

**Characterization of resistant hypertensive patients facing therapeutic adherence in coastal lowlands of Rio de Janeiro***Caracterización de pacientes hipertensos resistentes frente a la adherencia terapéutica en la región costera del Río de Janeiro**Caracterização de pacientes hipertensos resistentes frente adesão terapêutica na baixada litorânea do Rio de Janeiro***Rammi Damiani Fabricio<sup>1</sup>**

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**Abstract**

The aim was to characterize the sociodemographic and clinical profile of resistant hypertensive patients regarding therapeutic adherence. Descriptive, cross-sectional study with 100 patients assisted at an Attention Center in Cabo Frio-RJ. Data were collected between September and October 2019. The information contained in a data collection instrument related to sociodemographic and clinical data was analyzed. A predominance of the female gender was identified 70 (70%); elderly 77 (77%); retired 43 (43%); diagnosed with SAH for more than 30 years 24 (24%); having associated comorbidities, the main one being Diabetes Mellitus 61 (61%); overweight 32 (32%). In the routine related to pharmacological therapy, it was identified that (85-85%) of the patients use the medications faithfully, 91 (91%) without the same reaction. The results show limitations regarding non-pharmacological adherence, especially weight control, maintenance of food planning and stress control.

**Descriptors:** Nursing; Hypertension; Adherence to Treatment; Resistance; Primary Health Care.

**Resumen**

El objetivo fue caracterizar el perfil sociodemográfico y clínico de los pacientes hipertensos resistentes en cuanto a la adherencia terapéutica. Estudio descriptivo, transversal con 100 pacientes atendidos en un Centro de Atención en Cabo Frio-RJ. Los datos fueron recolectados entre septiembre y octubre de 2019. Se analizó la información contenida en un instrumento de recolección de datos relacionados con datos sociodemográficos y clínicos. Se identificó un predominio del género femenino 70 (70%); ancianos 77 (77%); jubilados 43 (43%); diagnosticado de HSA por más de 30 años 24 (24%); tener comorbilidades asociadas, siendo la principal Diabetes Mellitus 61 (61%); sobrepeso 32 (32%). En la rutina relacionada con la terapia farmacológica, se identificó que (85-85%) de los pacientes utilizan fielmente los medicamentos, 91 (91%) sin la misma reacción. Los resultados muestran limitaciones en cuanto a la adherencia no farmacológica, especialmente el control de peso, el mantenimiento de la planificación dietética y el control del estrés.

**Descriptores:** Enfermería; Hipertensión; Adherencia al Tratamiento; Resistencia; Primeros Auxilios.

**Resumo**

Objetivou-se caracterizar o perfil sociodemográfico e clínico de pacientes hipertensos resistentes no que se refere a adesão terapêutica. Estudo descritivo, transversal com 100 pacientes assistidos em um Centro de Atenção em Cabo Frio-RJ. Os dados foram coletados entre setembro e outubro de 2019. Foram analisadas as informações contidas em instrumento de coleta de dados referente a dados sociodemográficos e clínicos. Identificou-se uma predominância do gênero feminino 70(70%); idosos 77(77%); aposentados 43(43%); diagnosticados com HAS há mais de 30 anos 24(24%); tendo comorbidades associadas, sendo a principal, Diabetes Mellitus 61(61%); sobrepeso 32(32%). Na rotina relacionada a terapia farmacológica identificou-se que (85-85%) dos pacientes utilizam as medicações fielmente, 91(91%) sem reação a mesma. Os resultados evidenciam limitações no que tange a adesão não farmacológica, em destaque o controle do peso, manutenção do planejamento alimentar e controle do estresse.

**Descritores:** Enfermagem; Hipertensão; Adesão ao Tratamento; Resistência; Atenção Primária à Saúde.



## Introduction

According to WHO (World Health Organization) data, chronic non-communicable diseases are responsible for 58.5% of all deaths in the world. Of these deaths, it is estimated that 7.5 million occur due to cardiovascular diseases and 6.7 million due to strokes (strokes), which represents approximately 12.8% of the total annual deaths where hypertension is the biggest risk factor<sup>1</sup>.

With high prevalence and low control rates, SAH (Systemic Arterial Hypertension) is one of the main modifiable risk factors for cardiovascular diseases and one of the most important public health problems. SAH is a chronic, non-communicable disease, of multifactorial origin, characterized by high levels of blood pressure in the arteries. It is called systemic, as it can reach organs and systems, often associating with functional or structural changes in target organs such as the heart, brain, kidneys, blood vessels, and others<sup>2,3</sup>.

In the Brazilian context, 32% of the adult population, or the equivalent of 36 million individuals, are hypertensive. WHO has revealed that the disease has a major socioeconomic impact. In Brazil, this impact generated a loss of productivity at work and family income that totaled US \$ 4 billion in the period from 2006 to 2015<sup>2</sup>.

According to the Brazilian Society of Cardiology, the classification of SAH in adults occurs as follows, considering the mean systolic and diastolic pressures, sequentially: Stage I Mild hypertension > 140 to 159 x 90 to 99 mmHg; Stage II - Moderate hypertension > 160 to 179 x 100 to 109 mmHg; Stage III - Severe hypertension > Greater than or equal to 180 x 110 mmHg. There is also resistant arterial hypertension (RAH) where blood pressure levels remain high even with the use of three or more antihypertensive agents<sup>3</sup>.

Due to these variations, the goal of treatment varies for each patient, depending on the stage of SAH and associated diseases, but the goal usually used in clinical practice is to maintain the maximum BP (Blood Pressure) between 120 x 75 to 130 x 85 mmHg<sup>3,4</sup>.

There is a set of potentially determining causes for the occurrence of SAH, in which age, obesity, inappropriate eating habits, smoking, physical inactivity, genetic factors, among others, stand out. The main ally of the treatment is healthy lifestyle habits in addition to a wide variety of drug treatments, such as diuretics, calcium channel blockers, angiotensin-converting enzyme inhibitors, angiotensin receptor blockers and beta-blockers<sup>4,5</sup>.

One of the great current difficulties refers to patients' adherence to the therapeutic treatment program instituted by the health team. Adherence to treatment is considered the degree of link between the pharmacological and non-pharmacological prescription and the behavior adopted by the patient. Therefore, it is important to identify in the health units the existence or not of this adherence to contribute to improving the quality of life of these patients<sup>6,7</sup>.

In this context, the presence of the Nurse is essential to act as an educator by making the patient aware of their health condition and establishing goals and plans

with them on how to follow the care, making treatment as easy as possible<sup>7,8</sup>.

Given the magnitude of SAH and considering its difficulty in adhering to treatment, there is a need to add evidence to reduce morbidity, improve quality of life and prevent diseases from those with the disease. Thus, the characterization of resistant hypertensive patients in the region of the city of Cabo Frio may support the standardization of nursing processes applied to this population, as well as making current data available to the scientific community on the subject.

Given the above, the aim of this study was to characterize the sociodemographic and clinical profile of resistant hypertensive patients about therapeutic adherence.

## Methodology

This is a cross-sectional, descriptive study with a quantitative approach conducted at the Center for Attention to Hypertension and Diabetics (CAHDi), located in the city of Cabo Frio, with subjects as resistant Hypertensive patients attended at that location.

The study scenario is a unit specialized in the treatment of resistant arterial hypertension and diabetes mellitus, with a multidisciplinary team with doctors, nurses, physiotherapists, nutritionists, and social worker.

The inclusion criterion was given to patients older than 18 years of age with Arterial Resistance hypertension (HAR) treated at CAHDi. And those who did not agree with the study and did not sign the Free and Informed Consent Form (ICF) were excluded from the research. Thus, 100 patients were found, all of whom were selected, with no patients excluded. Data collection was carried out from September to October 2019, using a data collection instrument with open and closed questions, prepared by the research author. This collection took place after the invitation to the patient, which was chosen at random in the waiting room of the multidisciplinary office, where they were provided with information about the research objective, benefits, and risks. Being the authorization signed, by signing the informed consent form.

Observing the ethical principles, the research was developed in accordance with CNS Resolution No. 466/12 of the Ministry of Health, with the approval of the Research Ethics Committee of the University Veiga de Almeida, with the opinion of No. 3,630. 142 \ 2019.

After data collection, they were typed and a spreadsheet was created with more relevant information in Word and Excel software, later tables were generated for descriptive analysis by percentage.

## Results

Table 1 shows the socio-demographic distribution of resistant hypertensive patients, with a predominance of females 70 (70%), elderly 77 (77%), with primary education 67 (67%), retired 43 (43%), with income of up to two minimum wages 33 (33%), residents of the outskirts of Cabo Frio 68 (68%).



Characterization of resistant hypertensive patients facing therapeutic adherence in coastal lowlands of Rio de Janeiro

Fabricio RD, Brancalhão LD, Ribeiro BBC, Koeppel GBO, Jesus PBR, Pereira BWS, Cerqueira LCN

**Table 1.** Sociodemographic distribution of resistant hypertensive patients seen at CADHI. Cabo Frio, RJ, Brazil, 2019 (N = 100)

| <b>Gender</b>                    | <b>n</b>   | <b>%</b>    |
|----------------------------------|------------|-------------|
| Male                             | 30         | 30%         |
| Female                           | 70         | 70%         |
| <b>TOTAL</b>                     | <b>100</b> | <b>100%</b> |
| <b>Age range</b>                 | <b>n</b>   | <b>%</b>    |
| 18 - 49 years                    | 6          | 6%          |
| 50 - 59 years                    | 17         | 17%         |
| 60 or more                       | 77         | 77%         |
| <b>TOTAL</b>                     | <b>100</b> | <b>100%</b> |
| <b>Education</b>                 | <b>n</b>   | <b>%</b>    |
| Illiterate                       | 8          | 8%          |
| Elementary School                | 67         | 67%         |
| High school                      | 20         | 20%         |
| University education             | 5          | 5%          |
| <b>TOTAL</b>                     | <b>100</b> | <b>100%</b> |
| <b>Occupation</b>                | <b>n</b>   | <b>%</b>    |
| Unemployed                       | 3          | 3%          |
| Retired                          | 43         | 43%         |
| From home                        | 25         | 25%         |
| Merchant                         | 5          | 5%          |
| Not registered                   | 1          | 1%          |
| Others                           | 23         | 23%         |
| <b>TOTAL</b>                     | <b>100</b> | <b>100%</b> |
| <b>Average family income R\$</b> | <b>n</b>   | <b>%</b>    |
| No fixed income                  | 8          | 8%          |
| From 1 to 2 minimum wages        | 43         | 43%         |
| From 3 to 4 minimum wages        | 27         | 27%         |
| Above 4 minimum wages            | 12         | 12%         |
| Not registered                   | 10         | 10%         |
| <b>TOTAL</b>                     | <b>100</b> | <b>100%</b> |
| <b>City of residence</b>         | <b>n</b>   | <b>%</b>    |
| Center                           | 28         | 28%         |
| Periphery                        | 68         | 68%         |
| Other cities                     | 2          | 2%          |
| Not registered                   | 2          | 2%          |
| <b>TOTAL</b>                     | <b>100</b> | <b>100%</b> |

In Table 2, regarding the clinical profile, there was an ancestry of individuals diagnosed with SAH more than 30 years ago 24 (24%), with associated comorbidities, the main one being Diabetes Mellitus 61 (61%), with overweight 32

(32%) and obesity II - severe 29 (29%), with major limitations regarding the control of daily blood pressure where 59 (59%) did not perform, with the main reason being the lack of a device that measures 32 (32%).

**Table 2.** Clinical distribution of resistant hypertensive patients treated at CADHI. Cabo Frio, RJ, Brazil, 2019 (N = 100)

| <b>Associated comorbidities</b> | <b>n</b>   | <b>%</b>    |
|---------------------------------|------------|-------------|
| Deny                            | 33         | 33%         |
| Diabetes                        | 61         | 61%         |
| ICC                             | 2          | 2%          |
| DRC                             | 2          | 2%          |
| AVE                             | 2          | 2%          |
| <b>TOTAL</b>                    | <b>100</b> | <b>100%</b> |
| <b>Time of diagnosis of SAH</b> | <b>n</b>   | <b>%</b>    |
| Less than 5 years               | 20         | 20%         |
| Up to 10 years                  | 11         | 11%         |
| Up to 20 years                  | 16         | 16%         |
| Up to 30 years                  | 21         | 21%         |
| Above 30 years                  | 24         | 24%         |
| Uninformed                      | 8          | 8%          |
| <b>TOTAL</b>                    | <b>100</b> | <b>100%</b> |
| <b>Blood Pressure Check</b>     | <b>n</b>   | <b>%</b>    |
| Yes                             | 41         | 41%         |
| Analog                          | 12         | 12%         |
| Digital                         | 29         | 29%         |
| No                              | 59         | 59%         |



**Characterization of resistant hypertensive patients facing therapeutic adherence in coastal lowlands of Rio de Janeiro**

Fabricio RD, Brancalhão LD, Ribeiro BBC, Koeppel GBO, Jesus PBR, Pereira BWS, Cerqueira LCN

|                           |            |             |
|---------------------------|------------|-------------|
| Lack of apparatus         | 32         | 32%         |
| Judges unnecessary        | 18         | 18%         |
| Forgetfulness             | 2          | 2%          |
| Only when you feel unwell | 5          | 5%          |
| Fear                      | 2          | 2%          |
| <b>TOTAL</b>              | <b>100</b> | <b>100%</b> |
| <b>BMI</b>                | <b>n</b>   | <b>%</b>    |
| Normal weight             | 21         | 21%         |
| Overweight                | 32         | 32%         |
| Obesity I                 | 11         | 11%         |
| Obesity II - Severe       | 29         | 29%         |
| Obesity III- Morbid       | 7          | 7%          |
| <b>TOTAL</b>              | <b>100</b> | <b>100%</b> |

In Table 3, regarding the analysis of data on pharmacological adherence, it can be identified that 83 (83%) use four antihypertensive drugs, the most common classes being: Angiotensin 68 blockers (29.4%), blockers calcium channel 51 (22.0%), beta-blockers 37 (16.0%), statins 37 (16.0%), diuretics 25 (10.8%), angiotensin-converting enzyme inhibitors 10 (4.3 %) and three (1.29%) vasodilators. It is worth mentioning that the number of drugs used overlaps the number of subjects, since a patient uses more than one medication.

In the routine analysis related to pharmacological therapy, it can be identified that 85 (85%) of the patients used the medications daily faithfully, 91 (91%) without reacting to it, with a small audience 15 (15%) who did not follow for reasons such as forgetfulness and lack of financial resources for acquisition. In the analysis of additional therapies to control blood pressure, 83 (83%) of the patients use only prescribed medications.

**Table 3.** Distribution of pharmacological adherence of resistant hypertensive patients seen at CADHI. Cabo Frio, RJ, Brazil, 2019 (N = 100)

|   |            |             |
|---|------------|-------------|
| <b>Number of antihypertensive drugs in use</b>        | <b>n</b>   | <b>%</b>    |
| 4 drugs   | 83         | 83%         |
| 5 or more   | 6          | 6%          |
| Not registered  | 11         | 11%         |
| <b>TOTAL</b>  | <b>100</b> | <b>100%</b> |
| <b>Description of drugs used</b>                      | <b>n</b>   | <b>%</b>    |
| Angiotensin receptor blockers                         | 68         | 29,4%       |
| Calcium channel blockers                              | 51         | 22,0%       |
| Beta blockers   | 37         | 16,0%       |
| Statins   | 37         | 16,0%       |
| Diuretics   | 25         | 10,8%       |
| Angiotensin-converting enzyme inhibitors              | 10         | 4,3%        |
| Vasodilators  | 3          | 1,29%       |
| <b>TOTAL</b>  | <b>231</b> | <b>100%</b> |
| <b>Adverse reactions</b>                              | <b>n</b>   | <b>%</b>    |
| No  | 91         | 91%         |
| Yes   | 9          | 9%          |
| Dizziness   | 3          | 3%          |
| Somnolence  | 2          | 2%          |
| Severe hypotension                                    | 2          | 2%          |
| Cough   | 2          | 2%          |
| <b>TOTAL</b>  | <b>100</b> | <b>100%</b> |
| <b>Adherence to the daily pharmacological routine</b> | <b>n</b>   | <b>%</b>    |
| Yes   | 85         | 85%         |
| No  | 15         | 15%         |
| <b>TOTAL</b>  | <b>100</b> | <b>100%</b> |
| <b>Additional therapies for BP control</b>            | <b>n</b>   | <b>%</b>    |
| No  | 83         | 83%         |
| Yes   | 17         | 17%         |
| <b>TOTAL</b>  | <b>100</b> | <b>100%</b> |

In Table 4, regarding non-pharmacological treatment, there was a high incidence of individuals who do not have control of their weight through routine weighing 66 (66%), thus not controlling gains or losses. Most patients 74 (74%) have a prescribed diet, however 59 (59%) report not following the proposed diet plan; Most also say that they

have a diet with salt control 78 (78%), showing a divergence regarding the results about food conduction. It was also identified that 74 (74%) of the population are sedentary, with daily water intake of 1-2 L in 38 (38%), followed by up to 1 L in 35 (35%) and above 2 L in 27 (27%). Most non-smokers 96 (96%) and non-drinkers 86 (86%). As for sleep,



66 (66%) have a satisfactory sleep pattern, with a small portion of 34 (34%) that diverge due to insomnia, frequent urination, and pain at night. 50 (50%) declare to suffer stress.

**Table 4.** Distribution of non-pharmacological adherence of resistant hypertensive patients seen at CADHI. Cabo Frio, RJ, Brazil, 2019 (N=100)

| <b>Weight control frequency</b>            | <b>n</b>   | <b>%</b>    |
|--|------------|-------------|
| Often                                      | 34         | 34%         |
| Rarely                                     | 66         | 66%         |
| <b>TOTAL</b>                               | <b>100</b> | <b>100%</b> |
| <b>Diet</b>                                | <b>n</b>   | <b>%</b>    |
| No   | 59         | 59%         |
| Yea  | 41         | 41%         |
| With main restriction Sugar                | 16         | 16%         |
| With main restriction Sodium               | 10         | 10%         |
| With main fat restriction                  | 9          | 9%          |
| With the main restriction the Carbohydrate | 6          | 6%          |
| <b>TOTAL</b>                               | <b>100</b> | <b>100%</b> |
| <b>Salt consumption</b>                    | <b>n</b>   | <b>%</b>    |
| Little to taste                            | 78         | 78%         |
| Medium to taste                            | 21         | 21%         |
| A lot to taste                             | 1          | 1%          |
| <b>TOTAL</b>                               | <b>100</b> | <b>100%</b> |
| <b>Feeding guidelines</b>                  | <b>n</b>   | <b>%</b>    |
| Yes  | 74         | 74%         |
| No   | 26         | 26%         |
| <b>TOTAL</b>                               | <b>100</b> | <b>100%</b> |
| <b>Average daily water intake</b>          | <b>n</b>   | <b>%</b>    |
| Up to 1 L                                  | 35%        | 35%         |
| 1 - 2 L                                    | 38%        | 38%         |
| Above 2 L                                  | 27         | 27%         |
| <b>TOTAL</b>                               | <b>100</b> | <b>100%</b> |
| <b>Smoking</b>                             | <b>n</b>   | <b>%</b>    |
| Yes  | 4          | 4%          |
| No   | 96         | 96%         |
| <b>TOTAL</b>                               | <b>100</b> | <b>100%</b> |
| <b>Ethics</b>                              | <b>n</b>   | <b>%</b>    |
| No   | 86         | 86%         |
| Yes  | 14         | 14%         |
| Everyday                                   | 1          | 1%          |
| Once a week                                | 1          | 1%          |
| Two to three times a week                  | 3          | 3%          |
| Rarely                                     | 9          | 9%          |
| <b>TOTAL</b>                               | <b>100</b> | <b>100%</b> |
| <b>Stress</b>                              | <b>n</b>   | <b>%</b>    |
| Yes  | 50         | 50%         |
| No   | 50         | 50%         |
| <b>TOTAL</b>                               | <b>100</b> | <b>100%</b> |
| <b>Adequate sleep pattern</b>              | <b>n</b>   | <b>%</b>    |
| Yes  | 66         | 66%         |
| No   | 34         | 34%         |
| <b>TOTAL</b>                               | <b>100</b> | <b>100%</b> |
| <b>Physical activity</b>                   | <b>n</b>   | <b>%</b>    |
| No   | 74         | 74%         |
| Yes  | 26         | 26%         |
| Walk                                       | 16         | 16%         |
| Water aerobics                             | 3          | 3%          |
| Pilates                                    | 4          | 4%          |
| Others                                     | 3          | 3%          |
| <b>TOTAL</b>                               | <b>100</b> | <b>100%</b> |

Discussion



The demographic and epidemiological transition that Brazil has gone through has changed the population's age pyramid, leading to changes in the incidence and prevalence of Chronic Non-Communicable Diseases (NCDs), due to the physiological changes in the aging process. One of the NCDs that has a great relationship with the elderly population is Systemic Arterial Hypertension, with high prevalence and low control, directly impacting the quality of life of these individuals and the costs related to health. This factor is causally related to the cardiovascular changes presented by the aging process, where the elderly person has an increased vascular resistance, thus raising their pressure levels in a sustained manner<sup>11</sup>.

As for gender, there was an expressive number of women<sup>12</sup>. What has changed over time in this profile, where the prevalence of people with SAH was men<sup>3</sup>. These changes in the epidemiological aspects of the population must be considered for the implementation of measures aimed at improving adherence and disease management.

Another relevant aspect in the control of the disease is the level of education, where in the present study most individuals had low levels, which is already described in the literature as a factor that can interfere with treatment adherence, as it has a direct correlation with the perception of the disease and self-care<sup>13</sup>.

In the same way, income is also considered an important factor for adherence to treatment, as it directly implies better access to health care<sup>14</sup>, in addition to enabling the purchase of used medications, usually in large quantities, which are not always available through the public system. It can be seen in the survey that the participants had a relatively low income for the economic standards currently established, implying other limitations in terms of adherence. Another relevant aspect is that the majority live in neighborhoods in the periphery where access is less compared to neighborhoods in the center.

Some studies refer to the high prevalence of individuals who have two or more NCDs concomitantly, which may be the cause of SAH or the complication associated with the disease. In the analysis of comorbidities, most respondents have, in addition to Hypertension, Diabetes de Mellitus (DM). There is a great relationship between the patient with SAH and developing DM, this can be explained by the risk factors that present themselves in a similar way in both pathologies, such as eating and living habits<sup>15</sup>. Therefore, the work of prevention and awareness with the objective of generating a change in these habits, is a fundamental tool to reduce the risks and costs of assistance generated by the combination of these diseases.

To modify the health-disease process of chronic patients, it is necessary for chronic patients to adhere to the proposed therapy, be it pharmacological or non-pharmacological, since they influence the management of the disease, improve life, reduce morbidity and mortality<sup>3</sup>.

Adherence to pharmacological treatment involves different elements that constitute this process: the individual, the treatment, the disease, the services, the health professionals, as well as the social and cultural environment of the user and his family. For adherence to be

achieved, alignment and organization of these elements are necessary<sup>16,17</sup>. In the present study, it was observed that hypertensive individuals have a certain adherence to the pharmacological treatment, a factor that can directly interfere in the pressure control of this population. This result may have been significant, since the research scenario is a reference center for resistant hypertensive patients, so the perception that these services have direct and periodic monitoring of the patient is extrapolated, thus facilitating pharmacological management.

In a study carried out with 392 hypertensive patients in a UBS in a city in the south of Brazil, it was identified that 44.90% would not adhere to drug treatment, and of these, 88.02% did not present pressure values at desirable levels, in addition, individuals who did not adhere to the treatment were 9 (95% CI 6.74 - 12.07) times more likely to have uncontrolled blood pressure, that is, the antihypertensive agents used in the treatment of hypertensive patients allow not only the reduction of tension levels, but also reducing the rate of fatal and non-fatal cardiovascular morbid events<sup>18</sup>.

The pharmacological management of hypertensive patients involves drugs that reduce blood pressure to baseline levels, as well as drugs that reduce morbidity and mortality associated with the disease. The most used calcium channel antagonists, diuretics, adrenergic inhibitors, coronary vasodilators, angiotensin-converting enzyme inhibitors<sup>3</sup>. This corroborates in part with the data made available in the research, where the main drugs used were angiotensin receptor antagonists, calcium channel antagonists, statins, beta blockers, beta I inhibitors, angiotensin converting enzyme inhibitors, potassium-sparing diuretics, antiarrhythmic agents, coronary vasodilators, antiplatelet agents, and benzodiazepines.

Complete assistance to resistant hypertensive patients is related to their adherence not only to pharmacological treatment, but also non-pharmacological treatment. The latter has great relevance in controlling blood pressure levels, thus stabilizing the disease and reducing health problems. Non-pharmacological adherence involves weight control, adequate dietary pattern, decreased consumption of salt and alcohol, smoking cessation and physical exercise<sup>19</sup>.

In the study, it was identified that the majority of those surveyed are overweight and obese, it is worth remembering that weight loss is an important measure in the control of blood pressure, because in general it is associated with the reduction of visceral fat, which is the highest cardiovascular risk. Small reductions in weight (around 5% of the initial weight) result in significant drops in blood pressure. A fundamental way for weight loss and obesity control is adherence to physical activity, as physical inactivity becomes harmful to organic balance<sup>20,21</sup>.

Another essential guide for the management of hypertensive patients is the reduction of salt consumption. Several studies reveal a relationship between salt intake and blood pressure, since salt increases the circulatory volume, thus increasing the pressure in the arterial wall<sup>3</sup>. Food is an essential condition for the maintenance of human life, and is





fundamental for the promotion, maintenance and / or recovery of health<sup>22</sup>. In the present study, most respondents reported having a low salt intake. It is important to note that data collection was carried out by means of a questionnaire, being restricted to the answers generated by them. In this context, it cannot be said that the consumption of salt is truly within the necessary standards.

According to the Brazilian Society of Cardiology, another important step towards treatment effectiveness is to encourage a total or significant reduction in the use of alcohol and smoking cessation. In the research participants, the majority do not have smoking and drinking habits, thus contributing to the reduction of modifiable causes of death and the effectiveness of the therapy. The importance of more targeted research regarding alcohol and tobacco consumption habits in this population is emphasized, as in the research many belong to the elderly population that is the most affected by chronic diseases and therefore seeks health services<sup>21,23</sup>.

Another important point was the significant number of participants who declare themselves with a high level of stress, which becomes a relevant factor for the conduction of psychosocial changes in this population, considering that stress can cause significant damage also to the patient's physique.

Among the limitations of the study, it was perceived the difficulty to find the social and clinical data of the patients in the medical records.

The study's contributions span the academic and professional fields of Nursing, bringing quantitative data that will be important in the preventive approach to health promotion actions, as well as guidelines on quality of life to simplify the stratification of measures for adherence to drug treatment of chronic diseases.

## Conclusion

It was found that the sociodemographic and clinical profile prevalent in patients treated at CADHi is elderly, female, with elementary education, retired, with an income of up to two minimum wages, residents of the outskirts of the municipality of Cabo Frio, diagnosed with SAH for over 30 years and affected by other comorbidities, the main one being Diabetes de Mellitus.

Adhered to pharmacological therapy, but with little routine control of blood pressure levels because they do not have an adequate device. They use up to four antihypertensive drugs; as for non-pharmacological goals, most have some degree of obesity, physical inactivity, without routine weight control, low adherence to the prescribed diet and high level of stress. In conclusion, the nurse's central role as a member of the multidisciplinary committee, through critical reasoning and decision-making.

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