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Epidemiological Profile of the Hypertensions

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***Abstract*—** *Hypertension is a chronic pathology that needs care because it is considered as risk factors for the appearance of other cardiovascular diseases. The objective of this study was to analyze the epidemiological profile of hypertensive residents in the urban area of Vitória da Conquista. The research is transversal in nature with a quantitative approach. To collect the data were used questionnaires composed of questions that belonged to the study. The study involved 306 people who were diagnosed with hypertension of both genders, 75 male and 231 female, where 63.4% of hypertensive patients did not work and most were of social class D, most of the schooling was low being 44% and most had only elementary education incomplete and 90.3% studied in the public education network, 53.2% were married. This research provided a controlled health-disease profile in which a very low number of people with conditions associated with hypertension were verified, this means that blood pressure control is being effective. This research has provided a controlled health-disease profile in which a very low number of people with pathologies associated with hypertension have been verified, this means that the monitoring of the pressure is being effective. However, it was possible to notice that hypertensive patients do not use continuous medication, being a point of alert in our study. It was observed in the study a high number of patients make use of natural medicines, often because they think that it has fewer side effects.*

Keywords*— *Hypertension, risk factors and cardiovascular diseases.

I. INTRODUCTION

Hypertension is a chronic disease of high prevalence that reaches about 1 billion individuals worldwide and is classified among the major diseases contributing to a large worldwide increase in diseases and deaths, accounting for approximately 9.4 million deaths a year (Akinluaet al., 2015; Guwatuddeet al., 2015).In today, the prevalence of hypertension is 32.3%, where low- and middle-income hardest hit with a higher burden of disease (Sarkiet al., 2015).

There are several risk factors that can cause the appearance of hypertension are age, race, gender, overweight or obesity, excessive consumption of alcoholic beverages, sedentary lifestyle, dyslipidemias, diabetes mellitus, smoking and high-sodium diet (Motteret al., 2015; et al., 2016). Thehigh blood pressure can also lead to cardiovascular diseases such as stroke, peripheral artery disease, heart failure, chronic kidney disease, acute myocardial infarction and coronary artery disease (Nobreet al., 2013).

According to the 7th Brazilian Guidelines for Arterial Hypertension, conceptualize arterial hypertension as a multifactorial disease which is defined by the increase in pressure levels, where the values are greater than or equal tommHg140/90(Mvbet al., 2016). In the year 2013 the prevalence of hypertension in Brazil was 21.4%, being 24.2% in women and 18.3% in men, where it was possible to perceive that this prevalence increased with the passing of the years, being higher in sex women and in people with lower schooling(Anderson et al.,., 2015).

The main measures to avoidis pathology is making lifestyle modification, reducing weight, avoiding alcoholic beverages, controlling psychosocial stress, practicing physical activity, avoiding foods with high salt content, smoking cessation, diet rich in fruits, vegetables, reduce saturated fat and cholesterol (Nobreet al., 2013).

The objective of this project is to analyze the epidemiological profile of Conquest's hypertensive patients, verify the socioeconomic factors and lifestyle of

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hypertensive patients, present pre-existing diseases, classify the level of physical activity, and verify the weight of the patient according to their conception, analyze the habit of smoking, alcohol, illicit drugs and stress level.

II. METHODOLOGY

The study is part of the Nucleus of Extension and Research and Study of Chronic Diseases (NEPEDC) (David, et al., 2019). The research is transversal in nature with a quantitative approach. The research was carried out in the health units of Vitória da Conquista - Bahia, Brazil, which has a population of 320,129 inhabitants, with a latitude of -14 ° 51 '58', longitude of -40 ° 50 '22 and Altitude 923 meters on the stairs of the main church. The study population consisted of individuals previously diagnosed with arterial hypertension, using blood pressure monitoring results following the ATP III protocol and also using the questionnaire of pre-existing diseases, adults of both genders, living in the urban area of Victory of the Conquest.

The data were collected through the use of five questionnaires to the research participants. The first instrument evaluated the socioeconomic profile (gender, income, age range, schooling, marital status, etc.), and health conditions to know if there were diseases, drug therapy used by the elderly and consultations / hospitalizations in the last 12 months (PEREIRA, et al., 2015). The second instrument was the ABUEL questionnaire that investigated living conditions, eating habits, behavioral, physical and mental health and social relations between people and the elderly (David, et al.,., 2019).

The next questionnaire was that of adult stress symptoms (LIPP), which is a questionnaire that contains several questions, in order to identify if the patient has any symptoms of stress. To complete the collection, the BECK depression inventory was used as an instrument to measure depressive episodes, in which these questionnaires are composed of 21 groups of affirmations. Having intuited to describe how the patient has felt in the last week (Silva, et al., 2018).

The study included individuals previously diagnosed with hypertension, and who were individuals who were 60 years of age or older, and the individuals were of the sex (female / male) and patients who had no difficulty in communicating and withdrawing from the study persons without conditions reasoned, hearing-impaired, bedridden, wheelchair-bound, or who had difficulty communicating when they were not accompanied by a helper to assist him in the interview.

The socioeconomic variables that were taken into account were age (expressed in years), sex (male or female), race / color (white, brown and black), schooling (expressed in years of study), marital status , separated, divorced and widowed), number of residents at home and per capita income in wages.

III. RESULTS AND DISCUSSION

The study included 306 people previously diagnosed with arterial hypertension of both sexes, being 75 men and 231 women. Some people have failed to answer some parts of the questionnaires, so some variables are not complete. Most of the hypertensive students studied did not work (63.4%), formed by social class D, mostly majority schooling was low, 44% had only incomplete fundamental and 90.3% studied in the teaching network 53.2% were married. More details of the sample in table 1, soon after.

Table.1: Characterization of the hypertensive sample.

		n	%	Total
Gender	Male	75	24.5	306
	Female	231	75.5	
Work	Yes	112	36.6	306
	No	194	63.4	
Social Class	A	1	0,3	289
	B	6	2,1	
	C	39	13,5	
	D	155	53,6	
Education	And	88	30.4	243
	Incomplete Elementary	107	44.0	
	Elementary Full	10	4.1	
	Incomplete Middle	10	4.1	
	East Full	58	23.9	
	Some college	18	7.4	
	Complete Higher	26	10.7	

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	Education No	14	5.8	
State Civil	Single	46	15.4	299
	Married	159	53.2	
	Divorced	30	10.0	
	Widowed	64	21.4	
Type ofTeaching	Public	204	90.3	226
	Private	22	9.7	

Source: own research, 2018.

The number of women who participated in the Data collection was superior to that of men, since they are more interested in knowing their health condition and monitoring their health-disease profile. However, when the sample of both sexes is equal, the tendency of the male gender to be hypertensive is much higher than the women (Ghoeshet al., 2016).

The great majority of the studied public denied not to work, where it can take into consideration and analysis that the arterial hypertension and its morbidity has removed the worker from his condition of exercising his daily working conditions, preventing him from being able to do his work activities, either by drug use and / or complications of disease out-of-control (Lenget al.,., 2015).

The effectiveness of drug treatment is related to the level of schooling and the understanding of the positive effects of daily and controlled drug use. Our sample of hypertensive individuals, the level of schooling was very low, thus demonstrating that the level of schooling has a strong influence on the health status of patients who have hypertension or who do not have which does not have (Lunstadet al., 2016).

With the factors cited above, of course most people are allocated into a lower social class. Being the majority of class D and E, which can be a barrier to the adoption of good habits of life and prevention of chronic diseases(Ruilopeet al., 2016; Mistrettaet al., 2017). Many authors have shown that social class has an important influence on changes in the individual's health-disease profile. The impact of public policies on health improvement must take into account the important findings regarding risk factors, and prophylactic treatment, not only being the treatment curative (Lenget al., 2015, Duncanet al., 2012).

The results showed that large parts of hypertension had normal weight, 54.35 and 68.6% said they had good body satisfaction. However, it is worth mentioning that a large number of people were overweight and obese, which can progress to the accumulation of chronic diseases, and should invest in health improvements and encourage healthy eating and high physical exercise that is practiced all days (Davis et al., 2016, Sodermanet al., 2013, Szwarcwaldet al., 2015).

Table.2: Hypertensive Health-Disease Profile.

		n	**%**	**Total**
Body Mass Index	Low weight	38	13.8	276
	Normal weight	150	54.3	
	Overweight	70	25.4	
	Obesity	18	6.5	
Hyperlipidemia	Yes	23	7.9	291
	No	267	91.8	
Hypertriglyceridemia	Yes	35	13.1	268
	No	226	84.3	
Obesity	Yes	22	7.5	293
	No	271	92.5	
Diabetes	Yes	53	18.4	288
	No	235	81.6	
Cardiopathy	Yes	23	7.9	291
	No	269	92.4	
Renal Disease	Yes	22	7.5	293
	No	271	92.5	
Anxiety	Yes	78	27.4	285

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	No	207	72.6	
Depression	Yes	59	19.7	300
	No	241	80.3	
Stress	Yes	177	62.8	282
	No	105	37.2	
Body Satisfaction	Content	208	68.6	303
	not Satisfied	95	31.4	
Autonomy	Independent	90	48.1	187
	Dependent	97	51.9	

Source: own research, 2018.

In heart medication, 93 people with hypertension were seen to use daily. Pain medications, 176 hypertensives claimed to use daily and regularly. More information regarding the use of drugs by hypertensive patients are described in table 3.

Table.3: Medications used by hypertensive patients

		n	%	Total
	Daily	14	4.8	
Natural Medicines	Regularly	111	37.7	294
	Never	169	57.5	
	Daily	48	16. 2	
Diabetes Drug	Regularly	4	1.3	297
	Never	245	82.5	
	Daily	93	30.8	
Heart Medication	Regularly	10	3.3	302
	Never	199	65.9	
	Daily	5	1.7	
Medication for Asthma	Regularly	4	1.3	295
	Never	286	96 .9	
	Daily	17	5.7	
Anxiety Medication	Regularly	10	3.3	298
	Never	271	90.3	
	Daily	13	4.4	
Medication for Depression	Regularly	4	1.3	298
	Never	281	94.3	
	daily Daily	18	6.1	
Sleeping	Regularly	19	6.4	297
	Never	260	87.5	
	Daily	35	11.7	
Medication for Pain	Regularly	141	47.3	298
	Never	122	40.9	

Source: own research, 2018.

Regularly - 1 to 3 times a week.

In our sample it was found that there is a high number of hypertensive patients who use drugs for the heart,in which 103 people were declared. This fact can be justified by the fact that high blood pressure is a disease that carries many risk factors for the appearance of cardiovascular complications, where 40 to 50% of patients with hypertension will present problems in the heart or even serious vascular accidents if not control blood pressure levels(Oparilet al., 2018; Jakovljevicet al., 2015). Therapeutic adherence on the part of hypertensive patients was not very good, as it can be perceived both by the use of drugs for the heart including the hypotensive drugs and for the drugs directed to the control, as shown in chart 1 below (Lanet al., 2015).

The use of pain medications was considered high, since they are mostly medications without the need

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for medical prescription and used intentionally. Because they do not have contraindications, only in cases of dengue, their use does not follow the same guidelines as other medicines such as those with black stripes. It can then be justified by rooted cultural issues of self-medication without prior consultation.

IV. FINAL CONSIDERATIONS

This research has provided a controlled health-disease profile in which a very low number of people with pathologies associated with hypertension have been verified, this means that the monitoring of the pressure is being effective. However, it was possible to notice that hypertensive patients do not use continuous medication, being a point of alert in our study. It was observed in the study a high number of patients make use of natural medicines, often because they think that it has fewer side effects.

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