



CHARACTERIZATION OF HYPERTENSENS AT A BASIC FAMILY HEALTH UNIT

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ABSTRACT

Introduction: Systemic arterial hypertension (SAH) is characterized by high blood pressure levels ≥ 140 and/or 90 mmHg. The perception of hypertension on hypertension is often inadequate, and it is necessary for the team to know the hypertensive population. The objective of this study was to characterize the hypertensive patients of a Basic Family Health Unit (UBSF). **Methods:** This was a descriptive and quantitative research carried out in a UBSF in a municipality in the interior of Paraíba.

Results: 92 (82.1%) were female, 61 (54.5%) declared themselves white, 44 (39.3%) were married, 90 (80.4%) reported residing accompanied, 55 (49, 1%) were retired, 66 (58.9%) had primary education, and average income of 1.3 (± 0.8) minimum wages. It was identified that only 35 (31.3%) patients reported practicing some physical activity. The prevalence of smoking and alcoholism was 16 (14.3%) and six (5.4%) patients, respectively.

Conclusions: the findings may demonstrate low therapeutic adherence. The characterization of hypertensive patients contributes to the promotion of other researchers, planning, execution and evaluation of measures, strategies and health actions directed to the hypertensive.

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INTRODUCTION

The systemic arterial hypertension (SAH) is considered a chronic and degenerative multifactorial condition, characterized by sustained elevation of pressure levels ≥ 140 and/or 90 mmHg (Malachias et al., 2016). According to the World Health Organization (WHO), there are more than 600 million hypertensives in the world.

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Its magnitude in the Brazilian population affects 25%, affecting one in four adults (Souza et al., 2013, Santos and Vasconcelos, 2013). This morbidity presents modifiable risk factors related to the individual's lifestyle, such as sedentary lifestyle, inadequate diet related to a hyper sodium diet, smoking, elitism, obesity and dyslipidemia, and non-modifiable, such as genetic condition, age, and sex (Weber et al., 2014). When SAH is not controlled, it causes complications that interfere with quality of life, such as stroke, acute myocardial infarction (AMI), heart failure (HF), peripheral arterial disease (PAD) and chronic kidney disease (CKD) (Malachias et al., 2016).

It is estimated that mortality from cardiovascular diseases is the most prevalent among all causes, reaching approximately 30% (Paredes *et al.*, 2016). In addition to death, the complications of hypertension can lead to other complications such as hospital admissions and disabilities, which affect the quality of life of hypertensive patients (Souza *et al.*, 2013).

The perception of hypertensive on SAH is often inadequate since many users do not have adequate knowledge about the pathology that affects them. Studies have shown that this deficiency impairs treatment, causing these people to seek Primary Health Care services in cases of emergency and emergencies, resulting from complications caused by failure to control blood pressure (Costa *et al.*, 2017; Carvalho *et al.*, 2011; Dias *et al.*, 2015). In order for Basic Health Care (AB) to minimize these consequences, it is necessary for the service team to know the hypertensive population, and based on this knowledge of the clientele served, develop strategies aimed at health promotion, making the user an essential agent for this process (Dias *et al.*, 2015; Silva Barreto *et al.*, 2015; Trindade *et al.*, 2013). Therefore, it is necessary to provide qualified assistance, focused on the multidimensional analysis of users. Studies performed in health services at the primary level have chosen to observe the characterization of hypertensive patients accompanied at the Basic Family Health Unit (UBSF). These findings facilitate the construction of effective strategies to improve the quality of life and consequently adherence to the prescribed treatment (Menezes *et al.*, 2017; Cavalari *et al.*, 2012). Thus, the objective of this study was to characterize the hypertensive patients of a UBSF of a municipality in the interior of Paraíba, Brazil; with a view to implementing strategies that promote health and quality of life for this specific clientele.

MATERIALS AND METHODS

It was a descriptive research, with a quantitative approach, carried out in a UBSF of a municipality of the interior of Paraíba. In its composition, the unit has two family health teams serving around 6,000 users, of which 657 are enrolled in the HIPERDIA program. The study included: hypertensive users, over 18 years of age, both genders, using drug therapy and with the ability to respond to the form. Data collection was performed in the period from November 2016 to April 2017 during visits to the basic unit and in-home visits to these hypertensive patients. The hypertensive patients were approached while awaiting the care of the professionals or during the visit to their home. Initially the subjects were invited to participate in the research, and according to the accepted explanation the purpose of the study and how the collection was performed. According to the accepted, the Informed Consent Form (TCLE), which was signed in two ways, one with the patient and the other with the researcher. In the case of illiterate individuals, a fingerprint or signature was collected from someone responsible. In order to characterize the subjects, a form with socio demographic data containing: name, age, sex, skin color, whether alone, civil status, education, occupation, income, sedentary lifestyle, alcoholism, smoking, morbidities, pressure related complaint, medications in use and time of diagnosis; in addition to anthropometric data, such as: abdominal circumference, blood pressure, weight, height, BMI (Body Mass Index) and values of exams. After the data collection, the data was inserted into a Microsoft Excel spreadsheet and later inserted in the IBM SPSS version 21.0 software to perform statistical calculations and variable crosses.

The results are presented descriptively in graphs, tables, and explanations about inferential tests. Regarding the ethical aspects, this research was approved by the Research Ethics Committee with opinion n°: 931.863, and all the subjects presented consent to participate through the signing of the TCLE.

RESULTS

The 127 subjects were approached to participate in the study, of which 15 refused to participate. Thus, this study had 112 hypertensive participants enrolled in the UBSF chosen for data collection. Of the interviewees, 92 (82.1%) were female. Regarding skin color, 61 (54.5%) declared themselves white, 29 (25.9%) were non-whites and 22 (19.6%) did not respond. It was observed that 44 (39.3%) were married, 40 (35.7%) were widowers, 16 (14.3%) were single and 12 (10.7%) were separated. When questioned with whom they lived, 90 (80.4%) reported residing accompanied and 20 (17.9%) alone, two (1.8%) did not respond. In relation to schooling, 66 (58.9%) had primary education, 26 (23.2%) were illiterate, 16 (14.3%) had high school and four (3.6%) had higher education. The subjects presented average family income of 1.3 (\pm 0.8) minimum wages. This figure reflects the occupation of individuals, where 55 (49.1%) retired, 41 (36.6%) of the household, eight (7.1%) are employed, six (5.4%) are self-employed, only two (1.8%) are far from their activities. Regarding the time of diagnosis of systemic arterial hypertension, it ranged from one to 60 years, with a mean of 11.32 (\pm 9.9) years of SAH. The anthropometric data found in the table below (Table 1), demonstrate its importance for the characterization of users, which directly interferes in the control of pathology and quality of life.

Table 1. Descriptive statistics of anthropometric data of hypertensives attended at the UBSF. n = 122. Campina Grande-PB, 2017

Variables	Min.	Max.	Average	\pm
Age	37	91	65,49	12,143
Weight	34,50	127,00	68,37	14,59
Height	1,38	1,94	1,55	0,95
BMI	17,90	45,35	28,11	5,00
Abdominal circumference	55	143	98,21	12,85
Blood Pressure: Systolic /	90/	200/	136,48/	17,73/
Diastolic	00	100	80,45	12,11

Source: Direct Search, 2017.

Regarding the risk factors for hypertension, it was identified that only 35 (31.3%) patients reported practicing some physical activity. The prevalence of smoking and alcoholism was 16 (14.3%) and six (5.4%) patients, respectively. When analyzed the morbidities that most affected the individuals, diabetes mellitus presented prominence, with 42 (37.5%), followed by dyslipidemia 39 (34.8%), acute myocardial infarction nine (8%), and cerebrovascular accident with seven (6.3%) cases. Regarding the complaints related to the SAH 50 (44.6%), some of them were mentioned: headache 31 (27.7%), dizziness and headache 12 (10.7%), fatigue 04 (3.6%), dizziness 03 (2.7%), tachycardia 02 (1.8) and dry mouth, sleep and neck pain with 01 (0.9%) each. In relation to the continuous use of drugs, 109 (97.3%) of the interviewees used, being prevalent hydrochlorothiazide 55 (49.1%), followed by losartan 52 (46.4%), captopril 18 (16.1%), enalapril 18 (16.1%), simvastatin 16 (14.3%), alogidipine 13 (11.6%), atenolol 12 (10.7%), acetylsalicylic acid eight (7.1%), propranolol seven, 3%) and seven furosemide (6.3%).

Of the interviewees, 92 (82.1%) were followed up with the unit's physician, where 20 (17.9%) reported infrequently, 10 (8.9%) rarely and two (1.8%) had their first the unit during the interview. The follow-up with the unit nurse was reported by 74 (66.1%) users, it was observed that the frequency of this follow-up was 23 (20.5%) low and six (5.4%) were rare. When asked if they felt lacking in the follow-up of hypertension, six (5.4%) reported missing but did not specify what was missing, six (5.4%) reported difficulty in receiving medication, and two (1.8%) reported lack of nutritionist and tests; In addition to these, the lack of attention of professionals and educational groups was cited by one (0.9%) subject each, as factors that interfere with the follow-up of hypertensive patients in the unit.

DISCUSSION

In the study, it was observed that among the hypertensive, the predominance was of the female gender. This result was similar to that performed by Mansour, Monteiro and Luiz (2016) in which 65.8% of hypertensive users were women. The size of the female sample may be justified because this population seeks health services more than men (Souza, 2014). This result can also be explained because women live longer, however, they get sicker, seeking health services more frequently (Veras and Santos, 2016). The most prevalent skin color was the white self-declared users. The result was equivalent to the study by Cenatti *et al.* (2013). However, it diverged from the literature showing the predominant black skin color. The ELSA-Brazil study showed a prevalence of 30.3% in whites and 49.3% in blacks (Truelsen *et al.*, 2007). Most of the individuals were married and resided accompanied, corroborating with another study (Cenatti *et al.*, 2013). For Freitas *et al.* (2013) the involvement of the spouse is a facilitating component for adherence to treatment, contributing to BP control. The majority of the sample studied had an elementary education, average family income of 1.3 minimum wages and were retired. The poor living conditions predispose to the onset of diseases, as well as schooling interferes in the control of AP, being worse the control in those with fewer years in school (Piccini *et al.*, 2012). At the time of diagnosis, studies affirm that this aspect is an important influencer in therapeutic adherence (Santa-Helena *et al.*, 2010; Moura *et al.*, 2011).

During this study, a variation in diagnosis time from one to 60 years was observed, with a mean of 11.32 years. This finding converges with the study by Dias *et al.* (2015) carried out in the southeast region, where 92.30% had the time of discovery of upper SAH for five years. In contrast, the study by Silva Barreto *et al.* (2015) performed in the city of the Southern Region of Brazil, observed that the hypertensive patients had a short diagnosis time, less than ten years (56.16%), this research also stated that in their population the time of discovery of hypertension did not influence the accession. It is believed that the more recent the diagnosis, the chances of non-adherence increase, since knowledge about the pathology, risk factors, and importance of drug adherence is still not well established by hypertensive individuals. Because it is a chronic non-transmissible asymptomatic disease, users may obtain erroneous beliefs by denying SAH as a disease. However, Pierin *et al.* (2011), presented statistics that diverge from this thought, the greater frequency of users with uncontrolled adherence to the disease for more than five years, this finding

can be influenced by the beliefs that these individuals have, as they lived with SAH for a long time, during many may not have received adequate information about the pathology, so the construction of erroneous beliefs is quite frequent and resistant to change. Age and anthropometric data were analyzed as aspects of value for BP control, which reinforces the importance of observation in studies that address the characterization of hypertensive patients (Padilha *et al.*, 2017). The mean age of the hypertensive patients was 65.49, a finding similar to those presented by Silva Barreto (2015). Differing from a study by Serra *et al.* (2015), which obtained the mean age of fewer than 60 years. The studies Dias *et al.* (2015) and Leão and Silva *et al.* (2013) had an age group well above the age range found in this study, in which the incidence was higher in the elderly in the 70-75 age group. Changes in anthropometric data play a relevant role in the control of BP and the appearance of other clinical conditions, such as obesity, diabetes mellitus and dyslipidemia. When analyzing the mean weight (68.37 kg) and height (1.55 m), it is observed that many individuals are overweight and obese, another fact that reinforces this finding is the mean BMI (28.11 kg/m²), being classified as overweight. The mean abdominal circumference is also high, 98.21 cm. The elevation of these parameters was reported as risk factors for Cardiovascular Disease also in studies that evaluated hypertensive populations (Serra *et al.*, 2015; Esperandio *et al.*, 2013; Gama *et al.*, 2016). Regarding the BP value during the interview, it was observed that the minimum SBP/DBP was 90/00 and the maximum 200/100, with a mean of 136.48/80.45, which is classified as prehypertension according to VII Diretriz Brasileira de Hipertensão. Considering the new values of the American Heart Association (2017), this value is suitable for stage 1 hypertension. In Trindade *et al.* (2013), the average found was 141/86.5, approaching the values found in this study.

The values recommended by national and international guidelines provide warning indicators, where elevation increases the chances of cardiovascular risks arising, which health professionals should be aware of to intervene in strategic actions. Only 31.3% of the users reported practicing some physical activity. This number corroborates the results presented in a study by Turi *et al.* (2014) where a low number of users claimed to be active throughout life, which results in a worrying since the sedentarism has a strong impact on mortality from cardiovascular diseases. According to Dias *et al.* (2015), the participation of users in physical activities should be stimulated, as there will be an exchange of experiences with people in the same situation. Studies indicate that, through the practice of physical activities, there is a decrease in systolic and diastolic blood pressure levels, becoming an important factor in the prevention of heart disease (Alves *et al.*, 2014). The prevalence of risk factors such as smoking was 14.3%, similar to the data found by Trindade *et al.* (2013), which indicated that 10.2% of hypertensive patients are smokers. Also according to Trindade *et al.* (2013) and Dias *et al.* (2015), smoking should receive special attention, since being active or passive, constitutes an important element for predisposition to cardiovascular diseases and/or thrombotic phenomena, as well as elevation of blood pressure, as observed more in smokers than in non-smokers. Another important risk factor is alcoholism, which obtained an average of 5.4% among the interviewed users, considerably lower than that found by Trindade *et al.* (2013), which was 28.6%. The same author affirms that alcoholism has negative effects in the treatment of arterial hypertension, characterizing

itself as one of the causative agents of the abandonment to the medical accompaniment in the health unit. Thus, it can be observed that the effects of alcoholism in relation to the treatment of systemic arterial hypertension are not associated to the actual use, but to the frequency of its use and to social acceptance (Trindade *et al.*, 2013). However, it is worth mentioning that the increase of alcohol levels in the bloodstream raises blood pressure, although in a slow and progressive way, equivalent to 2 mmHg for every 30 ml ingested daily (Dias *et al.*, 2015). With regard to the morbidities associated with hypertension, it was observed that diabetes mellitus was prevalent, with about 37.5% of the users affected. Then, dyslipidemia was found, with 34.8%, followed by AMI and stroke, with 8% and 6.3% of cases, respectively. Diabetes mellitus and dyslipidemia represent important risk factors for cardiovascular diseases, a risk that increases when associated with hypertension (Trindade *et al.*, 2013). Regarding diabetes mellitus, studies indicate that its connection with hypertension is made through the risk factors in common (Moreira *et al.*, 2015). According to a previous study on the reasons that lead the elderly to look for the basic unit shows that most of the complaints cited by the users are not related to the signs of arterial hypertension itself, however, in this study, it was observed that 44.6% of the hypertensive patients referred to the symptoms of the disease, such as a headache, dizziness, headache associated with dizziness, fatigue, tachycardia, dry mouth, sleep and neck pain (Ferrari *et al.*, 2014). Regarding the use of drugs, it was observed that 97.3% of the interviewees used, the three most prevalent being hydrochlorothiazide, losartan and captopril. These results are similar to those found in the study by Mengue *et al.* (2016), which point out these same drugs as the most used ones.

In Brazil, this incidence may be associated with the government incentive program for adherence to treatment for hypertension, which makes available these medicines on a monthly basis, free of charge, to the population under medical care in basic care or specific service. The rate of drug treatment of hypertension is high, which is due, in most cases, too late diagnosis, because the longer it takes to discover the disease, the more serious it is and the less successful the non-pharmacological therapies for the treatment of it (Mengue *et al.*, 2016). Regarding the use of drugs, Silva Barreto *et al.* (2015), affirms that a significant number of hypertensive users of primary care do not make correct use of medication, a fact of concern, since inadequate treatment can lead to immediate and late complications of systemic arterial hypertension, and consequently the lack of control of blood pressure levels, a finding that could be found in this study if treatment adherence were investigated, since blood pressure levels were outside the normal range. The main factors that lead the hypertensive to not follow correctly the treatment are related to the side effects caused by some medications, physical and mental deficiencies, lack of purchasing power to acquire medication and forgetfulness (Dias *et al.*, 2015). The present study shows that 82.1% of the interviewees receive follow-up with the doctor and 66.1% with the unit's nurse. Regarding medical follow-up, 17.9% reported low frequency. In the follow-up with the nurse, the data indicated that the frequency was still subdivided into a low 20.5% and a rare 5.4%. Low adherence to treatment contributes to the diseases and complications of the disease. Trindade *et al.* (2013) point out as reasons for low or nonadherence to treatment, deficiency in the follow-up of hypertension, related to the following factors: appointment on the day of the appointment, coincidence with working hours,

forgetfulness, delay to be attended or even being traveling. Some respondents (5%) reported "*missing something following basic care*", such as lack of attention from professionals and activities related to hypertension and difficulty in receiving the medicine. In view of the data obtained, it is necessary to have a more solid and constant approach on arterial hypertension, since besides passing the knowledge, it is necessary that the users fix the information that was transmitted to them. A dynamic and effective method would be the wheels of conversations to exchange knowledge, using ways that facilitate understanding about prevention, treatment and care that should be taken by users, such as posters, videos or even experiences experienced by hypertensive and/or professional.

Conclusion

It was concluded that among the 112 hypertensive patients enrolled in a family health unit in the city of Campina Grande, women were predominantly female, sexagenarians with low income and schooling, and blood pressure levels classified as stage I of hypertension. These findings may demonstrate, due to the risk factors found, low therapeutic adherence to control systemic hypertension, since most of the interviewees referred to a sedentary lifestyle, overweight and risk factors such as smoking and alcoholism. The interviewees could observe the lack of actions aimed at the information about hypertension, contributing to the low adherence to therapy and, consequently, the lack of control of blood pressure levels. These results contribute to the promotion of other researchers that seek to evaluate therapeutical adherence, properly speaking, with the possibility of planning, implementing and evaluating health measures, strategies and actions directed at the elderly hypertensive population, in order to ensure the adherence therapy and medication for blood pressure control. Based on these results, it is expected that the multi-professional team will endeavor to take care of this sexagenarian population in relation to hypertension in a differentiated manner since specific strategies should be thought and implemented in an individualized way to this idle clientele of care.

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