

Prevalence and Factors Associated With Arterial Hypertension in Adults Living in the Municipality of Chapada Diamantina, Bahia

Prevalência e Fatores Associados a Hipertensão Arterial em Adultos Residentes em Município da Chapada Diamantina, Bahia
Prevalencia y Factores Asociados a Hipertensión Arterial en Adultos Residentes en el Municipio de Chapada Diamantina, Bahia

RESUMO

Objetivo: estimar a prevalência e investigar os fatores associados a hipertensão arterial em adultos, cadastrados a Estratégia de Saúde da Família (ESF), no município de Mucugê, Bahia. **Métodos:** Estudo transversal com uma amostra aleatória de 337 indivíduos. Foram considerados hipertensos os indivíduos que apresentaram no momento da aferição, pressão arterial sistólica ≥ 140 mmHg e/ou pressão arterial diastólica ≥ 90 mmHg. Nos questionários aplicados foram abordadas características sociodemográficas, hábitos de vida e medidas antropométricas. Utilizou-se a análise bivariada para investigar a relação entre as variáveis independentes e a hipertensão arterial. **Resultados:** A prevalência de HAS foi de 49,6%. Constatou-se associação com idade ≥ 46 anos, sexo masculino, baixa escolaridade e circunferência da cintura aumentada no sexo feminino. **Conclusão:** Verificou-se elevada prevalência de hipertensão arterial e associação com variáveis modificáveis (escolaridade e circunferência da cintura) e não modificáveis (idade e sexo). Os resultados desse estudo, poderão colaborar com as ações de prevenção e controle da hipertensão arterial, desenvolvidas pelas autoridades de saúde do município. **DESCRIPTORES:** Prevalência, Fatores de Risco, Hipertensão Arterial, Estratégia de Saúde Família/Atenção Primária.

ABSTRACT

Objective: To estimate the prevalence and investigate the factors associated with arterial hypertension in adults enrolled in the Family Health Strategy (FHS) in the municipality of Mucugê, Bahia. **Methods:** A cross-sectional study was conducted with a random sample of 337 individuals. Those classified as hypertensive were those who, at the time of measurement, presented systolic blood pressure ≥ 140 mmHg and/or diastolic blood pressure ≥ 90 mmHg. The applied questionnaires included sociodemographic characteristics, lifestyle habits, and anthropometric characteristics. Bivariate analysis was used to investigate the relationship between independent variables and hypertension. **Results:** The prevalence of hypertension was 49.6%. A significant association was observed with age ≥ 46 years, male sex, low education level, and increased waist circumference in females. **Conclusion:** A high prevalence of hypertension was observed, associated with modifiable variables (education level and waist circumference) and non-modifiable variables (age and sex). The results of this study may contribute to the development of prevention and hypertension control measures by local health authorities. **DESCRIPTORS:** Prevalence, Risk Factors, Systemic Arterial Hypertension; Family Health Strategy; Primary Health, Care

RESUMEN

Objetivo: Estimar la prevalencia e investigar los factores asociados a la hipertensión arterial en adultos registrados en la Estrategia de Salud de la Familia (ESF), en el municipio de Mucugê, Bahía. **Métodos:** Estudio transversal con una muestra aleatoria de 337 individuos. Se consideraron hipertensos aquellos que, en el momento de la medición, presentaron presión arterial sistólica ≥ 140 mmHg y/o presión arterial diastólica ≥ 90 mmHg. Los cuestionarios aplicados abordaron características sociodemográficas, hábitos de vida y características antropométricas. Se utilizó el análisis bivariado para investigar la relación entre las variables independientes y la hipertensión arterial. **Resultados:** La prevalencia de hipertensión arterial fue del 49,6%. Se observó asociación con edad ≥ 46 años, sexo

masculino, bajo nivel educativo y circunferencia de cintura aumentada en mujeres. **Conclusión:** Se identificó una elevada prevalencia de hipertensión arterial y su asociación con variables modificables (escolaridad y circunferencia de cintura) y no modificables (edad y sexo). Los resultados de este estudio pueden contribuir a las acciones de prevención y control de la hipertensión arterial desarrolladas por las autoridades sanitarias del municipio.

DESCRIPTORES: Prevalencia, Factores de riesgo, Hipertensión; Estrategia de Salud Familiar; Salud, Atención

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INTRODUCTION

Systemic arterial hypertension (SAH) is a chronic noncommunicable disease (NCD) of multifactorial origin, asymptomatic and gradually evolving, characterized by a persistent elevation of systolic blood pressure equal to or greater than 140 millimeters of mercury (SBP $\geq$ 140 mmHg) and/or diastolic blood pressure equal to or greater than 90 millimeters of mercury (DBP $\geq$ 90 mmHg), measured using an appropriate technique on at least two different occasions⁽¹⁾. It is considered a serious public health problem, as

it is an important risk factor for the development of cerebrovascular diseases, which characterizes it as one of the causes of the greatest reduction in the quality and life expectancy of the population⁽²⁾.

Hypertension is associated with several factors, which can be classified as modifiable and non-modifiable. Modifiable factors are those related to lifestyle habits, such as smoking, alcohol consumption, physical inactivity, obesity, and eating habits. Non-modifiable factors include age, heredity, gender, and race⁽³⁾. It is an asymptomatic disease that can cause structural and/or functional changes

in target organs.

The World Health Organization estimates that by 2030, approximately 23.6 million people will die from cardiovascular disease, with hypertension being the leading cause of these deaths⁽³⁾. Epidemiological studies have shown that early diagnosis of hypertension and the adoption of simple preventive measures, such as lifestyle changes and healthy eating, can contribute to increased life expectancy and reduced mortality, as well as delaying the need for drug therapy. In Brazil, in 2021, the frequency of adults who reported having high blood pressure ranged from 19.3% in

São Luís to 32.0% in Rio de Janeiro, with a national average of 26.3%⁽⁴⁾.

Given the high rates of hypertension in Brazil and worldwide, as well as the scarcity of research on the subject in small cities in the northeast region, this study aims to estimate the prevalence and investigate the factors associated with hypertension in adults registered with the Family Health Strategy (ESF) in the municipality of Mucugê, Bahia.

METHOD

This is a cross-sectional, sample-based epidemiological study derived from the research project "Proposal for health surveillance for the detection of minor mental disorders, diabetes mellitus, and hypertension," conducted in the municipality of Mucugê, located in the mesoregion of Central-South Bahia and in the microregion of Seabra, 448 km from the capital Salvador and 338 km from Feira de Santana. In the area of health, Mucugê has six (06) Family Health Units (USF) distributed throughout the territory⁽⁷⁾.

The sample consisted of adult individuals (aged ≥ 18 years) residing and registered in the Family Health Strategy (ESF) of the municipality of Mucugê. The sample was calculated using the expression: $N = Z^2 p(1-p) / (d)^2$, where (p) prevalence of hypertension was defined based on population-based studies conducted by the Ministry of Health, where the prevalence of hypertension in Brazil was 25% ($p = 0.25$) (Brazil 2006). The confidence interval was set at 95% ($Z = 1.96$) and the sampling error at 5% ($d = 0.05$). Thus, the sample should include at least 288 adult individuals. A design effect (DEFF) of 0.2 was scored to correct the sample size, taking into account that the population comes from several ESF units. With this correction, the sample size was limited to 346 adults ($288 \times 1.2 =$

346)⁽⁵⁾.

Through the random, stratified, and systematic sampling technique, proportional participation in the sample was ensured, with the same percentage of families and individuals registered in the Family Health Units (06 USF) of the municipality. Initially, 24 micro-areas were identified in the six USFs of the municipality. Then, 14 families per micro-area and one adult individual per family were randomly selected, and finally, to complete the 346 individuals in the sample, 10 more families were randomly selected in 10 of the 24 existing micro-areas. Individuals selected who could not be found after two visits, or in the event of death, were replaced by another member of the same family, seeking to maintain similarity in age group and gender. Bedridden individuals, pregnant women, and individuals with mental disabilities were excluded from the study. In the end, 337 adults were interviewed.

Data collection was carried out through home visits between November and December 2022 and March 2023. Individuals who decided not to participate in the study after reading the Free and Informed Consent Form (FICF) were considered refusals. In this study, there were three losses and six refusals.

The instrument used for data collection was a standardized questionnaire containing sociodemographic variables, lifestyle habits, data on previous diagnosis of hypertension and diabetes, as well as anthropometric measurements; blood pressure, capillary blood glucose, weight, height, waist circumference, sleep quality assessment (sleep problems) using the Mini-Sleep Questionnaire (MSQ), and identification of Minor Psychiatric Disorders (mental distress) using the Self Report Questionnaire (SRQ-20).

Data collection was performed by trained interviewers, supervised by

SSAEE professors/researchers and accompanied by the Community Health Agent (ACS) from each micro-area. The interviewers were six (06) medical students and Scientific Initiation Scholars from UEFS, duly trained to apply the research instrument, the TCLE, as well as to perform anthropometric measurements.

In order to assess the clarity of the data collection instrument used, estimate the time required to complete it, and evaluate the suitability of the interviewers, a pilot study was conducted in the micro-area belonging to the Santo Antônio dos Prazeres Family Health Unit, in the city of Feira de Santana, Bahia, and a data collection manual was prepared. These procedures were intended to adapt the data collection instrument, assess the approximate interview time and all the logistics of the fieldwork, and train the team, seeking to standardize data collection procedures in a setting similar to that of the research site.

Anthropometric measurements were collected in a standardized manner. For weight, a portable analog scale with an accuracy of 1 kg (G-Tech) was used, with the individual barefoot and wearing light clothing. Height was measured with a portable stadiometer on a flat surface (Personal Caprice Sanny – ES2060), with the participant in an upright position, arms at their sides, and looking at the horizon. Waist circumference was measured using a non-elastic tape measure, placed at the midpoint between the iliac crest and the lower edge of the costal margin⁽¹¹⁾. The standardization and measurement of anthropometric measurements were performed in accordance with the recommendations of the Laboratory for Nutritional Assessment of Populations, Department of Nutrition, University of São Paulo⁽⁶⁾.

Automatic oscillometric wrist blood pressure monitors (Connect - HEM-6323T automatic digital oscil-

lometric sphygmomanometer) were used to measure blood pressure. Two measurements were taken with an interval of at least five (05) minutes between measurements. In addition, the following procedures and/or conditions were also considered: participants should rest for 5 minutes in a calm environment, be instructed not to talk during the measurement, refrain from physical exercise, smoking, and drinking alcohol in the last 30 minutes prior to the measurements; sitting position, with legs uncrossed, feet flat on the floor, back leaning against the chair and relaxed; left arm relaxed, resting on a table at heart level; palm facing up and bladder empty. The cuff used was properly compatible with the circumference of the wrist. In this study, individuals with SBP ≥ 140 mmHg and/or DBP ≥ 90 mmHg were considered to have high blood pressure⁽⁷⁾.

The Self Report Questionnaire (SRQ-20) was used to identify individuals with mental distress (Minor Psychiatric Disorders/MPD). The SRQ-20 is a questionnaire developed for use in psychiatric morbidity studies in primary health care institutions in developing countries. The SRQ-20 consists of 20 questions with binary answers, yes (1) or no (0), so the final score can range from 0 to 20 points. In this study, individuals with a score equal to or greater than 7 points were considered to have MSD⁽⁸⁾.

The Mini-Sleep Questionnaire (MSQ) was used to assess sleep quality. This instrument consists of ten items and was translated into Brazilian Portuguese by Gorenstein; it assesses subjective sleep quality and is useful for screening sleep disorders in populations. Insomnia is assessed by four questions: difficulty falling asleep, waking up in the middle of the night, waking up early in the morning, and use of hypnotic medication (MSQ insomnia). To assess hypersomnia, the questions include feel-

ing tired upon waking, falling asleep during the day, excessive daytime sleepiness, morning headaches, snoring, and excessive movements during sleep (MSQ hypersomnia)⁽⁹⁾.

Responses are given on a seven-point Likert scale, ranging from 1 (never) to 7 (always). Thus, the score ranges from 10 to 70 points, and the higher the score, the more sleep problems. From 10 to 24 points, good sleep quality; 25 to 27 points, mild sleep difficulties; 28-30 points, moderate sleep difficulties; and ≥ 31 points, severe sleep difficulties. The total score provides an estimate of sleep quality and the presence or absence of sleep disorders. In this study, individuals with a score greater than or equal to 25 points (MSQ score ≥ 25 points) were considered to have sleep problems⁽⁹⁾.

The variables investigated in this study were:

- Sociodemographic: gender, age, marital status, education level, race/color, place of birth, monthly family income.
- Lifestyle habits: smoking, alcohol consumption
- Health problems: self-reported diabetes, minor mental disorder, sleep problems
- Anthropometric measurements: waist circumference, weight, height, body mass index (BMI) was calculated (BMI = weight kg/height m²) individuals with BMI < 25 kg/m² were classified as eutrophic, and those with BMI ≥ 25 kg/m² were classified as overweight/obese⁽¹⁰⁾.

The data were entered in duplicate into the EpiData statistical package version 3.1. After comparing the information, identifying and correcting typing errors, the data were exported, processed, and analyzed using the Statistical Package for Social Science (SPSS) version 17.0 for Windows.

A descriptive analysis of the variables studied was performed, showing

the absolute and relative frequencies. For the bivariate analysis, the prevalence ratio (PR) was used as a measure of association and the 95% confidence interval (95% CI)⁽⁵⁾.

This study is part of the project "Health surveillance for the detection of minor mental disorders, diabetes mellitus, and hypertension in Mucugê, Bahia," funded by the Bahia State Research Support Foundation (FAPESB) (SUS Grant Agreement 0018/2021) and was conducted by researchers from the Situation Room and Epidemiological and Statistical Analysis (SSAEE) at the State University of Feira de Santana (UEFS). The project was submitted for review and approval by the Research Ethics Committee of the State University of Feira de Santana (CEP/UEFS) (CAAE: 15618119.7.0000.0053), following the recommendations of Resolution 466/2012⁽¹¹⁾.

RESULTS

A total of 337 individuals were studied, with 3 losses and 6 refusals. The prevalence of SAH was 49.6% (167).

Most of the adults interviewed were female (64.1%), aged 46 years or older (50.7%), living with a partner (60.2%), with low educational attainment (55.8%), with an income equal to or greater than two minimum wages (60.5%), self-identified as black or brown (82.6%), and originating from the city of Mucugê (58.8%), Table 1.

Regarding smoking habits, 4.5% of respondents reported being smokers. Regarding alcohol consumption, 30.0% reported drinking alcohol, Table 1.

The prevalence of excess weight measured by altered WC was 87.5% in females and 53.7% in males, and according to BMI, it was altered in 62.0% (overweight 38.6% and obesity 23.4%). Regarding sleep problems, minor mental disorders, and diabetes,

50.1% had sleep problems, 31.2% had minor mental disorders, and 16.3% reported having diabetes, Table 1.

The results revealed a higher prevalence of hypertension among males (PR = 1.53 - 95% CI 1.23-2.08),

those aged 46 years or older (PR = 1.45 - 95% CI 1.16-1.81), with low educational attainment (PR = 1.30 - 95% CI 1.04-1.64), with altered waist circumference, in females (PR = 3.07 - 95% CI 1.22-7.70), among those

who reported smoking (PR = 1.38 - 95% CI 0.95-2.00), black and brown skin color (PR = 1.25 - 95% CI 0.92-1.76), and overweight, as measured by BMI (PR = 1.17 - 95% CI 0.93-1.48), Tables 2, 3, and 4.

Table 1. Frequency of sociodemographic, anthropometric, and health conditions variables in the adult sample registered in the Family Health Strategy of Mucugê, Bahia, 2021–2022.

Variables	Frequency ¹	Percentage
Gender		
Male	121	35,9
Female	216	64,1
Age		
≥46	171	50,7
<46	166	49,3
Marital status		
With partner	203	60,2
Without partner	134	39,8
Level of education		
Low education	188	55,8
High level of education	149	44,2
Family income		
Low income	133	39,5
High Income	204	60,5
Skin Color		
Black/Brown	270	82,6
Indigenous, white, and yellow	57	17,4
Place of birth		
Mucugê	198	58,8
Other	139	41,2
Smoking habit		
Yes	15	4,5
No	320	95,5
Alcohol consumption		
Yes	101	30,0
No	236	70,0
Female waist circumference		
≥80 cm	189	87,5
<80 cm	27	12,5
Male waist circumference		
≥94 cm	65	53,7
<94 cm	56	46,3

Original Article

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BMI		
Overweight/Obese	79	62,0
Eutrophic	258	38,0
Sleep Problem		
With Sleep Problems	169	50,1
No Sleep Problems	167	49,6
DPM		
Yes	105	31,2
No	232	68,8
Diabetes		
Yes	55	16,3
No	282	83,7
Total	337	100

Source: database

Valid responses, excluding those ignored.

Table 2. Prevalence, prevalence ratio (PR), and respective 95% confidence intervals (95% CI) of the association between sociodemographic variables and SAH in adults residing and registered with the Family Health Strategy in Mucugê, Bahia, 2021/2022.

Variable	HAS		Normotensive		Total1		Prevalence Ratio	95% CI
	N	%	N	%	N	%		
Gender								
Male	77	63,6	44	36,4	121	100	1,53	1,23-2,08*
Female	90	41,7	126	58,3	216	100		
Age								
≥46 years	100	58,5	71	41,5	171	100	1,45	1,16-1,81*
<46 years	67	40,4	99	59,6	166	100		
Marital status								
With Partner	103	50,7	100	49,3	203	100	1,06	0,85-1,33
No partner	64	47,8	70	52,2	134	100		
Education								
Low	104	55,3	84	44,7	188	100	1,30	1,04-1,64*
High	63	42,3	86	57,7	149	100		
Race/Color								
Black and Brown	136	50,4	134	49,6	270	100	1,25	0,89-2,68
Other	23	41,6	34	58,4	57	100		

Source: database

Valid responses, excluding those ignored.

* Statistically significant result

Table 3. Prevalence, prevalence ratio (PR), and respective 95% confidence intervals (95% CI) of the association between anthropometric variables and SAH in adults residing and registered with the Family Health Strategy of Mucugê, Bahia, 2021/2022.

Variable	HAS		Normotensive		Total ¹		Prevalence Ratio	95% CI
	N	%	N	%	N	%		
BMI ²								
≥25 kg/m²	110	52,6	99	47,4	209	100	1,17	0,93-1,48
<25 kg/m²	57	44,9	70	55,1	127	100		
CC ³ Female								
≥80cm	86	45,5	103	54,4	189	100	3,07	1,22-7,70*
<80cm	4	14,8	23	85,2	27	100		
CC ² Male								
≥94cm	44	67,7	21	32,3	65	100	1,06	0,87-1,51
<94cm	33	58,9	23	41,1	56	100		

Source: database

¹Valid responses, excluding those ignored.

1. BMI – Body Mass Index

2. 2.WC – Waist Circumference

* Statistically significant result

Table 4. Prevalence, Prevalence Ratio (PR), and respective 95% Confidence Intervals (CI-95%) of the association between health status, lifestyle habits, and SAH in adults residing and registered with the Family Health Strategy of Mucugê, Bahia, 2021/2022.

Variable	HAS		Normotensive		Total ¹		Prevalence Ratio	95% CI
	N	%	N	%	N	%		
Sleep Problems								
Yes	85	50,3	84	49,7	169	100	1,03	0,83-1,29
No	81	48,5	86	51,5	167	100		
DPM ²								
Yes	51	48,6	54	51,4	105	100	0,97	0,77-1,23
No	116	50	116	50	232	100		
DMA ³								
Yes	28	50,9	27	49,1	55	100	1,03	0,77-1,37
No	139	49,3	143	50,7	282	100		
Drinks								
Yes	48	47,5	53	52,5	101	100	0,94	0,74-1,20
No	119	50,4	117	49,6	236	100		
Smokes								
Yes	10	66,7	05	33,3	15	100	1,38	0,95-2,00
No	155	48,4	165	51,6	320	100		

Source: database

1. Valid responses, excluding those ignored.

2. DPM - Minor Psychiatric Disorder

3. DMA - Self-reported Diabetes Mellitus

DISCUSSION

The prevalence of hypertension observed in this study was higher than that found in other national studies (49.6%). The 2023 Vigitel survey, conducted in 27 Brazilian cities, revealed a prevalence of approximately 27.9%, ranging from 19.2% in São Luís to 34.4% in Rio de Janeiro, while in Salvador, this figure was 29.4%⁽¹⁵⁾. Other investigations in Brazil, such as those by Fiorio et al. (2020) and Oliveira EFP et al. (2023), described prevalences similar to those in the aforementioned study: 23.2% and 27.9%, respectively.

The prevalence of hypertension was higher among males, corroborating the findings of other studies conducted with adults in the city of São Paulo and in Santa Catarina. These studies detected a strong association between male gender and hypertension⁽¹²⁾. However, other researchers, such as Menezes in São Paulo and Molina in Paraná, found a higher prevalence among females^(13,14). This factor may be related to the early diagnosis of systemic hypertension in females, due to greater adherence to seeking health services⁽¹⁵⁾.

In this study, an association was found with age ≥ 46 years, corroborating the results of other studies conducted in Paraná and São Paulo^(13,14). Aging can add to other risk factors observed throughout life. This factor is associated with changes that make individuals more prone to developing hypertension, including vascular and aortic changes, stiffening of connective tissue, lipid and calcium deposits in vessel walls, and increased vascular resistance⁽¹²⁾. In addition to this, the aging of the population is seen by experts as the explanatory factor for the increase in the prevalence of SAH worldwide⁽¹⁶⁾.

Low educational attainment was a factor associated with SAH. Studies consulted indicate that individuals and populations with lower socioeconomic status, including low educational attainment, are more likely to experience the event. The level of education is inversely proportional to the prevalence of hypertension, i.e., the

higher the level of education, the easier it is to understand information regarding the health/disease process, such as lifestyle habits, risk factors, and medications⁽¹⁶⁾.

Among the anthropometric variables, WC in females was the one that showed the strongest association, with statistical significance, since females identified with WC changes were three times more likely (OR = 3.07 – 95% CI = 1.22-7.70) of developing hypertension when compared to eutrophic individuals of the same sex. A study conducted in Pernambuco found similar results, in which an increase in waist circumference was associated with an increase in systemic arterial hypertension⁽¹⁷⁾. Excess weight is an important risk factor for the overall burden of disease and is strongly related to degenerative diseases, such as atherosclerotic diseases. This risk factor is considered modifiable, so controlling it can lead to better life expectancy and quality of life for hypertensive individuals⁽¹⁸⁾.

The absence of an association between SAH and alcohol consumption was an unexpected result, given that it is a risk factor traditionally described in the literature. This result suggests reverse causality bias, which is very common in cross-sectional studies, when the exposure variable may be a consequence of the outcome. In this case, knowledge of the diagnosis of the disease (SAH) may cause behavioral changes, such as a reduction or even elimination of alcohol consumption⁽¹⁹⁾. Epidemiological studies indicate that alcohol consumption is associated with increased blood pressure levels, as consumption increases the weight and stiffness of the arteries of alcohol consumers⁽¹⁾.

This study observed an association between skin color and hypertension, but this result was not statistically significant. A nationwide study revealed that brown and black races/colors have a higher prevalence of hypertension when compared to other racial groups⁽²⁰⁾. Thus, black and brown races are more likely to develop more severe forms of the disease, justified by a hereditary component capable of compromising cellular electrolyte uptake,

interfering with renal function^(1,20). Furthermore, the miscegenation of the Brazilian population, which makes ethnic classification difficult, must be considered⁽¹⁸⁾.

From the same perspective, BMI and smoking show a strong relationship with the development of hypertension⁽¹³⁾. Articles show that excess weight is one of the determining factors for the increased incidence of SAH, due to increased body fluid, cardiac output, and peripheral insulin resistance⁽¹⁾. In addition, smoking causes an acute increase in blood pressure and heart rate, probably mediated by nicotine. In this sense, smoking cessation is pointed out as an effective non-pharmacological measure in reducing blood pressure. Studies indicate that quitting smoking can reduce blood pressure by up to 10 mmHg, due to decreased activation of the sympathetic nervous system and reduced levels of catecholamines, which are elevated during smoking⁽²¹⁾.

This study was pioneering in estimating the prevalence and investigating factors associated with hypertension (HAS) in the municipality of Mucugê, Bahia, having studied a significant sample of adult individuals in a short time and at low cost. However, it is necessary to point out some methodological limitations. This study has a cross-sectional design, which makes it impossible to establish a causal link between the variables studied, as no chronological relationship between the variables studied was established. Another limitation pointed out is the possibility of reverse causality bias, when the exposure variable may be a consequence of the outcome. Finally, the study may have presented, as a possible limitation, the occurrence of selection bias, since most of the participants were female.

It is hoped that the results of this study will contribute to the discussion on the prevalence of SAH and its associated factors, as well as encourage the implementation of actions for the prevention and control of hypertension, especially in relation to modifiable variables such as obesity, since in this study, older people (≥ 46 years) and those with abdominal obesity

were more likely to have SAH.

FINAL CONSIDERATIONS

This study revealed a high prevalence of hypertension among adults registered in the Family Health Strategy (ESF) in the municipality of Mucugê, Bahia, especially among males, those with low educational attainment, those aged 46 years or older,

and those with high abdominal circumference, especially among women.

The high prevalence of hypertension associated with modifiable variables (education and waist circumference) and non-modifiable variables (age and sex) observed in this study may contribute to the prevention and control of hypertension developed by health authorities.

Therefore, it is recommended that

health professionals implement simple actions, such as measuring weight, height, and abdominal circumference and encouraging the adoption of healthy lifestyle habits. In addition, disseminating information about risk factors for hypertension and its health implications may contribute to the prevention and control of this condition.

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