative Care Indicators Tool) para a população portuguesa. Dissertação (Mestrado em Cuidados Paliativos) – Universidade de Lisboa, Lisboa, 2020.
6. van Lummel EV, Ietswaard L, Zuithoff NP, Tjan DH, van Delden JJ. The utility of the surprise question: A useful tool for identifying patients nearing the last phase of life? A systematic review and meta-analysis. *Palliative Medicine.* 2022;36(7):1023–1046.
7. Paraizo-Horvath CMS, Fernandes DS, Russo TMS, Souza AC, Silveira RCCP, Galvão CR, Mendes KDS. Identificação de pessoas para cuidados paliativos na atenção primária: revisão integrativa. *Ciência & Saúde Coletiva.* 2022; 27(9): 3547–3557.
8. Remawi BN, Gadoud A, Murphy IMJ, Preston N. Palliative care needs-assessment and measurement tools used in patients with heart failure: a systematic mixed-studies review with narrative synthesis. *Heart Failure Rev.* 2021;26(1):137–155.
9. Sicras-Mainar A, Sicras-Navarro A, Palacios B, Varela L, Delgado JF. Epidemiology and treatment of heart failure in Spain: the HF-PATHWAYS study. *Rev Esp Cardiol (Engl Ed).* 2022;75(1):31–38.
10. Soares FL, Junqueira MB, Silva DG, Sampaio KRF, Braz JPMR, Araújo GRPT, Pereira LC, Silveira ABLC. et al. Perfil epidemiológico das internações por Insuficiência Cardíaca no Brasil entre 2019 e 2023. *Brazilian Journal of Implantology and Health Sciences.* 2024;6(4), 887–896.
11. Bezerra DS, Siqueira AC. Processo de adoecimento e hospitalização em pacientes de um hospital público. *Revista de Psicologia.* 2021;12(1):61–71.