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ANALYSIS OF DATA PREPARED BY IBGE ON DIAGNOSES OF CVD (CARDIOVASCULAR DISEASES) OF INTENSE DEGREE

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Abstract: Health has been considered by many, something valuable for humanity, because in the absence of it, much bigger problems can be generated and one of them refers to cardiovascular diseases, which unfortunately has grown a lot in recent times. The heart, as well as the rest of the organs that make up the human body, has its importance, and that is precisely why one must have a very careful look at its care. In this sense, this article sought to establish an analysis, through data presented by the Brazilian Institute of Geography and Statistics, IBGE, the proportion of patients, specifically from 18 years of age onwards, who were affected by some cardiovascular disease. The methodology adopted for this article was a bibliographic study available in the public domain on the internet. The result arrived at is that rural areas of the Northeast region are places with higher incidences and differences between male and female people.
Keywords: Cardiovascular diseases; statistic; severe diagnosis.

INTRODUCTION

The world we see today is completely different from earlier times, where the tranquility and peace of the countryside was sought in the bucolic. However, with technological advances and a more accelerated, frenetic and chaotic life, it has been revealed to the man that the world has evolved, and what must be done is to adapt it in a way that can resume the pseudo tranquility of yesterday.

With the result of technology, whether computerized or not, came the bitter taste of the problems caused by the enslavement processes and this began to directly affect their health.

This way, over time, man spent accumulating problems, specifically health, as he did not look at himself as a machine that needs constant revisions or perform functions because his body is already weakened and worn out.

The aim of these initial reflections is that human beings need to constantly take care of their health, because it is through it that everything around them works, primarily their own organism, which is said to be one of the most sensitive things in the world, that requires constant care.

On the other hand, this is not how the situations are happening, as we see many people getting sick easily, and conversely, people with treatment difficulties due to their own health status. And one of the examples that illustrate this scenario is the number of patients who, for example, have heart problems (the main focus of this research), this makes patients rethink their attitudes.

In view of the above, the objective of this course conclusion work is to analyze data regarding the proportion of patients aged 18 years and over who have diagnoses of heart disease, in addition, a theoretical study on the subject of CVD is necessary(cardiovascular diseases).

DEFINITION OF CVD (CARDIOVASCULAR DISEASES)

In the quest to define what a cardiovascular disease is, according to Lima (2017) "they are a set of problems that affect the heart and blood vessels, causing diseases and serious complications to the health of the person, such as heart attack, heart failure, arrhythmias, stroke or other types of changes in blood circulation."

According to the World Health Organization, cardiovascular diseases are classified as:

- Cardiovascular diseases are a group of diseases of the heart and blood vessels and include:

- Coronary heart disease – disease of the blood vessels that supply the heart muscle;
- Cerebrovascular disease – disease of the blood vessels that supply the brain;
- Peripheral arterial disease – disease of the blood vessels that supply the upper and lower limbs;
- Rheumatic heart disease – damage to the heart muscle and heart valves due to rheumatic fever, caused by streptococcal bacteria;
- Congenital heart disease – malformations in the structure of the heart existing from the moment of birth;
- Deep vein thrombosis and pulmonary embolism – blood clots in the veins of the legs, which can become dislodged and move to the heart and lungs. (World Health Organization, 2017)

As it was seen in the above quote, cardiovascular diseases have several types, all of which if not taken care of can be lethal, the most common manifestation is heart attacks, that is, infarction (see Figure 1) and strokes, according to the WHO (2017).) "is the accumulation of fatty deposits on the inner walls of blood vessels that supply the heart or brain.

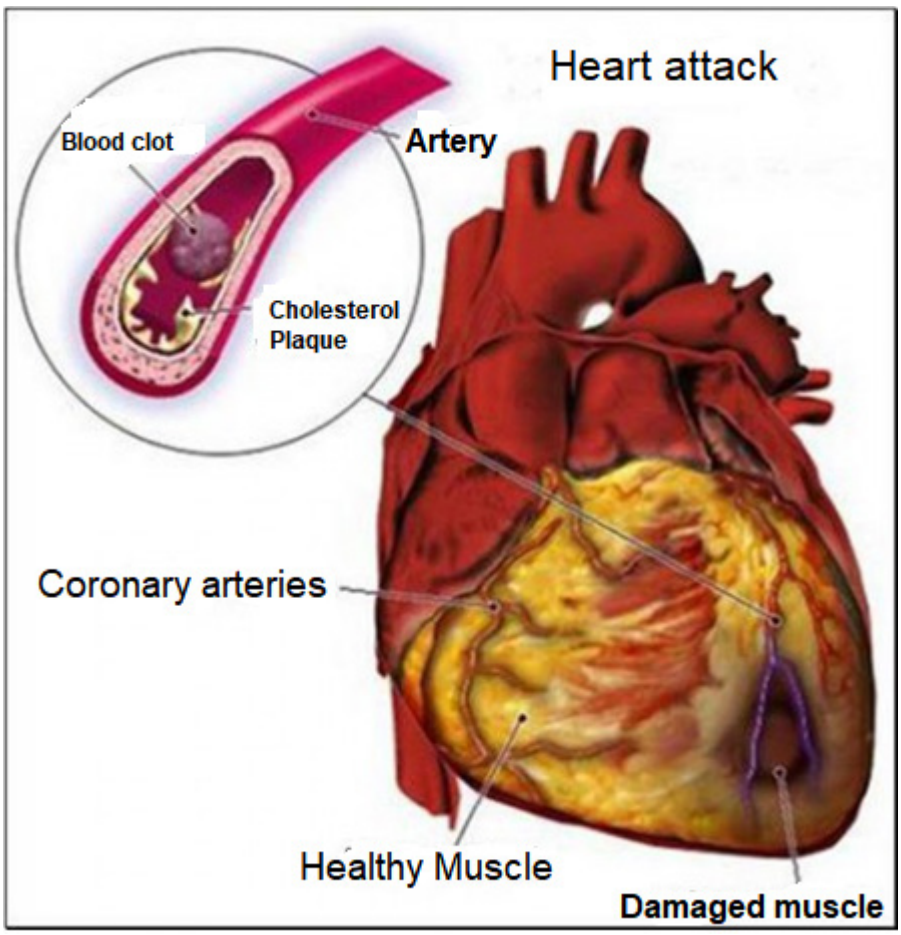

Figure 01: Characteristics of the infarction.

Source: http://saude.culturamix.com/blog/wp-content/gallery/doencas-que-afetam-o-coracao-2/doencas-que-afetam-o-coracao-3.jpg.

Strokes can also be caused by bleeding into blood vessels in the brain or from blood clots." The main symptoms are "pain or discomfort in the chest, arms, left shoulder, elbows, jaws and back" (WHO, 2017). Stroke has the following symptoms:

- Numbness in the face, arms or legs, especially on one side of the body
- Confusion, difficulty speaking or understanding;
- Difficulty seeing with one or both eyes;
- Difficulty walking, dizziness, loss of balance or coordination;
- Severe headache with no apparent cause; and
- Fainting or unconsciousness. (WHO, 2017)

Therefore, factors such as sedentary lifestyle, tobacco consumption, diets that are prescribed and ingested inappropriately, as well as the abusive use of alcohol. There are other important factors that can lead a patient to develop a cardiovascular disease that according to the WHO "They are a reflection of the main forces that govern social, economic and cultural changes – globalization, urbanization and an aging population. Other determinants of these illnesses include poverty, stress and hereditary factors."

Regarding the treatment, it can be done in two ways.

Medications	Surgical Operations
Aspirin Beta blockers Angiotensin converting enzyme inhibitors Statins	Cardiac revascularization surgery Balloon angioplasty (in which a small balloon-shaped device is placed in a blocked artery to reopen it) Heart valve repair and replacement Heart transplant Artificial heart implantation

Figure 2 - Treatments.

Source: OMS (2017).

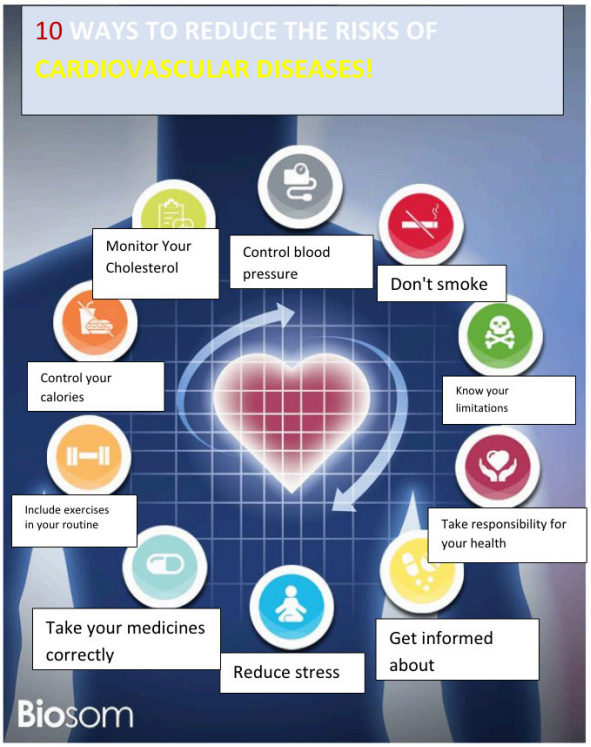

Figure 03: Reduction of cardiovascular diseases.

Source: https://biosom.com.br/blog/wp-content/uploads/2015/12/doencas-cardiovasculares-3.png

What can be observed is that cardiovascular diseases have increased, both in Brazil, which according to the Ministry of Health (2017) more than 300,000 people suffer heart attacks and 30% of cases are fatal, and in the world, about 17 million have been victims of coronary heart disease including heart attacks, so we must understand that there is a need for greater awareness regarding the risk of heart disease than according to WHO facts and data

- Cardiovascular diseases are the leading cause of death in the world: more people die annually from these diseases than from any other cause.
- An estimated 17.7 million people died from cardiovascular disease in 2015, representing 31% of all deaths globally. Of these deaths, an estimated 7.4 million are due to cardiovascular disease and 6.7 million are due to stroke.

- More than three-quarters of deaths from cardiovascular disease occur in low- and middle-income countries.
- Of the 17 million premature deaths (people under 70 years of age) from chronic noncommunicable diseases, 82% occur in low- and middle-income countries and 37% are caused by cardiovascular diseases.
- Most cardiovascular diseases can be prevented by addressing behavioral risk factors – such as tobacco use, unhealthy diets and obesity, lack of physical activity and harmful use of alcohol – using strategies for the general population.
- For people with cardiovascular diseases or at high cardiovascular risk (due to the presence of one or more risk factors such as hypertension, diabetes, hyperlipidemia or an established disease), early diagnosis and treatment, through counseling services or appropriate management, is essential. of medicines.

METHODOLOGY

The study here intends to analyze data from medical diagnoses of heart disease that has an intense degree and limitations in usual activities. The data are from the Brazilian Institute of Geography and Statistics (IBGE), prepared in 2013, with an informative quantitative approach. Questions such as proportions, lower and upper limits were evaluated with both male and female criteria.

The survey profile counts data from urban and rural areas, with data from the North, Northeast, Midwest, South and Southeast regions and their respective states, and interviewed over 6.1 million people over 18 years of age. This research was presented in a document "National Health Survey – Perception of health status, lifestyles, and chronic diseases" developed by IBGE in partnership with the Oswaldo Cruz Foundation, Ministry of Health and Ministry of Planning, Budget and Management. (Figure 04).

DISCUSSIONS

As we saw in the aforementioned IBGE table, in relation to the index, people who live in rural areas presented higher data in relation to the population surveyed in urban areas, so we see that in rural areas in most parts of the country it does not happen, because the inexistence of health posts makes any sign of symptoms difficult, let alone an accurate diagnosis or prevention.

Regarding the regions, we see that the statistics of the Northeast region are higher, because they have characteristics. Some factors would be the precariousness of medical care, lack of hospital structure and geographical distance from certain regions. In addition, the Northeast region presents factors that prevent the population is the lack of basic sanitation.

Another factor that fluctuated in the data presented were differences between the indices shown between males and females, this draws attention mainly to the upper limits that are quite different between both sexes.

Below we see a bit of reality and the difference between the sexes, as well as the configuration of the problems generated by cardiovascular diseases. (Figure 3).

Table 6.29.1.1 - Proportion of people aged 18 years and over who report a medical diagnosis of heart disease and have an intense or very intense degree of limitations in their usual activities due to heart disease, by sex, with an indication of the confidence interval than 95%, according to Major Regions, Federation Units and household status - 2013

Major Regions Federation Units and home situation	Proportion of people aged 18 years and over who report a medical diagnosis of heart disease and have an intense or very severe degree of limitations in usual activities due to heart disease (%)								
	Total			Gender					
				Male			Feminine		
	Proportion	Confidence Interval of 95%		Proportion	Confidence Interval of 95%		Proportion	Confidence Interval of 95%	
		Inferior limit	Upper limit		Inferior limit	Upper limit		Inferior limit	Upper limit
Brazil	**13,5**	**10,8**	**16,2**	**13,3**	**9,6**	**17,0**	**13,6**	**10,0**	**17**
Urbana	13,2	10,4	16,0	13,1	9,2	16,9	13,3	9,6	17
Rural	15,8	5,8	25,8	15,1	3,3	26,9	16,5	6,3	26
North	**16,4**	**6,6**	**26,2**	**10,5**	**3,9**	**17,1**	**20,6**	**5,2**	**36**
Rondônia	16,9	5,3	28,5	11,4	0,0	29,5	21,6	4,2	39
Acre	19,4	5,9	33,0	28,6	4,1	53,1	12,6	0,0	27
Amazonas	6,6	0,0	14,2	4,2	0,0	12,7	7,7	0,0	18
Roraima	21,5	0,0	43,0	33,8	0,7	66,9	5,1	0,0	12
Pará	20,2	0,0	44,0	7,3	0,0	18,0	28,0	0,0	62
Amapá	5,2	0,0	11,3	6,6	0,0	15,9	3,5	0,0	10
Tocantins	21,7	3,3	40,1	12,2	0,0	31,8	29,4	2,0	56
Northeast	**11,9**	**8,3**	**15,5**	**16,9**	**10,0**	**23,9**	**8,2**	**4,7**	**11**
Maranhão	10,7	0,0	25,5	8,3	0,0	24,3	11,8	0,0	32
Piauí	10,9	0,0	22,7	23,9	0,0	50,5	1,2	0,0	3
Ceará	17,1	3,3	30,8	24,2	0,0	49,2	10,6	0,0	21
Rio Grande do Norte	22,9	10,9	34,8	36,1	16,5	55,8	10,4	0,8	20
Paraíba	9,6	0,5	18,8	6,1	0,0	14,2	12,2	0,0	26
Pernambuco	9,1	2,9	15,3	8,7	0,0	18,0	9,3	0,6	18
Alagoas	18,4	3,5	33,3	29,4	5,4	53,3	5,4	0,0	11
Sergipe	18,5	5,7	31,2	21,7	0,0	43,5	16,4	0,4	32
Bahia	2,1	0,0	4,2	2,5	0,0	7,0	1,9	0,0	3
Southeast	**11,3**	**7,1**	**15,6**	**9,5**	**4,1**	**14,8**	**12,9**	**7,1**	**18**
Minas Gerais	14,5	5,4	23,6	8,5	0,0	17,8	18,9	8,1	29
Espírito Santo	12,2	0,9	23,4	22,3	1,4	43,2	2,4	0,0	6
Rio de Janeiro	10,6	4,0	17,2	14,6	2,0	27,2	7,5	1,7	13
São Paulo	9,6	3,7	15,6	8,0	0,3	15,8	11,2	2,3	20
South	**18,9**	**12,7**	**25,0**	**19,1**	**10,3**	**27,9**	**18,7**	**10,2**	**27**
Paraná	18,5	7,1	30,0	20,1	4,8	35,4	17,2	0,4	34
Santa Catarina	18,8	7,3	30,2	15,0	0,0	31,5	21,1	5,7	36
Rio Grande do Sul	19,2	10,1	28,4	20,6	7,1	34,2	18,3	5,8	30
Midwest	**16,7**	**10,3**	**23,1**	**20,3**	**10,8**	**29,9**	**14,0**	**6,1**	**21**
Mato Grosso do Sul	21,0	9,3	32,6	40,8	17,0	64,6	9,0	0,0	18
Mato Grosso	22,2	8,5	35,9	25,2	3,6	46,8	18,9	1,1	36
Goiás	16,0	5,4	26,5	17,8	3,9	31,7	14,6	1,4	27
Distrito Federal	8,1	0,0	16,1	-	-	-	12,5	0,5	24

Figure 04: Table with the proportion of people aged 18 years with a diagnosis of heart disease.

Souce: IBGE. Research Directorate. Coordination of Work and Income. National Health Survey 2013.

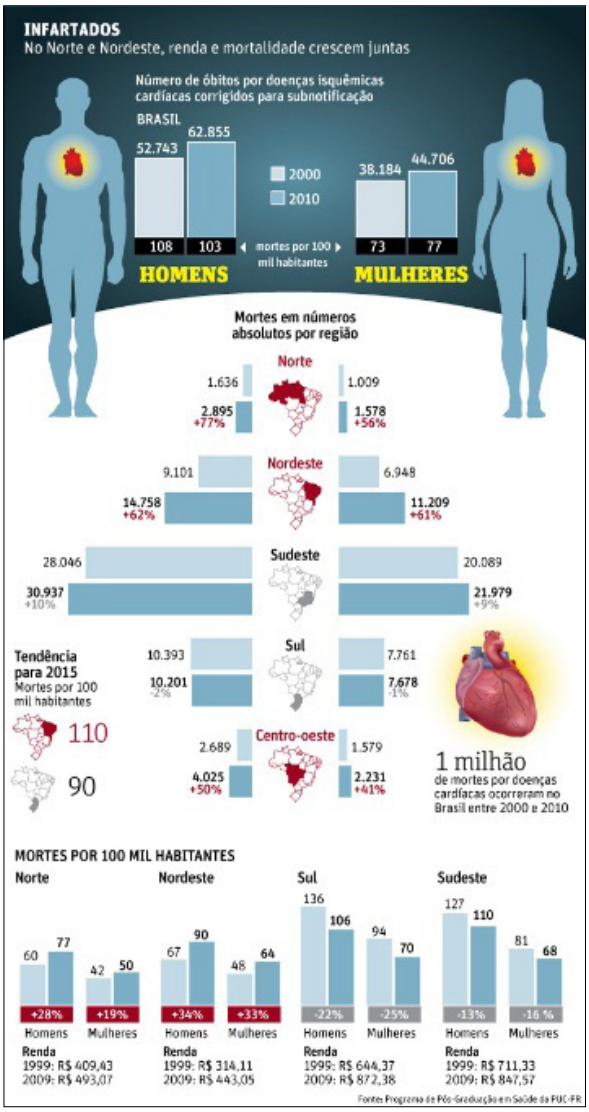

Figure 3: Infarcts.

Source: http://f.i.uol.com.br/folha/equilibrio/images/131091516.jpeg

CONCLUSION

What can be observed throughout this study is that cardiovascular diseases are very worrying, each year there is a significant increase, as many factors such as the stress, the result of contemporaneity, make people end up affected by heart problems. This situation must change, despite the great advances in treatment technologies, but having a treatment is not enough, there must be prevention in all aspects.

The conclusion can be reached with this study, it is necessary to establish prevention programs, so that these rates can decrease, allowing for improvements in both public and private systems, as well as actions that will actually help in medical care and that they reach places that are difficult. access. Statistics and information about the condition of heart patients are indeed worrying as they represent the biggest deaths in Brazil and in the world.

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