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EVALUATION OF THE HYPERTENSION INDEX IN THE POPULATION OF THE POVOADO DE AREIA BRANCA IN THE MUNICIPALITY OF SANTANA DO IPANEMA-AL

Evaluation of the index of hypertension in the population of the village of Areia Branca in the municipality of Santana do Ipanema-AL

Cícero da Silva dos Santos
Jaciaria França Balbino dos Santos
Sebastião da Rocha França
Delma Holanda de Almeida

SUMMARY
Hypertension is a chronic, non-infectious disease popularly called “high blood pressure” and acts silently. Many people become hypertensive before the age of 60, causing various health problems, such as stroke, heart attacks and cardiorespiratory diseases. From this perspective, the present work aimed to carry out a survey of the lifestyle habits of hypertensive and non-hypertensive individuals aged between 40 and 70 years and identify, through all the answers obtained, what is causing people to become hypertensive at such an early age. The research was carried out in the village of Areia Branca and neighboring sites in the municipality of Santana do Ipanema. The data collection instrument was a questionnaire constructed based on risk factors for hypertension, seeking information regarding the lifestyle habits of these individuals, as well as their level of knowledge regarding the importance of such factors for controlling the disease. The sample was made up of 100 individuals of both sexes, 50 of whom were hypertensive and 50 were non-hypertensive. The analysis criteria for the collected data were included in an Excel spreadsheet, for better understanding. The results obtained showed that there are factors that can cause the disease, but among those that were included in the spreadsheet we can highlight some of the most relevant ones, including high salt consumption, excess caffeine, and frequent intake of alcoholic beverages, in addition lack of physical exercise is also a contributing factor.
Key words: Hypertension; Factors; Consequences.

ABSTRACT
Hypertension is a chronic and non-infectious disease popularly called “high blood pressure” and acts silently. Many people become hypertensive before age 60, causing several health problems, such as cerebrovascular accident (CVA), heart attacks and cardiorespiratory diseases. In this perspective, the present work aimed to carry out a survey of the lifestyle habits of hypertensive and non-hypertensive individuals aged between 40 and 70 years and identify through all the answers obtained what is causing people to be hypertensive so early. The research was carried out in the Areia Branca village and neighboring sites in the municipality of Santana do Ipanema. The data collection instrument was a questionnaire built based on risk factors for hypertension, seeking information regarding these individuals' lifestyle habits, as well as their level of knowledge about the importance of such factors for disease control. The sample was built by 100 individuals of both sexes, 50 hypertensive and 50 non-hypertensive. The analysis criteria of the collected data were included in an Excel spreadsheet, for a better understanding. The results obtained showed that there are factors that can cause the disease, but among those that were placed in the spreadsheet, we can highlight

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some that are more relevant, including high salt consumption, excess caffeine, and frequent alcohol intake, in addition to lack of exercise is also a contributing factor.
Keywords: Hypertension; Factors; Consequences.

1. INTRODUCTION

Currently, hypertension is one of the biggest public health problems, popularly called "High Blood Pressure", it is a chronic and non-infectious disease. Prolonged elevation of blood pressure damages blood vessels throughout the body, causing thickening and loss of elasticity of arterial walls and increased peripheral vascular resistance in the affected vessels. (POTTER and PERRY, 2001; SMELTZER and BARE, 2006 apud RIBEIRO and ARAÚJO, [200-]). According to Varellas (2017), presenting symptoms only in very advanced stages or when there is a sudden and exaggerated increase, thus acting silently.

In antiquity well before Christ. "The ancient Egyptians already knew about the origin of the heartbeat and the pumping function of the heart. The observation of the vascular pulse is very old while the measurement of blood pressure only occurred centuries later." (KOHLMANN; KOHLMANN JR, 2011, p. 6). According to Andrade Lima and Smithfield (1986*apud*LUNA, 1999, p. 6) the first experimental measurement of blood pressure was made on a horse, in 1711, by Stephen Halles, in England. In human beings, the record is that the first accurate measurement of blood pressure took place in 1856, during a surgical procedure by J. Faivre. (BOOTH J. 1977 apud INTROCASO, 1998, p. 79).

Hypertension "is one of the main risk factors for cardiovascular diseases, which in the last decade represented the main causes of mortality worldwide" (SILVA; OLIVEIRA; PIERIN, 2016, p. 52).

With the increase in consumption by Brazilian families, before the economic crisis that devastated the country, people's diet fell outside of health standards. This led to several problems such as high cholesterol, diabetes and a greater number of hypertensive people. Data from VIGITEL (surveillance system for risk and protective factors for chronic diseases by telephone survey), in 2016 the number of people who were diagnosed with hypertension was 25.7%, compared to 2006 which was 22.5% if there was an increase of 14.2% (BRASIL, 2016). In the village of Areia Branca in the municipality of Santana do Ipanema, Community Health Agents (ACS) found a very high rate of people over 40 years of age with hypertension. With this increase in people with hyperdia, the secretariat

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municipal health department in the city, has not yet reached the conclusion that, or which factor can cause early hypertension.

Health campaigns are being carried out to guide people to have healthy eating habits, ensuring a better quality of life. As the number of hypertensive people has increased, a study would be necessary, aimed at improving revolutionary concepts that can raise awareness among the population to have good health and social well-being. Therefore, the first step is to instruct, guide and encourage physical sports such as walking, going to the gym, healthy eating, etc. In these terms, we will achieve that everyone has a better quality of life.

Therefore, this work aims to analyze the lifestyle of the studied group in diagnosed cases of hypertension, in addition to listing the risks and complications that hypertension can bring to people's lives.

2 THEORETICAL FOUNDATION

Arterial hypertension is an important risk factor for diseases resulting from atherosclerosis and thrombosis, which are predominantly caused by cardiac, cerebral, renal and peripheral vascular involvement. It is responsible for 25 and 40% of the multifactorial etiology of ischemic heart disease and stroke, respectively (FUCHS, DUNCAN 2004).

For Almeida, Lima and Costa (2003 and 2009) in Brazil, cardiovascular diseases are responsible for 33% of deaths with known causes. Furthermore, these diseases were the leading cause of hospitalization in the public sector between 1996 and 1999, and accounted for 17% of hospitalizations of people aged between 40 and 59 years and 29% of those aged 60 or over.

Based on the growing rate of chronic non-communicable diseases in childhood and adolescence, the WHO has been proposing, since 2004, the adoption of the Global Strategy on Healthy Eating, Physical Activity and Health, which aims to reduce risk factors for chronic non-communicable diseases associated with unhealthy diet and low levels of physical activity (WORLD HEALTH ORGANIZATION 2003). In view of this, the health system has been organized in an attempt to facilitate interventions aimed at promoting a healthy lifestyle, using the school as one of the strategic spaces for diagnosis, as well as encouraging

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formation of healthy eating habits and the practice of regular physical activities. This is an initiative that was adopted by the Brazilian Ministry of Health, constituting one of the guidelines of the country's National Food and Nutrition Policy (MINISTÉRIO DA SAÚDE 2000).

In developed countries, Collins (1990) has observed a decrease in mortality and an improvement in health levels through the control of arterial hypertension. Therefore, the development of measures with the aim of life modifications and therapeutic control is necessary to reduce the levels of the disease. The existence of two population-based studies in the city of Pelotas made it possible to verify the trend of the disease. Therefore, a specific study of the prevalence of arterial hypertension in younger age groups is suggested.

There are few studies in Brazil and around the world that describe adherence rates among hypertensive patients. Studies are often not comparable, as they address different profiles of individuals and use different methods to identify adherence. In recent years, therapeutic adherence has become one of the biggest problems faced in medical practice due to its complexity. Around 40% to 60% of patients do not use the prescribed medication (HIGGINS 2004).

Giorgi (1985), in a study carried out at the Arterial Hypertension League of the Hospital das Clínicas of the Faculty of Medicine of the University of São Paulo (HC-FMUSP), in the 1980s, it was found that 33.5% of patients attended only a consultation, with younger males taking it worse. After ten years, with there being a fixed doctor for each patient, the dropout rate was reduced to 25%, but only 41% of patients attended four scheduled appointments (KRASILCIC 1996).

3 METHOD

This is applied research of an exploratory and descriptive nature. The research was held in June 2017, in the village of Areia Branca and surrounding sites, located east of the city of Santana do Ipanema Alagoas, and on the border with the municipality of Dois Riachos – AL.

A total of 100 (one hundred) people participated in the research, 50 (fifty) hypertensive and 50 (fifty) non-hypertensive, using a semi-structured questionnaire as a data collection instrument with a total of 22 questions addressing issues

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such as: lifestyle habits, medical care, stress, whether you have insomnia, whether or not you practice physical exercise, whether you use legal drugs such as cigarettes and alcoholic beverages by answering YES (Y) or NO (N). For the theoretical foundation, a bibliographical survey was carried out using articles in the Google Scholar database. The data was analyzed and organized into tables and graphs for a clearer understanding of the results obtained.

4 RESULTS AND DISCUSSION

The table below shows the respective questions asked to the public of this research. In the table below, of the 100 interviewees, 50 are hypertensive and the other 50 are not hypertensive.

Table 1 – Questionnaire applied to the studied public

	THEY ANSWERED YES TO THE QUESTIONS	50 HYPERTENSIVE	50 NO HYPERTENSIVE
1	Consumes alcoholic	11	39
two	beverages Smokers	4	35
3	Patients with chronic diseases	5	10
4	Diabetics	8	6
5	Do you undergo medical follow-up annually?	24	48
6	Have you had any exams in the last six	10	22
7	months? Take continuous medication	20	22
8	Do you eat well?	22	42
9	Lead a stressful life day in and day out	10	24
10	When you feel stressed, do you use any type of drug?	4	4
11	Have you ever had a change in blood pressure?	14	8
12	Have you had any hospitalizations in the last six months? Do	4	1
13	you consume a lot of coffee?	12	23
14	Do you practice physical exercise? Do	12	12
15	you think you are overweight? Do you	10	14
16	eat a lot of red meat? Do you use salt	10	12
17	properly?	20	24
18	Do you look for the PSF at least once a year? Have you ever	12	33
19	had a heart attack?	two	3
20	Have you ever had a stroke?	1	0
21	Do you have guidance on the risks of hypertension?	16	22
22	Are you tired?	two	1

Source: Authors 2021

For a better analysis, the graph below shows the number of non-hypertensive people who consume alcohol, smoke, consume coffee and red meat, the results are

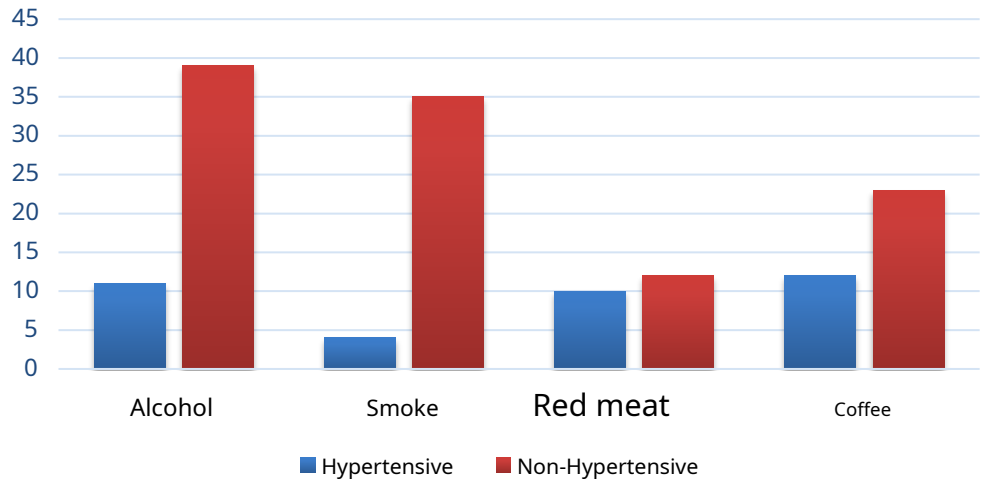
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higher than those who are already hypertensive. However, it is clear in relation to hypertensive patients that not everyone follows medical advice and the care they should take to ensure a better quality of life.

As the data in the table above shows, 39 of the 50 hypertensive people interviewed, that is, 78% consume alcoholic beverages. Pinheiro (2017) says that daily alcohol consumption of more than 2 glasses of wine or 2 glasses of beer, or the alcohol equivalent of any other drink, increases the risk of hypertension by 2x.

Coffee and tobacco are two villains that put the health of the population at risk. Generally, smokers look for the famous "coffee" in stressful situations, as shown in (table 3) where 48% of non-hypertensive people end up feeling stressed on a daily basis. Although the minority of both interviewees responded that they do not use any type of drug, but cigarettes are a non-illicit drug like marijuana, they are legal. However, nicotine, a substance present in them according to Vieira (2013), acts on the cardiovascular system, raising blood pressure.

Graph 1 – Consumption of alcohol, coffee, red meat and cigarette use among hypertensive and non-hypertensive patients.

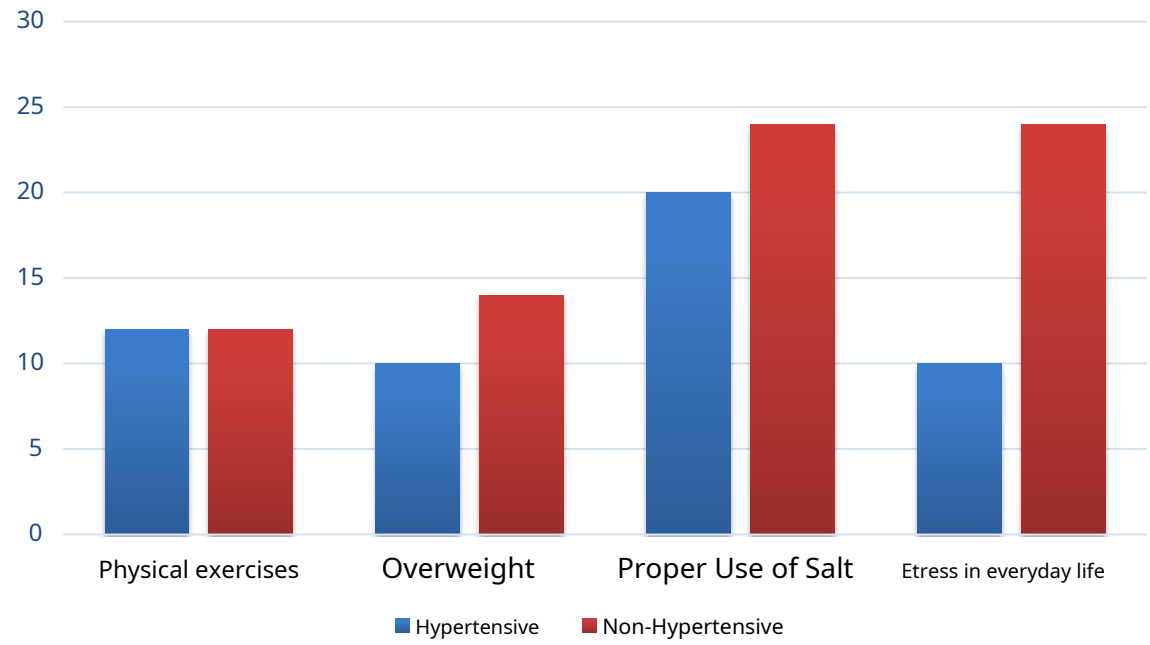


Source: Authors 2021.

White meat is most consumed by the population interviewed, but red meat remains on the menu. Red meat contains more saturated fats than white meat; therefore, its consumption should not be exaggerated either. These saturated fats increase the release of vasoconstrictor substances in the blood, as shown by Silva and Souza (2004) that these substances can result in an increase in pressure, at least acutely.

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Graph – 2 Risk factors that in the long term can bring harm to hypertensive and non-hypertensive patients



In the graph above we have the list of interviewees and, it is alarming to see that despite having a certain positive result among hypertensive and non-hypertensive patients who answered YES to the appropriate use of salt, in (table 4) it shows that unfortunately 60% of hypertensive and 52 % of non-hypertensive patients said they like well-seasoned food (with salt). According to PINHEIRO (2017), people who ingest more than 6g of salt per day (or 2.3g sodium) are at greater risk of having high blood pressure.

Not everyone is in the habit of practicing physical exercise and, among those who responded positively, they walk and some reported cycling, but this is not often. Therefore, the sedentary lifestyle of some people, combined with an unhealthy diet, causes them to become overweight and these are factors that lead people to hypertension.

It is recommended to practice physical exercises, as they are one of the important factors in the quality of life of both parties, both hypertensive and non-hypertensive. According to Ferreira and Bragaria (2011), the suggested exercises should be predominantly aerobic, such as walking, running, swimming, cycling and dancing, with light to moderate intensity.

Another worrying factor is the lack of information about the health problems that hypertension can cause to sick patients, in (table 3) around 32% of hypertensive patients surveyed have knowledge about the disease and in (table 4) 56% of who are not hypertensive do not have adequate guidance about the disease, leading a life in a

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risky when it comes to hypertension. 24% of hypertensive patients who seek out the PSF, a small percentage, where everyone has to seek out the Basic Health Unit.

Regarding a heart attack (table 3) 4% of those with hypertension responded that they had already had a heart attack and the most worrying thing is that a higher percentage of those without hypertension, 6% responded that they had already had the same problem. Those who have had a stroke are 2% of those with hypertension and 0% of those who are not hypertensive.

FINAL CONSIDERATIONS

Therefore, with these results obtained, we can state that there are several aggregate factors that contribute to hypertension, such as high consumption of alcoholic beverages, misuse of salt, cigarette use, consumption of red meat, lack of physical exercise , excessive coffee consumption, poor diet, among other factors.

Stress is also bothering hypertensive people in terms of their good quality of life, causing diabetes and chronic diseases such as cholesterol and kidney failure in the future.

Then another worrying factor is the lack of guidance for those who are not yet hyperdia, leading these people to error in precautionary mode. The lack of physical exercise has also increased the number of overweight people, leading them to later acquire the disease in question.

We can say, through other research already carried out, that to minimize these cases of high blood pressure, the population needs to change their eating and physical habits and have more information about the consequences it can cause if they are hypertensive or not. Constant intervention strategies must be developed, encouraging people to make lifestyle changes and appropriate treatment.

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