

## CHARACTERIZATION OF CARDIOPATHIC PATIENTS IN A THORACIC PAIN UNIT: ADMISSION PROFILE\*

Caracterização de pacientes cardiopatas em uma unidade de dor torácica: perfil de chegada

Caracterización de pacientes cardiopatas en una unidad de dolor torácico: perfil de llegada

\*Residency conclusion paper presented at the University of Passo Fundo in 2017 to obtain the title of specialist nurse in Cardiology.

*Jaqueline Piccoli Korb<sup>1</sup>; Marisa Basegio Carretta<sup>2</sup>, Tainá Samile Pesente<sup>3</sup>; Tiago Luan Labres de Freitas<sup>4</sup>; Gabriela Stochero<sup>5</sup>; Alessandra Rodrigues Moreira de Castro<sup>6</sup>*

### Como citar este artigo:

Korb JP, Carretta MB, Pesente TS, et al. Characterization of cardiopathic patients in a thoracic pain unit: admission profile. Rev Fund Care Online. 2021 jan/dez; 13:27-33. DOI: <http://dx.doi.org/10.9789/2175-5361.rpcfo.v13.7133>

### ABSTRACT

**Objective:** To characterize the cardiac patients who access the Thoracic Pain Unit (UDT) of a general hospital in the north of the State of Rio Grande do Sul. **Methods:** a cross-sectional, descriptive, quantitative study was carried out at the UDT of the Hospital of the City of Passo Fundo, addressing patients with suspicion or medical diagnosis of Cardiovascular Disease (CVD). **Results:** Data collection with 112 patients. There was a predominance of elderly, men with low socioeconomic conditions and a high incidence of acute coronary syndrome (ACS), and chest pain was present in most patients. **Conclusions:** Knowing the population that accessed the UDT made possible reflections on the subject, as well as the importance of this service, which serves as a gateway for patients in acute and chronic conditions of CVD.

**Descriptors:** Cardiovascular diseases, Chest pain, Hospital

<sup>1</sup> Resident nurse of the Multiprofessional Residency Program in Cardiology of the University of Passo Fundo and Hospital of the City of Passo Fundo and Municipal Secretary of Passo Fundo.

<sup>2</sup> Professor and Tutor of the Multiprofessional Residency Program in Cardiology of the University of Passo Fundo and Hospital of the City of Passo Fundo and Municipal Secretary of Passo Fundo.

<sup>3</sup> Resident Physiotherapist of the Multiprofessional Residency Program in Cardiology of the University of Passo Fundo and Hospital of the City of Passo Fundo and Municipal Secretary of Passo Fundo.

<sup>4</sup> Resident nurse of the Multiprofessional Residency Program in Cardiology of the University of Passo Fundo and Hospital of the City of Passo Fundo and Municipal Secretary of Passo Fundo.

<sup>5</sup> Resident nurse of the Multiprofessional Residency Program in Cardiology of the University of Passo Fundo and Hospital of the City of Passo Fundo and Municipal Secretary of Passo Fundo.

<sup>6</sup> Pedagogue of the Hospital of the City of Passo Fundo.

## RESUMO

**Objetivo:** Caracterizar os usuários cardiopatas que acessam a Unidade de Dor Torácica (UDT) de um hospital geral no norte do Estado do Rio Grande do Sul. **Métodos:** Estudo transversal, descritivo, de abordagem quantitativa, que foi realizado na UDT do Hospital da Cidade de Passo Fundo, abordando pacientes com suspeita ou com diagnóstico médico de Doença Cardiovascular (DCV). **Resultados:** Coleta dos dados realizada com 112 pacientes. Houve o predomínio de idosos, homens com baixas condições socioeconômicas e alta incidência de diagnóstico de Síndrome Coronariana Aguda (SCA) sendo que a dor torácica esteve presente em grande parte dos pacientes. **Conclusões:** Conhecer a população que acessou a UDT possibilitou reflexões acerca da temática, bem como a importância do referido serviço, no qual serve como porta de entrada para pacientes em condições agudas e crônicas de DCV.

**Descritores:** Doenças cardiovasculares, Dor torácica, Hospital.

## RESUMEN

**Objetivo:** Caracterizar a los usuarios cardiopatas que accede a la Unidad de Dolor Torácica (UDT) de un hospital general en el norte del Estado de Rio Grande do Sul. **Métodos:** estudio transversal, descriptivo, de abordaje cuantitativo, que fue realizado en la UDT del Hospital de la Ciudad de Passo Fundo, abordando pacientes con sospechosos o con diagnóstico médico de Enfermedad Cardiovascular (ECV). **Resultados:** Recolección de los datos realizada con 112 pacientes. Hubo el predominio de ancianos, hombres con bajas condiciones socioeconómicas y alta incidencia de diagnóstico de Síndrome Coronaria Aguda (SCA), siendo que el dolor torácico estuvo presente en gran parte de los pacientes. **Conclusiones:** Conocer la población que accedió a la UDT permitió reflexiones acerca de la temática, así como la importancia de dicho servicio, en el cual sirve como puerta de entrada para pacientes en condiciones agudas y crónicas de ECV.

**Descritores:** Enfermedades cardiovasculares, Dolor torácico, Hospital

## INTRODUCTION

Cardiovascular diseases (CVD) are considered non-communicable chronic diseases, which also include neoplasms, chronic respiratory diseases and diabetes mellitus and have high death rates in Brazil and worldwide. Multiple etiology, related to functional deficiencies and disabilities, added to cultural, socioeconomic and environmental factors are the main determinants in limiting the population's quality of life and the significance of morbidity and mortality associated with these pathologies, with a long latency period, prolonged evolution with irreversible injuries.<sup>1-2</sup>

In this context, Acute Coronary Syndrome (ACS) arises, which can be conceptualized as a group of signs and symptoms of diseases related to partial or total occlusion of the coronary arteries.<sup>3</sup> With coronary occlusion, rupture of the atherosclerotic plaque occurs, which causes the formation of an intraluminal thrombus, responsible for greater damage to the occluded artery. This can be classified as Unstable Angina and Acute Myocardial Infarction.<sup>4</sup>

Still regarding to SCA, American statistical data show that approximately twelve million people have some coronary artery pathology, of which, more than one million AMI each

year, resulting in more than 400,000 deaths attributed to this group of diseases.<sup>5</sup>

There are countless facts that may be contributing to the growing importance of these diseases. Part of it can be attributed to the aging of the population, survival of infectious diseases, new technologies available with early diagnosis of diseases and reduction of lethality. Another part that must be considered is the inadequate control of the factors associated with the development of these pathologies.<sup>6</sup>

Epidemiological studies from Brazilian main centers show cardiovascular pathologies as having the highest morbidity and mortality. Therefore, it is known that two thirds of sudden deaths from heart disease occur in an out-of-hospital environment and only 20% of individuals with a report of acute chest pain arrive at an emergency service before two hours after the onset of symptoms<sup>7</sup> being that 40-65% of deaths occur in the first hours of disease onset and approximately 80% in the first 24 hours.<sup>8</sup> One of the factors that contributes to the reduction of death rates from Acute Myocardial Infarction (AMI) is the rapid and effective care of these patients after the beginning of the first signs and symptoms. Therefore, emergency services must be prepared with trained and involved professionals so that the service is efficient and the diagnosis is fast and accurate.<sup>9</sup>

In the context described above, and in order to provide easy and priority access to users with chest pain who are looking for a hospital emergency service, provide diagnostic and therapeutic strategies organized in the emergency room, in search of agility, high quality of care, efficiency and cost reduction, hospital Thoracic Pain Units were created in 1982, now widespread in hospital centers across the country.<sup>10</sup>

The main purpose of this study was to characterize cardiac users who access the chest pain unit (UDT) of a general hospital in the north of the state of Rio Grande do Sul, from April to August of 2017.

## METHODS

Cross-sectional, descriptive, quantitative study conducted with users who accessed the UDT of the Hospital da Cidade de Passo Fundo (HC) located in the northern region of the State of Rio Grande do Sul (RS).

The defined inclusion criteria were being 18 years of age or older, both sexes, presenting clinical, cognitive and emotional conditions to respond to the instrument, being in investigation or treatment of any cardiovascular pathology and accepting to participate in the research through the Term of Consent. Free and Informed Commitment (ICF) during the proposed period for data collection.

As exclusion criteria, users under the age of 18, who are not in clinical, cognitive and emotional conditions to respond to the instrument and who do not accept to participate in the research and sign the informed consent form, did not participate in the research.

Upon accessing the UDT, patients were approached at the bedside, providing information about the objectives of the study as well as its importance for the practice of the health service. After reading, explaining and signing the informed consent form, a semi-structured questionnaire developed exclusively for the current study was applied, contemplating the proposed objectives, which addresses the sociodemographic profile, clinical profile of the patient upon arrival at UDT and existing risk factors for CVD with associated comorbidities, in which it contemplated a sample of 112 patients to carry out the study.

Regarding the approach to risk factors, they were considered as follows:

a) systemic arterial hypertension (SAH), dyslipidemia and diabetes mellitus (DM): risk factors that were questioned in the interview and confirmed in medical records;

b) Alcoholism: the verbal report of exacerbated use was considered a risk factor. The type and amount of drink consumed was not investigated;

c) obesity: the body mass index (BMI) was evaluated. If the patient had a  $BMI > 30 \text{ kg} / \text{m}^2$ , he was considered obese. The BMI is the most used calculation to assess the degree of body adiposity, for that, a formula is made which consists of the division of the weight in kilogram by the height in meters squared ( $\text{kg} / \text{m}^2$ ), in this way, it is considered a person obese, one who has a BMI with a value equal to or greater than  $30 \text{ kg} / \text{m}^2$ .<sup>8</sup>

d) sedentary lifestyle: those who did not perform physical activity for at least 30 minutes, three times a week, were considered sedentary.

e) smoking: smokers were those who regularly consumed at least one cigarette per day, for at least one year, and who had smoked in the year prior to inclusion in the study; ex-smokers those who had not smoked in the year prior to inclusion in the study and non-smokers those who had never smoked. Patients were not assessed for the degree of passive smoking.

f) family history: a positive family history was considered for Coronary Artery Disease when the patient reported having at least one direct relative (parents or siblings) who had had ischemic heart disease, and for these men aged less than or equal to 55 years and women aged less than or equal to 45 years when the ischemic event occurred.

g) stress: the presence of some stressful event, which according to the patient's verbal report, was of great importance and impact on the life of this patient in the week prior to hospitalization, in the last six months, and whether or not his life was considered stressful.

The data were stored and organized in an electronic spreadsheet, in the Excel for Windows program (Office, 2007) and, later, were analyzed electronically.

Data analysis was performed using descriptive and analytical statistics, with the aid of the statistical software Bioestat 5.0. The data were compiled using descriptive statistical

technique, in the form of absolute and relative frequencies that will be presented in the form of tables and charts.

The study was approved by the Teaching and Research Coordination of the HC and by the Research Ethics Committee of the University of Passo Fundo (UPF), in Passo Fundo, RS, CAAE n ° 65704917.7.0000.5342 developed respecting the ethical principles with regard to research involving human beings, according to Resolution 466/2012 of the National Health Council, as well as compliance with specific legislation in Brazil.<sup>12</sup>

## RESULTS

During the period proposed for the data collection phase, from April to August of two thousand and seventeen, 152 users accessed the UDT of the Hospital of the City of Passo Fundo (HC), among these, 17 did not have clinical and / or cognitive conditions of responding to the questionnaire, 22 were receiving medical care by the Neurology team and one patient refused to sign the informed consent form, that is, after applying the aforementioned inclusion and exclusion criteria, 112 patients were eligible to participate in the study.

With the participants, she sought to trace her sociodemographic and clinical profile, which found that 42% were female and 53% male. Regarding the age group, 28.6% were between 71-80 years old, followed by 51-60 years corresponding to 26%, 61-70 years represented by 24% individuals, 41-50 years were revealed in 13% patients, the others, less significant, covered other age groups, with a minimum age of 22 years and a maximum of 86 years.

As a form of referral to the referred unit, 43% of individuals accessed the emergency room at the same hospital, 38% were referred by other municipalities in the Passo Fundo (PF) region and 19% used other forms of referral, with respect to their origin, 45% of the patients were from the city of FP, and the remaining 55% came from other locations in RS, with Brazilian descent being the most prevalent among respondents, corresponding to 34%, followed by Italians represented by 25% and German 13% of users.

Regarding the health plans used, the Unified Health System (SUS) was the most prevalent, with 73% of users. As for the level of education, 59% have incomplete elementary education, followed by 12% with complete secondary education and only 5% with complete higher education.

As for the marital status, most patients were married, representing 67% of the sample. Regarding occupational activities, 63% of users are retired and 16% are employed. With regard to income, 38% of patients receive between one and three minimum wages, with 11% of the total sample reporting no fixed salary. Regarding housing, 36% of users reported living with their spouse and 29% with their spouse and children.

In order to better understand the signs and symptoms referred by the patient and evaluated by the multiprofessional

team, these were analyzed together, that is, the group of signs and symptoms that the patient presented when entering the UDT and afterwards, these were analyzed in isolation. As for the signs and symptoms evaluated together, it is possible to verify the relationship between chest pain and dyspnea, chest pain and changes in the first electrocardiogram performed, chest pain and fatigue, as well as the incidence of users who did not show signs and symptoms referred, as shown in Table 1.

**Table 1** - Signs and symptoms of patients admitted to the Chest Pain Unit of Hospital Passo Fundo – 2017

| Signs and Symptoms  | N (%)      |
|---|------------|
| <b>Chest pain</b> without irradiation to upper limbs and cervical region with associated dyspnea                      | 8(7%)      |
| <b>Chest pain</b> with radiation to upper limbs and cervical region with associated dyspnea                           | 6 (5%)     |
| <b>No symptoms</b>  | 5 (5%)     |
| <b>Chest pain</b> without irradiation to lower limbs and cervical region  | 5(5%)      |
| <b>Chest pain</b> with irradiation to upper limbs and cervical region associated with alteration in Electrocardiogram | 5(5%)      |
| <b>Chest pain</b> without irradiation to upper limbs and cervical region associated with fatigue                      | 5(5%)      |
| <b>Other symptoms</b>   | 78 (68%)   |
| <b>Total</b>  | 112 (100%) |

Regarding the “other symptoms” related to the previous table, these add up to 68% of the total amount. Of these, it appears that chest pain is closely related to other signs and symptoms found, which we can mention: 2.7% had chest pain and SAH, 4% chest pain associated with dyspnea and electrocardiographic changes, 4% chest pain, dyspnea, SAH and fatigue, 1% chest pain and vertigo, 1% chest pain, nausea and electrocardiogram changes, among others.

As for the signs and symptoms assessed separately, it is possible to note that chest pain, without irradiation or irradiation to the lower limbs or cervical region was the most reported. There was a greater emphasis on dyspnea, fatigue, changes in the arrival electrocardiogram, presence of edema in the region of the lower or upper limbs, arterial hypertension, tachycardia, among others, whose data are detailed below, in table 2.

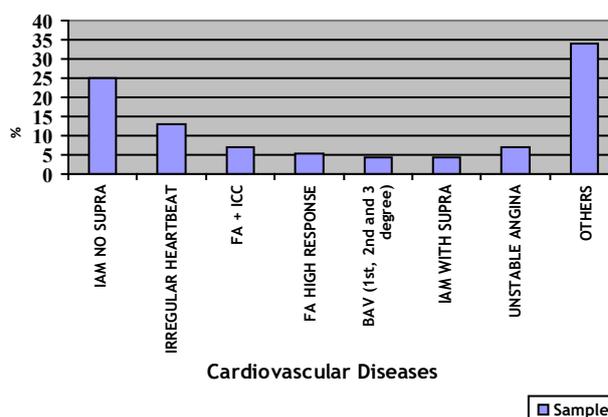
**Table 2** - Isolated signs and symptoms of patients admitted to the Chest Pain Unit of the Hospital Passo Fundo – 2017

| Signs and Symptoms  | N(%)     |
|---|----------|
| No symptoms   | 5(5%)    |
| Chest pain without irradiation to upper limbs and cervical region | 40 (36%) |
| Chest pain with radiation to upper limbs and cervical region      | 32 (29%) |
| Dyspnea   | 56 (50%) |
| Edema (lower or upper limbs)                                      | 12 (11%) |
| Tachycardia   | 14(13%)  |
| Bradycardia   | 4 (4%)   |

(Continue)

(Continuation)

| Signs and Symptoms           | N(%)     |
|------------------------------|----------|
| Arterial hypotension         | 5 (5%)   |
| Arterial hypertension        | 22 (20%) |
| Changes in Electrocardiogram | 51 (46%) |
| Fatigue                      | 26 (23%) |
| Other symptoms               | 16 (15%) |



**Figure 1** - Diagnosis of cardiovascular diseases in patients admitted to the Chest Pain Unit of the Hospital Passo Fundo - 2017

Presented the aforementioned signs and symptoms by users during admission to UDT, it was found that 81% of patients already had a pre-established CVD diagnosis, and the remaining 19% of users accessed it in order to investigate a possible heart disease. Among patients who did not have confirmed CVD, the main reason for admission to UDT was for investigation of Acute Coronary Syndrome (ACS), found in 62% of users. Regarding the diagnoses of CVD found in UDT, as detailed in Figure 1, it is possible to note that there was a noticeable variance between them, the most common ACS, which encompasses ST-segment acute myocardial infarction, ST-segment elevation acute myocardial infarction and unstable angina, with stable angina was not described in the sample. Decompensated heart failure was also one of the most common pathologies found among users, being isolated or associated with atrial fibrillation, the latter also found in a percentage of users. Atrioventricular blocks (1st, 2nd and 3rd degree) were also diagnosed in a statistically less significant population. Other pathologies were the reason for hospitalization, including Atrial Flutter, Malignant Arterial Hypertension, Supraventricular Tachycardia, Pulmonary Thromboembolism, Acute Lung Edema, among others.

In addition to pre-existing CVDs, or possible diagnosis of them, users had already established comorbidities, with a sum of 42%. Among the most common, the presence of rheumatoid arthritis in 4% and chronic obstructive pulmonary disease (COPD) reported by 4% of patients stands out.

Participants were asked about the presence of modifiable and non-modifiable risk factors for CVD, which are shown in Table 3. It is possible to show, among the data analyzed by users, that the high level of sedentary lifestyle (93%), stress

(55%) and Systemic Arterial Hypertension (SAH) (79%). With regard to non-modifiable risk factors, in terms of age, the majority of the population studied is elderly, as already explained in the results above.

**Table 3** - Modifiable and non-modifiable risk factors found in patients admitted to a chest pain unit of a general hospital in the city of Passo Fundo

|                                       | Yes<br>N (%) | No<br>N (%) |
|---------------------------------------|--------------|-------------|
| <b>Modifiable risk factors</b>        |              |             |
| Sedentary lifestyle                   | 104 (93%)    | 8 (7%)      |
| Stress                                | 61 (55%)     | 51 (46%)    |
| Obesity                               | 36 (32%)     | 76 (68%)    |
| Systemic Arterial Hypertension        | 88 (79%)     | 24 (21%)    |
| Diabetes Mellitus                     | 31 (28%)     | 81 (72%)    |
| Dyslipidemias                         | 52 (46%)     | 60 (54%)    |
| <b>Non modifying risk factors</b>     |              |             |
| Male                                  | 65 (63%)     | 47(42%)     |
| Heredity                              | 51 (46%)     | 61 (54%)    |
| Age (already shown in the data above) |              |             |

Still regarding risk factors, the participants were asked about the use of cigarettes and alcohol. For this, in addition to investigating the use of these legal drugs, it was addressed whether users were “former smokers” or “former drinkers”. As a result, with regard to smoking, 17% of them said they were smokers, 53% reported that they never used cigarettes and 30% said they were “former smokers”.

Regarding the use of alcohol, 7% of users claimed to be alcoholics, 90% denied having this addiction and 3% claimed that at some point in their lives they were alcoholics.

As for the care flows at the UDT, these were also evaluated and presented important results, 31% of the patients entered the unit on Monday, and the search on Sunday was the least found, with 2% of users. Regarding clinical outcomes, no patient died during hospitalization at UDT. Their length of stay ranged from less than twenty-four hours to more than forty-eight hours, with 45% of patients remaining in the UDT for less than twenty-four hours, followed by 38% with a stay of twenty-four to forty-four. eight hours and 18% obtained a hospitalization of more than forty-eight hours.

## DISCUSSION

The results in this study showed that the population served is predominantly male, elderly, married, retired, with low education and coming from neighboring municipalities in the city where the UDT is located. A cross-sectional study, carried out in the northwest of the State of São Paulo, one of the main objectives of which was to analyze the sociodemographic profile of patients with AMI treated in an emergency, showed that in a sample of 52 patients, 76% were male, with a predominance of elderly population, 65% of whom were married, 46% retired and 60% with incomplete

elementary education, corroborating with the data found in the present study.<sup>7</sup>

Similar results were obtained in a study that sought to characterize the profile of clinical emergency care, totaling 5825 consultations, whose diseases of the circulatory system were the most diagnosed within all pathologies attended corresponding to ICD 10. The results show that 54.1% of the visits were made to male patients, 70.1% in patients over 40 years of age and regarding the variable of the level of education, it showed that 73.9% had incomplete or complete elementary school.<sup>13</sup>

It is known that men still have difficulties in maintaining a healthy lifestyle compared to women. This leads to a possible development of chronic diseases, leading to recurrent hospitalizations for decompensating the clinical condition and acute episodes of these pathologies. A literature review study sought to analyze the National Men’s Health Policy and found that diseases of the circulatory system are among the main causes of morbidity and mortality in men in all age groups.<sup>14</sup>

On the other hand, researchers showed a quantitative and qualitative descriptive study, an equivalence between the sexes of patients with chest pain who accessed an Emergency Care Unit in a city in Minas Gerais. The data showed that 48% of users were men and 52% were women, with disagreement between the results discussed, while confirming great similarity between the occurrence of chest pain for both sexes.<sup>15</sup> In the same way, the Framingham study (1986)<sup>16</sup> showed the relationship between the involvement of ACS in relation to sex, of which 40% occurred in women, of whom under AMI.

As for the majority of patients being elderly, 37.7% of deaths in people over sixty years old, occur due to cardiovascular diseases. This is due to the fact that physiological and cardiovascular performance, after this age, may present a sharp decline associated with the presence of modifiable and non-modifiable risk factors, thus making them more susceptible to this group of diseases.<sup>17</sup>

Regarding to offspring, there are several ethnicities among patients, with the Brazilian one being the most found among the participants. Black and / or brown individuals are closely associated with chronic non-communicable diseases, including SAH whose control is more difficult with more frequent complications, possibly due to ethnic and socioeconomic factors. The latter may be related to greater difficulties in accessing medical services, thus impairing diagnosis and treatment in the search for the prevention of major complications.<sup>18</sup>

Regarding the signs and symptoms found in users during admission, the report of chest pain, whether with or without radiation to the lower limbs and cervical region, accounts for 65% of the entire sample studied. Another symptom reported by users was dyspnea, with 50% among users, followed by 46% of patients with changes in the first electrocardiogram

performed. The I Chest Pain Guidelines in the Emergency Room emphasizes that approximately five to eight million people with chest pain or other symptoms of acute myocardial infarction are seen in emergency rooms in the United States, accounting for 5 to 10% of all immediate visits carried out in American territory.<sup>10</sup>

Given the above, the main symptoms that patients diagnosed with ACS have are precordial or retrosternal pain, which may be associated with dyspnea and syncope, whose symptoms may or may not be associated with increased cardiac enzymes or recent changes in the electrocardiogram, as ST segment elevation or elevation, T wave inversion or right and left branch block.<sup>19</sup>

Still in relation to the signs and symptoms of ACS, corroborating with the data found, data from a study carried out, it aimed to evaluate the evolution of patients who were admitted to an Emergency Room at a reference hospital in cardiology in the State of São Paulo. In this, 574 patients were treated with complaints of chest pain, 48% of which were cardiac, 15% non-cardiac and 36% unspecified.<sup>8</sup>

Regarding the CVD diagnoses found, it is possible to assess that there was a variability between them. ACS was the most found among the participants, followed by decompensated heart failure. Similar to these data, authors sought to characterize the clinical profile of patients hospitalized for cardiovascular diseases and showed that Heart Failure and AMI represented 70% of the causes of hospitalizations in the service studied.<sup>20</sup>

Likewise, a retrospective, cross-sectional research with a quantitative approach carried out in an Emergency Unit in São Paulo, identified the clinical characteristics of patients who accessed the unit. In the sample of 9756 electronic medical records studied, cardiac diseases were the third cause of hospitalizations and admissions. Among these, the most common cardiovascular causes were precordial pain by 38% and heart failure with 26%.<sup>21</sup>

Regarding to risk factors, it is known that ACS is closely related to the lifestyle of the population, with a small group of modifiable risk factors accounting for the majority of deaths and the appearance of chronic non-communicable diseases, which are more important and significant are smoking, physical inactivity and dyslipidemia.<sup>22</sup>

In this study, it was possible to verify the predominance of sedentary, hypertensive and participants with a degree of active or previous smoking. Corroborating with the findings found here, a prevalence study characterized the profile of a patient with ACS treated at the Emergency Department of a public and general hospital in the city of Porto Alegre and identified that 86% were sedentary, 77% had some degree of overweight and / or obesity, 76% were hypertensive, 57% had a family history of Coronary Artery Disease, 53% considered themselves with some degree of daily stress, 45% were dyslipidemic, 40% were considered diabetic, 40% smokers and 15% reported some degree of recurrent alcohol intake.<sup>23</sup>

Regarding patient access to the UDT, it was found that the majority of patients entered on Monday. Similar data note in a quantitative study with three hundred and thirty attendance files in an Emergency Room in Ribeirão Preto that, of all days of the week, 17.2% users sought the service on Monday.<sup>24</sup>

The results have clear implications for the dynamics of the UDT service, since they are unprecedented data in that institution. The main limitation of this study was the impossibility for the researcher to be present in all shifts and to monitor the arrival of all users in the service. However, the difficulties and doubts regarding the clinical condition of patients during access to UDT were promptly resolved by the active multiprofessional team and when necessary, by searching for data via medical records and the electronic system of the health institution.

## FINAL CONSIDERATIONS

This study made it possible to know the characteristics of the population that access the HC UDT, as well as the various aspects of meeting this demand, as well as the reasons why the subjects sought this level of care.

Regarding the sociodemographic profile, it is possible to state that it is an elderly population, with a predominance of males, with low education and low socioeconomic conditions, the majority of which are from other municipalities in the Northern region of RS.

Regarding the clinical profile, the high incidence of diagnoses of ACS and decompensated heart failure stands out, with chest pain having a strong relationship with these pathologies.

With regard to the existence of modifiable and non-modifiable risk factors for CVD, the studied population showed a predominance of hypertensive, sedentary, smokers and with verbal reports of stress.

Knowing the population that accessed the UDT enabled reflections on the theme, as well as the importance of that service, which serves as a gateway for patients in acute and chronic CVD conditions. Thus, with the results obtained, it is possible to build better service conditions with the multidisciplinary team, in a planned and systematized way, with qualified actions, which contribute to reduce the length of hospital stay and prevent clinical complications resulting from hospitalization.

## REFERENCES

1. Duncan BB, Chor D, Aquino, EML, Bensenor IM, Mill JG, Schmidt MI, Lotufo PA, Vigo A, Barreto SM. Chronic non-communicable diseases in Brazil: priority for coping and research. *Revista Saúde Pública* 2012; 46 (Suppl): 126-34
2. Lana LD, Camponogara S, Botolli C, Cielo C, Rodrigues IL. Profile of patients undergoing cardiac rehabilitation: implications for nursing. *J. res. : fundam. care. online* 2014. jan./mar. 6 (1): 344-56.

3. Alves TE, Silva MG, Oliveira LC, Arrais AC, Júnior, JEM. Nurse's performance in emergency care for users suffering from acute myocardial infarction. *Rev Enferm UFPE on line; Recife*, 7 (1): 176-83, Jan., 2013
4. Santos JCA, Plaggi LFD. Perception of the Nurse on the Care of the Patient with Suspected Acute Myocardial Infarction. *Rev min Enferm* [cited 2011 Sept 14]; 2010 (2): 43-51.
5. Santos ES, Minuzzo L, Pereira MP, Castillo MTC, MAG Palace, Ramos RF, Timerman A, Piegas LS. Registry of Acute Coronary Syndrome in a Cardiology Emergency Center. *Arq Bras Cardiol* 2006; 87: 597-602
6. Ministry of Health (BR). Clinical prevention of cardiovascular, cerebrovascular and renal diseases. (Primary Care Notebooks, n. 14) (Series A. Standards and Technical Manuals). Available at: <http://dab.saude.gov.br/portaldab/biblioteca.php?conteudo=publicacoes/cab14>
7. Bastos AS, Beccaria LM, Contrin LM, Cesarino CB. Time of arrival of the patient with acute myocardial infarction in the emergency unit. *Rev Bras Cir Cardiovasc* 2012; 27 (3): 411-8
8. Missaglia MT, Neris ES, Silva MLT. Use of chest pain protocol in the Emergency Department of a Cardiology Reference Hospital. *Rev Bras Cardiol*. 2013; 26 (5): 374-81 September / October.
9. Caveião C, Santos RB, Montezeli JH, Visentin A, Brey C, Oliveira VBCA. Chest pain: Nurse's performance in an Emergency Room of a Teaching Hospital. *R. Enferm. Cent. O. Min.* 2014 Jan / Apr; 4 (1): 921-28
10. Bassan R, Pimenta L, Leães PE, Timerman A. Brazilian Society of Cardiology. I Chest Pain Guideline in the Emergency Room. *Arq Bras Cardiol* 2002; 79 (Suppl II): 1.
11. ABESO. Brazilian Association for the Study of Obesity and Metabolic Syndrome. Brazilian obesity guidelines. 2016. 4th edition; Sao Paulo-SP
12. BRAZIL. Ministry of Health. National Health Council. Resolution No. 466 of December 12, 2012 from the National Health Council, which regulates research with human beings in the country; Brasilia; 2012.
13. Coelho MF, Goulart BF, Chaves LDP. Clinical emergencies: Hospital Care Profile. *Rev Rene*. 2013; 14 (1): 50-9.
14. Schwarz E, Gomes R, Couto MT, Moura EC, Carvalho SA, Silva SFC. Men's Health Policy. *Rev. Saúde Pública*, v.46, n., P.108-16, 2012.
15. Santos F, Freire PB, Ribeiro JA. Approach of chest pain by the nurse in an emergency care unit in the patient's view. *Rev. Enfermagem Revista V. 19 N° 02 MAY / AUG 2016*
16. Lerner DJ, Kannel WB. Patterns of coronary heart disease morbidity and mortality in the sexes: a 26-year follow-up of the Framingham population. *Am Heart J*. 1986; 111 (2): 383-90.
17. Ferreira CCC, Peixoto MRG, Barbosa MA, Silveira, EA. Prevalence of cardiovascular risk factors in elderly users of the Unified Health System in Goiânia. *Arq Bras Cardiol* 2010; 95 (5): 621-28
18. Rocha-Brischiliari SC, Agnolo CMD, Gravena AAF, Lopes TCR, Carvalho MDB, Pelloso SM. Chronic non-communicable diseases and association with risk factors. *Rev Bras Cardiol*. 2014; 27 (1): 531-38 January / February.
19. Fantini JA, Gaglianone CC, Ribeiro, RCHM, Cesarino CB, Rodrigues CC, Beccaria LM. Clinical profile of patients with cardiovascular diseases treated at the emergency room of a teaching hospital. *Rev Enferm UFPE on line; Recife*, 9 (12): 1078-84, Dec., 2015
20. Pereira JMV, Cavalcanti ACD, Santana RF, Cassiano KM, Queluci GC, Guimarães TCF. Nursing diagnoses of hospitalized patients with cardiovascular diseases. *Esc Anna Nery (impr.)* 2011 Oct-Dec; 15 (4): 737-45.
21. Ribeiro RM, Cesarino CB, Ribeiro RCHM, Rodrigues CC, Bertolin DC, Pinto MH, Beccaria LM. Profile characterization in clinical emergencies in the Emergency Department of a teaching hospital. *Rev Min Enferm*. 2014, Jul / Sep; 18 (3): 533-38
22. Muniz LC, Schneider BC, Silva ICM, Matijasecic A, Santos IS. Cumulative Behavioral Risk Factors for Cardiovascular Diseases in Brazil. *Rev Saúde Pública* 2012; 46 (3): 534-42.
23. Lemos KF, Davis R, Moraes MA, Azzolin K. Prevalence of risk factors for acute coronary syndrome in patients seen in an emergency. *Rev Gaúcha Enferm.*, Porto Alegre (RS) 2010 mar; 31 (1): 129-35.
24. Gomide MFS, Pinto IC, Gomide, DMP, Zacharias FCM. Profile of users in an emergency care service. *Medicine (Ribeirão Preto)* 2012; 45 (1): 31-8

Received on: 08/01/2018

Reviews required: Did not have

Approved on: 12/04/2018

Published on: 05/01/2021

**Corresponding author :**

Jaqueline Piccoli Korb

**Address:** Rua Rubem Mendes n° 459, Bairro Morada do Sol, Ijuí – Rio Grande do Sul

**Zip Code:** 98700-000

**E-mail:** jake\_piccoli@hotmail.com