

## LEVEL OF SELF-CARE OF PATIENTS FROM THE CLINIC SPECIALIZED IN HEART FAILURE AT THE NAVAL HOSPITAL OF SPECIALTIES OF VERACRUZ

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**Abstract:** Heart failure is one of the main causes of hospitalization in the world and this represents a public health problem of great magnitude and economic implications that are generated by providing health services, where the level of self-care of each patient is of the utmost importance. importance since this provides autonomy, independence and individual responsibility for healthy behaviors. The present article has the purpose of publicizing the level of self-care of patients with heart failure and shows the results obtained from the application of the instrument Self-care behavior scale for people with heart failure in the Mexican population, to the patients who come to the clinic specialized in heart failure of the Naval Hospital of Specialties of Veracruz. The results obtained reflect the high level of self-care with 60%, presented by the adults who receive care (21) and 40% reflect a medium level of self-care (14 participants) who are closely monitored by the multidisciplinary team that provides them with care. medical treatment, outpatient treatment, teaching in lifestyle changes, as well as adherence to pharmacological and non-pharmacological treatment, which significantly impacts the quality of life.

**Keywords:** Self-care level; specialized clinic; Heart failure; Naval Hospital.

## INTRODUCTION

Heart failure (HF) is one of the main causes of hospitalization in the world (Comín-Colet, et al., 2016). It is not a single pathological diagnosis, it is a clinical syndrome characterized by typical symptoms that may be accompanied by signs such as elevated jugular pressure, pulmonary crackles, and peripheral edema caused by a structural or functional cardiac abnormality that cause elevated intracardiac pressures or inadequate cardiac output at rest or during exercise

(Clinical Practice Guidelines, 2021, p. 11).

Heart failure is a public health problem of increasing magnitude and with economic implications, it accounts for 3.7% of hospitalizations of patients older than 45 years of age, and 71% after 65 years of age, which makes it the most expensive cardiovascular pathology, has high morbidity and mortality, higher than various types of cancer (Rascón Sabido, Santos R., Baca Escobar, & Cabrera McGregor, 2018). In Latin America it is the main cause of mortality, with Brazil being one of the main countries with the highest deaths, increasing by 250% by the year 2040; while in the United States of America, 650 thousand new cases were registered, of which 274,601 died during the year 2010, (Pereira Rodríguez, Velásquez Badillo, Arrieta Mercado, De Marcos Sánchez, & Peñaranda Florez, 2021, p. 13).

In Mexico there are 750,000 patients with heart failure and the problem is increasing, it is estimated that 75,000 additional patients will have heart failure each year of which only 25% of men and 38% of women will still be alive after 5 years having been diagnosed with this pathology (Sánchez-Marteles, Rubio Gracia, & Giménez López, 2015)

This research focuses on measuring the level of self-care of patients who are treated at the Specialized Clinic for Heart Failure in a Third Level Hospital in the State of Veracruz. Investigating self-care in patients suffering from this disease has become essential to improve their quality of life, reduce the incidence of hospital admissions due to cardiac congestion, as well as decrease mortality. Self-care is the complex human capacity that allows adults to discern about the factors that they must control or exclude to make it possible to regulate the intentional action of self-care, it develops in the person during daily life, through a process spontaneous learning, which is complemented by intellectual curiosity,

experience, instruction and supervision of others within their environment (Arredondo Holguín, 2010).

The concept of self-care has evolved over the years, it can be associated with autonomy, independence and individual responsibility for healthy behaviors, as well as for the development of activities necessary to manage and control health conditions (Da Conceição, Dos Santos, Dos Santos , Lopes, & Da Cruz, 2015, page 579).

Recent studies show that self-care in samples of patients with heart failure is inadequate and that people who participated in self-congestion educational programs showed better self-care behavior, sociodemographic and clinical characteristics typical of heart failure are described in the literature as variables that influence the self-care of patients with HF, cultural aspects and level of education are also mentioned as factors that can influence self-care behavior in different countries (Da Conceição et al., 2015, p. 580). Self-care is the complex human capacity that allows adults to discern about the factors that they must control or exclude to make it possible to regulate the intentional action of self-care, it develops in the person during daily life, through a process spontaneous learning, which is complemented by intellectual curiosity, experience, instruction and supervision of others within their environment (Arredondo Holguín, 2010, p. 23).

There is evidence that educational interventions on patients improve knowledge of HF, the adoption of self-care, and clinical results six months after the intervention. In fact, HF clinical practice guidelines recommend that the professional staff of Health provides essential information to patients about the characteristics of heart failure and the self-care necessary to improve the quality of life. However, it is known that in usual clinical practice there is a substantial difference

between the fact of receiving information on self-care and the fact of absorbing knowledge, retaining the information and applying it in the daily practice of patients (Rodríguez Artalejo , and others, 2008, page 270).

Teaching for self-care must be provided continuously, in addition to monitoring compliance with the recommendations on changes in lifestyle, that is, non-pharmacological treatment (Pereira Rodríguez et al., 2021). That is why, at the Specialized Heart Failure Clinic, it provides teaching and continuous follow-up to the patients who come to said clinic. Various methods are used to improve self-care behaviors in patients (Rodríguez Esquivel, 2022).

The impact that patients can have with self-care is so important since it greatly influences the pathology, the health education that the guidelines most recommend is that all patients with heart failure comply with a comprehensive educational program and have a care unit of reference heart failure (López Moyano, et al., 2015). However, today the main tools for educating patients with heart failure are found in the hospital setting and this is inconvenient since not all patients with heart failure are referred to the hospital or heart failure units, This is an area of opportunity to be able to extend this training in heart failure in primary care, since this is the first contact with patients (Hernández Carballo & Hernández Hernández, 2019, p. 17).

Therapeutic adherence implies a diversity of behaviors, being considered as a multiple and complex phenomenon and referring to the degree to which the patient's behavior coincides with the recommendations agreed between the health professional and the patient (Ortega Cerda et al., 2018). Recent studies show a significant deficit in the knowledge and understanding of heart failure. Self-efficacy, as well as other psychological factors such as attitude, could also be predictive of

self-care. In Spain, studies on self-care have been carried out mainly in individuals with heart failure treated in specialized hospital units, with a higher proportion of men and younger than in primary care, the increase in the prevalence of heart failure due to the aging of the population makes it necessary to establish strategies to promote self-care from primary care, this being the first level of health care and the most accessible (Salvadó-Hernández, et al., 2017, page 3).

The benefits of adequate self-care of patients with acute coronary events show a decrease in mortality, and this is related to the creation of coronary care units, interventional management, transfer systems and the awareness of people about the need for self-care and early treatment, as well as the therapeutic benefit of some medications that reduce mortality in these cases (Naranjo Hernández et al., 2017). There is a significant gap between the efficacy of these treatments in prolonged research contexts and the effectiveness achieved in daily practice, the most common causes of distancing are: insufficient adherence, clinical inertia, barriers to access to care, fragmented care system, focus on the disease and lack of coordination of health care (Bastidas Sánchez, Olivella Fernández, & Bonilla Ibáñez, 2015).

It is important to mention that in order to obtain the advantages of self-care, patients must adhere to the established treatment, a continuous, dynamic, participatory process is necessary, and in the midst of this process, promote and analyze the social and emotional support available to patients with medical conditions. cardiac. In the management of heart failure, self-care is an important and useful aspect for the improvement of symptoms, quality of life, reduction of hospitalization rates, cost, and mortality. Due to the above, it is essential to educate the patient about the non-pharmacological

treatment that must be followed (Tarapués, Albán, Arévalo, & Paredes, 2018, p. 69).

## METHODOLOGY

This research is cross-sectional, the theoretical-methodological strategy is quantitative, focusing on the observation, measurement and analysis of the object of study. Its scope is descriptive-exploratory because the variable level of self-care of patients with heart failure treated at the heart failure clinic is unknown, since it is the only clinic nationwide that provides specialized care to this specific group of patients. which is little studied throughout the country.

It is a primary investigation, since the data was collected, for the exclusive purposes of this investigation. Regarding its temporality of administration and information collection, it is of a transversal or synchronous type, since it focuses on the analysis of the state of the variables under study at present and in terms of the design of the test it is of the Non-Experimental type. since the study variables will not be manipulated.

The study universe consisted of 172 patients with heart failure who are cared for in the specialized heart failure clinic, from which a non-probabilistic convenience sample of 35 patients was taken, who agreed to participate in the research and answer the instrument. of measurement applied through the descriptive survey technique in person and digitally through a link via WhatsApp to be answered at home, the link was available for a week after which access to the participants was closed.

The self-care behavior scale for people with heart failure in the Mexican population, prepared by Salcedo-Álvarez, Nava-Portillo, & Vega-Hernández (2018), was used. This scale has 18 items, evaluates two dimensions which are monitoring-maintenance practices with a Cronbach's alpha of 0.434, and monitoring-management practices with a Cronbach's

alpha of 0.767, and the reliability level of the entire instrument is with a Cronbach's alpha of 0.738, making it a suitable instrument for research.

## RESULTS

Graph No. 1 shows the results of the level of self-care presented by the participants according to dimension No.1 Monitoring Practices - Maintenance. 6% (2 participants) showed a low level, 37% (13 participants) showed a medium level of self-care. In a greater proportion, 57% (20 participants) found themselves with a high level of self-care in this dimension, this result was obtained from table No. 1 with the information obtained from the application of the instrument.

The results of dimension No.2 are shown in graph No. 2, the level of self-care presented by the participants according to the dimension of monitoring practices - management. 6% (2 participants) showed a low level, in a higher proportion, 54% (19 participants), showed a medium level of self-care. 40% (14 participants) found themselves with a high level of self-care, information that originated from the database of the results obtained that can be seen in table No.2.

The global result of the instrument applied to know the level of self-care of the patients who are treated in the clinic specialized in heart failure, it is observed that the participants showed a high level of self-care, being 60% (21 participants). Regarding the average level of self-care, 40% (14 participants) are valued at this level. In both dimensions, 2 participants (6%) were found to show a low level of self-care; however, the total weighting of the instrument generally showed that none of the participants presented a low level of self-care. Graph No. 3 shows what was previously described.

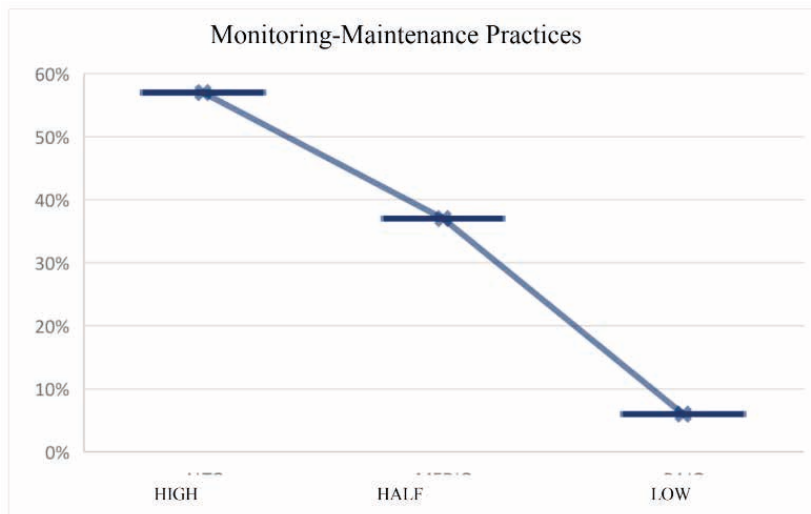
## DISCUSSION

The results obtained with the application of the Scale of Self-Care Behaviors in Heart Failure to patients treated at the Specialized Clinic in Heart Failure of the Naval Hospital of Specialties of Veracruz, in contrast to the results found by Pobrotyn et al., in 2021 where the level of self-care reached almost a midpoint with 49.55% (DE=22.07), compared to the present investigation where it is shown that the level of self-care of the patients of the Hospital de Veracruz was a high level in 60%, represented with 21 participants.

In 2019 Prochota, Szwamel, & Uchmanowicz observed a high or satisfactory level of self-care for the following self-care aspects: taking medication as prescribed, contacting the doctor or nurse when experiencing difficulty breathing or swelling of the feet/legs and daily weighing, in contrast to the present investigation, similar results were found, regarding the measurement and recording of weight in the morning before eating food, taking the medications as prescribed, they do it between 5 to 7 days a week. On the other hand, in implementing some action when you feel dyspnea or edema in feet, ankles or legs; and seek review by a health professional, the participants do so always or most of the time.

These same authors found the lowest levels of self-care, adherence to a low-sodium diet, regular exercise, and contacting the doctor or nurse after gaining 2 kg in a week. In the present investigation, physical exercise according to the indications for their current state of health and the intake of a low-sodium diet is only carried out with a frequency of 1 to 2 days a week. The frequency with which they implement some action when they identify weight gain greater than 2 kg in a week; and they look for a review by a health professional to do it most of the time and some of the time.

Finally, Achury-S et al. (2019) applied the European Heart Failure Self-Care Scale” with

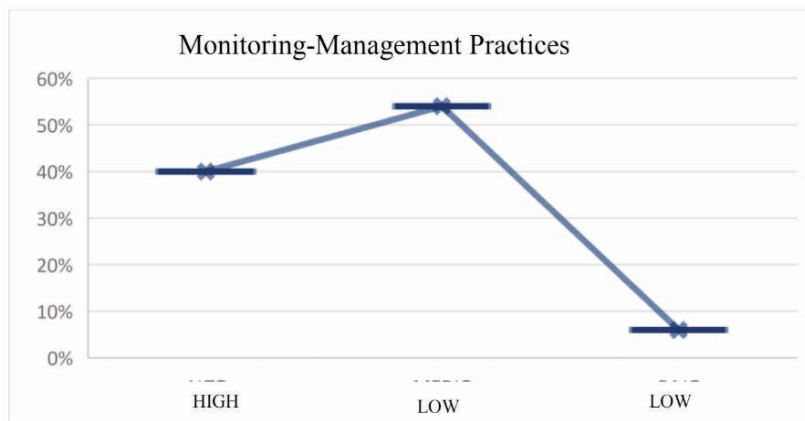


Graph No. 1 Level of self-care in dimension No.1 of Monitoring practices - Maintenance

How often do you do the following activities per week:	7 days	6 or 5 days	4 or 3 days	1 or 2 days	Never
1. I measure and record my weight in the morning before I eat.	43 %	23 %	17 %	17 %	0 %
2. I measure and record my abdominal circumference in the morning before eating food	6 %	29 %	23 %	26%	17 %
3. I measure and record my blood pressure numbers .	54 %	11 %	11 %	23 %	0 %
4. I do physical exercise according to the indications for my current state of health.	14 %	20 %	23 %	40 %	3 %
5. Quantify and limit the amount of liquids you ingest according to what has been indicated to me.	43 %	29 %	6 %	17 %	6 %
6.- I eat a diet low in salt (sodium).	31 %	23 %	11 %	34 %	0 %
7.- I take the medications as prescribed.	46 %	26 %	11 %	17 %	0 %
8.- I request and/or accept that the health team provide me with information to improve my self-care.	31 %	26 %	17 %	26 %	0 %

Table 1 Dimension 1 Monitoring Practices – Maintenance

Source: Own production

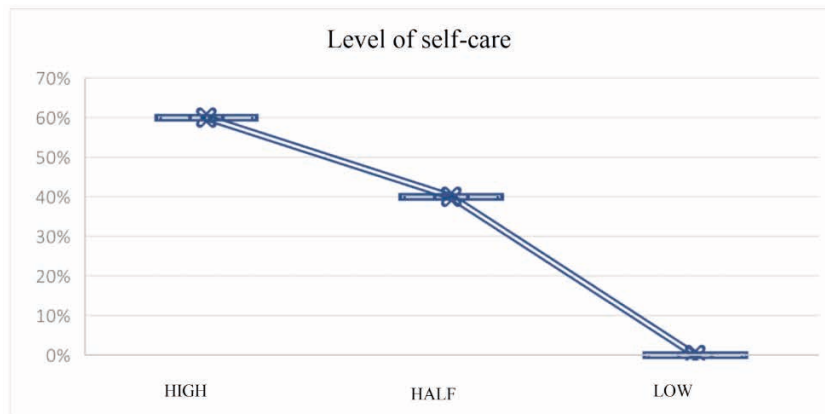


Graph No. 2 Level of self-care in dimension No. 2 of Monitoring Practices - Management

Frequency:	Always	Most of the time	Sometimes	Seldom	Never
9. How often do I know when I have shortness of breath (dyspnea).	31%	11%	34%	11%	11%
10. How often do I know when my feet, ankles or legs are swollen (edema).	43%	11%	29%	17%	0%
11. How often do I implement some action when I feel short of breath (dyspnea); and I'm looking for a health professional to check me out.	17%	37%	23%	11%	11%
12. How often do I implement an action when I identify swelling of the feet, ankles (edema) or legs; and I'm looking for a health professional to check me out.	29%	34%	29%	9%	0%
13. How often do I implement an action when I identify a weight gain greater than 2 kg in a week; and I'm looking for a health professional to check me out.	20%	34%	34%	11%	0%
14. How often do I implement an action when I identify increased tiredness (fatigue); and I'm looking for a health professional to check me out.	29%	26%	34%	6%	6%
15. How often do I implement an action when I identify an increase or decrease in the amount that I urinate; and I'm looking for a health professional to check me out.	23%	29%	26%	17%	6%

Table 2 Dimension No.2 Monitoring Practices – Management

Source: Own production



Graph No. 3 Level of Global Self-Care of Heart Failure

internal consistency with a Cronbach's alpha of 0.7. They found that the highest percentage of patients were 54.2% women, while in the present investigation, the largest number of participants turned out to be men in 66% (23 participants). In general, the level of self-care found in their work turned out to be in a greater proportion the high level in 50% with 24 participants, followed by the level medium with 46% represented with 22 participants. According to this research, the high level of self-care was represented by 60% (21 participants) followed by the medium level of self-care with 40% (14 participants).

## CONCLUSIONS

With the application of the self-care behavior scale for people with heart failure in the Mexican population, the level of self-care presented by patients who are cared for and monitored at the Specialized Heart Failure Clinic, by the multidisciplinary team, was objectively obtained through the implementation of nurse calling, patients have direct contact with the professional staff of the clinic, not only in order to resolve doubts, but also in order to carry out close surveillance. It should be noted that the willingness of patients to adapt to this new lifestyle is extremely important for there to be an adequate level of self-care.

The patients participating in the present investigation reported that, within the last three months, prior to the application of the measurement scale, 80% (28) did not go to the emergency department in the last 3 months due to decompensation of heart failure. heart failure, 20% (7) of whom did go to the emergency department due to decompensation of heart failure. This is a clear indicator that, thanks to the interventions carried out by the multidisciplinary team that makes up the clinic, patients present a high level of self-care, improving their quality of

life since the signs and symptoms of heart failure are controlled. both for the actions and activities in the daily life of the patient, as well as adequate adherence to pharmacological and non-pharmacological treatment.

Likewise, another of the questions that serve as an indicator of the patient's health is how many times they have been hospitalized due to heart failure, to which 46% (16) responded that they had only been hospitalized once. On the other hand, 17% (6) have not been hospitalized because of heart failure. Only 1 patient was hospitalized on 6 occasions. This indicates that, as there is a high level of self-care, patients maintain an adequate state of health and therefore the incidence of hospital and/or emergency care decreases. The high level of knowledge indicates that some cardiac decompensation could be prevented or identified in a timely manner, thus avoiding the aggravation and/or deterioration in the health status of the patients.

The main objective of this research was to determine the level of self-care of the patients of the Specialized Clinic in Cardiac Failure of the Third Level Hospital of Veracruz, it was met by finding the level of self-care that the patients present. Similarly, the dimension that presented a lower level of self-care was the dimension of monitoring practices - management. The indicator that represented low self-care was the frequency with which the patient implements some action when identifying an increase or decrease in the amount of urine excreted; and seeks to be reviewed by a health professional. Both the dimension and the indicator of less self-care are an area of opportunity to work with patients, thus increasing the level of self-care in the actions carried out by patients regarding their self-care.

Each of the indicators represents actions on the part of the patients, these actions together lead to adequate adherence to treatment that,



although it will not progress to a cure for the disease, will delay the exacerbation of the signs and symptoms that sometimes they prevent carrying out the activities of daily life, presenting some decompensation.

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