

FACTORS ASSOCIATED WITH INAPPROPRIATE BLOOD PRESSURE IN HYPERTENSIVE PATIENTS*

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ABSTRACT: Objective: assess the factors associated with inappropriate blood pressure in hypertensive patients monitored in the Family Health Strategy. Method: cross-sectional study, involving 417 people in Maringá, Paraná. The data were collected in the first semester of 2016, using the instrument satisfaction of hypertensive users with Primary Health Care services; using the questions related to the sociodemographic, nutritional and clinical profile. In the data analysis, descriptive and inferential statistics were applied. Results: most interviewees, 62.4% were elderly, 67.8% female and 55.2% retired/pensioner. Inappropriate blood pressure was associated with people over 59 years of age, retired/pensioners, moderately active, without practicing physical exercise and weakly oriented about the disease. Conclusion: the results signal the need to reorganize the work process, strengthening the orientations and health education for arterial hypertension patients.

DESCRIPTORS: Hypertension; Risk factors; Disease prevention; Family Health Strategy; Nursing.

FATORES ASSOCIADOS À PRESSÃO ARTERIAL INADEQUADA DE PESSOAS COM HIPERTENSÃO

RESUMO: Objetivo: avaliar os fatores associados à pressão arterial inadequada em pessoas com hipertensão acompanhadas pela Estratégia Saúde da Família. Método: estudo transversal, realizado com 417 pessoas, no município de Maringá, Paraná. A coleta de dados foi realizada no primeiro semestre de 2016, por meio do instrumento satisfação do usuário com hipertensão arterial com os serviços prestados pela Atenção Primária à Saúde, utilizando as questões referentes ao perfil sociodemográfico, nutricional e clínico. Na análise dos dados, aplicou-se estatística descritiva e inferencial. Resultados: a maioria dos entrevistados, 62,4% era idoso, 67,8% do sexo feminino e 55,2% aposentado/pensionista. Houve associação da pressão arterial inadequada com pessoas de idade superior a 59 anos, aposentados/pensionistas, moderadamente ativos, não praticantes de atividades físicas e fragilidade nas orientações sobre a doença. Conclusão: os resultados sinalizam a necessidade de reorganização do processo de trabalho, com o fortalecimento das orientações e educação em saúde às pessoas com hipertensão arterial.

DESCRIPTORES: Hipertensão; Fatores de risco; Prevenção de doenças; Estratégia Saúde da Família; Enfermagem.

FACTORES ASOCIADOS A LA PRESIÓN ARTERIAL INADECUADA DE PERSONAS CON HIPERTENSIÓN

RESUMEN: Objetivo: El propósito del estudio fue evaluar los factores asociados a la presión arterial inadecuada en personas con hipertensión acompañadas por la Estrategia Salud de la Familia. Método: Fue un estudio trasversal, realizado con 417 personas, en el municipio de Maringá, Paraná. La obtención de datos ocurrió en el primer semestre de 2016, por medio del instrumento de satisfacción del usuario con hipertensión arterial con los servicios prestados por la Atención Primaria a la Salud, utilizando las cuestiones referentes a los perfiles socio demográfico, nutricional y clínico. En el análisis de los datos, se aplicó estadística descriptiva e inferencial. Resultados: La mayoría de los entrevistados, 62,4%, era de ancianos, 67,8% del sexo femenino y 55,2% jubilado/pensionado. Hubo asociación de la presión arterial inadecuada con edades superiores a 59 años, jubilados/pensionados, moderadamente activos, no practicantes de actividades físicas y la debilidad de orientaciones acerca de la enfermedad. Conclusión: Se concluye que hay la necesidad de reorganizar el proceso de trabajo y perfeccionar las orientaciones y la educación en salud de las personas con hipertensión arterial.

DESCRIPTORES: Hipertensión; Factores de riesgo; Prevención de enfermedades; Estrategia Salud de la Familia; Enfermería.

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● INTRODUCTION

Hypertension is a major public health problem worldwide⁽¹⁾. With high prevalence rates, it is responsible for a high number of deaths due to its chronicity, besides requiring multiprofessional care, considering its multifactorial origin, complexity and range of pressure symptoms⁽²⁾.

The worldwide prevalence of hypertension is approximately 31%, accounting for 63% of a total of 38 million adult deaths worldwide. According to the World Health Organization (WHO), the African continent shows the highest prevalence of persons above 25 years of age diagnosed with hypertension (46%), in contrast to the North American continent, which has a lower prevalence (35%)^(1,3).

In Brazil, the prevalence of the disease is approximately 24.8% in adult individuals, with a higher proportion among women (26.8%) than men (22.5%)⁽⁴⁾. The occurrence of the disease is also higher in individuals with low levels of education, which increases the difficulty to keep blood pressure values within normal range, contributing to the onset of complications due to its chronicity⁽⁴⁾.

In this aspect, the difficult pressure control has raised the need for substantial care strategies related to coping and living with the disease⁽⁵⁾. The range of factors that interfere in the hypertension treatment and control, such as behavioral determinants, nutritional status, sociodemographic status and compliance with pharmacological therapy, should be considered in the creation and adoption of new strategies, with periodic evaluation of the people by health professionals⁽⁵⁻⁶⁾.

In this sense, knowing the factors associated with inadequate blood pressure can favor the discussion and improvement of the organization of the healthcare work process, based on the population's health needs, with precise, effective and problem-solving actions.⁽²⁾ In view of the above, the objective of this study was to evaluate the factors associated with inadequate blood pressure in people with hypertension accompanied by the Family Health Strategy (FHS).

● METHOD

A cross-sectional study was carried out with people on hypertension treatment and accompanied by the FHS. The city where the research was carried out is located in the Northwest of the state of Paraná, Brazil. It has an estimated population of 403,063 inhabitants, with a primary health system organized in a decentralized way, consisting of 34 Basic Health Units (BHU) and 74 FHS teams, covering 68.01% of the population⁽⁷⁻⁸⁾.

For the sample calculation, 27,741 individuals with hypertension were considered, enrolled in the outpatient network of the Unified Health System (SUS) - HIPERDIA. The parameters used for simple random sampling were a 5% estimation error, 95% confidence interval and 15% increase for possible losses, totaling 437 people, later stratified according to the number of people followed in each UBS of the city. Considering the losses and refusals, the final sample consisted of 417 people.

Inclusion criteria were defined as being at least 18 years of age, living in the urban area of the city, having been attended by health professionals from the UBS in the last six months prior to data collection, and being registered in HIPERDIA up to the year 2014, so that the analysis of medical records and the monitoring of the year 2015 could be carried out. Being pregnant at the time of the interview was an exclusion criterion.

Data collection was carried out between February and June 2016 during HIPERDIA meetings, which often took place between 08:00 and 17:00 hours. Initial contact was made with the managers, physicians and nurses of the UBS and later with the research subjects, presenting the study and inviting them to participate. All individual interviews were conducted in comfortable and interference-free environments.

Two instruments were used for data collection. The first evaluated and classified the population as to the economic level⁽⁹⁾. The second evaluated the satisfaction of the hypertensive user with the Primary Health Care (PHC) services, adapted and validated by Paes⁽¹⁰⁾. For this study, the variables of the first block of questions were used, regarding the interviewees' sociodemographic, nutritional and

clinical profile.

We used equipment to measure anthropometric data and blood pressure values, with current calibration and regulation, considering the guidelines of the Brazilian Cardiology Society (BCS) for the data collection techniques referred to⁽¹¹⁾. An analogue scale was used with an anthropometric ruler to verify weight and height and aneroid sphygmomanometers for blood pressure measurement. To check the waist circumference, an inelastic tape measuring 150 centimeters was used.

Blood pressure values were categorized as Appropriate Blood Pressure when the systolic blood pressure (SBP) was ≤ 140 mmHg and diastolic blood pressure (DBP) ≤ 90 mmHg, according to the criteria of the VII Brazilian Guideline for Hypertension.⁽¹¹⁾

The users' regular monitoring was established according to the data for the year 2015 as baseline, following the criteria proposed by the Ministry of Health⁽¹²⁻¹³⁾, which considers regular monitoring as attending the UBS at least three times per year, with blood pressure values recorded and registered in the medical history.

The cut-off point established by the guidelines of the Brazilian Association for the Study of Obesity and Metabolic Syndrome (ABESO)⁽¹⁴⁾ was adopted for the waist circumference (WA) and body mass index (BMI), which considers the WA as altered when values are ≥ 94 cm for men and ≥ 80 for women. The BMI was calculated and categorized as low (BMI <18.5 kg/m²), eutrophic (BMI between 18.5 and 24.9 kg/m²), overweight (BMI between 25 and 29.9 kg/m²) and grade I (BMI between 30 and 34.9 kg/m²), grade II (BMI between 35 and 39.9 kg/m²) and grade III obesity (BMI > 40 kg/m²).⁽¹⁴⁾

For variables related to hypertension complications, such as having diabetes mellitus (DM) type I or type II and the number of medications used to treat the disease, the interviewees' self-reported information was considered, later confirmed in the analysis of the medical records. For the smoking variable, the interviewees were questioned about active smoking, according to the criteria recommended by the Ministry of Health, which considers the consumption of at least five cigarettes per day as smoking.⁽¹⁵⁾

For the classification of regular exercising, users who reported performing dynamic exercises (walking, cycling, gymnastics, swimming, among others) were considered, each day of the week, with a minimum duration of 30 minutes. Moderately active users reporting physical activity at least three times a week and lasting at least 30 minutes.⁽¹¹⁾

The users who reported active drinking of alcoholic beverages daily, at least twice a day, were classified as drinkers. This variable was verified according to the medical diagnosis and follow-up notes with the psychologist, available in the medical records and classified according to the International Classification of Diseases (ICD-10), classified as F10 (Mental and behavioral disorders resulting from alcohol use)⁽¹⁶⁾. For the variables referring to the guidelines, side effects of the medication in use and diet prescribed by health professionals, the answers referred to by the interviewees and information contained in the medical records were considered.

All questionnaires were checked, processed in a spreadsheet and later analyzed using IBM SPSS version 20.0. The logistic regression model was used through the stepwise forward method, considering all the variables with p-value <0.20 in the univariate analysis. Only the variables that resulted in $p < 0.05$ were maintained in the multivariate model. The magnitude of the associations was estimated by means of the Odds Ratio (OR), adopting the 95% confidence interval as a measure of precision.

The research was evaluated by the Standing Committee on Ethics in Research involving Human Subjects, receiving a favorable opinion (1.407.687/2016).

● RESULTS

In total; 417 people were studied, including 260 (62.4%) aged ≥ 60 years, 283 (67.8%) female, 260 (62.3%) white, 183 (43.8%) social class C, 255 (61.1%) primary education, 230 (55.2%) were retirees and/or pensioners and 249 (59.6%) lived with a partner and children (Table 1).

Table 1 – Univariate analysis of factors associated with inadequate blood pressure in hypertensive patients monitored in the Family Health Strategy, according to the sociodemographic profile. Maringá, PR, Brazil, 2016

	Blood Pressure		Univariate Analysis		
	Adequate†	Inadequate†	OR	95%CI	p
Age					
20 to 59 years	95 (22.8)	62 (14.8)	1		
> 60 years	129 (30.9)	131 (31.5)	1.55	1.04-2.32	0.031*
Sex					
Male	74 (17.8)	60 (14.4)	1		
Female	150 (35.9)	133 (31.9)	1.09	0.72-1.65	0.671
Family Situation					
Lives with Partner and Child	141 (33.7)	108 (25.9)	1		
Lives without Partner and Child	50 (12.0)	45 (10.8)	1.33	0.83-2.14	0.234
Lives alone	33 (8.0)	40 (9.6)	1.34	0.79-2.26	0.270
Education					
Unable to read/write	20 (4.8)	12 (2.9)	1.52	0.51-4.53	0.445
Primary Education	131 (31.4)	124 (29.7)	1.57	0.74-3.36	0.238
Secondary Education	61 (14.6)	46 (11.1)	1.25	0.55-2.83	0.581
Higher Education	12 (2.9)	11 (2.6)	1		
Color					
White	138 (33.1)	122 (29.2)	1		
Black	37 (8.8)	28 (6.7)	0.85	0.49-1.48	0.578
Mulatto	49 (11.8)	43 (10.3)	0.99	0.61-1.59	0.976
Occupation					
Employed	58 (13.9)	38 (9.1)	1		
Unemployed	56 (13.4)	35 (8.4)	0.95	0.53-1.71	0.875
Retired	110 (26.4)	120 (28.8)	1.66	1.02-2.70	0.039*
Economic Classification - ABEP					
A and B	75 (18.0)	73 (17.6)	1		
C	98 (23.5)	85 (20.3)	0.89	0.57-1.37	0.891
D and E	51 (12.2)	35 (8.4)	0.7	0.41-1.20	0.203

Legend: †: n (%); OR: Odds Ratio; CI: confidence index; * p-value < 0.20, variables included in the adjusted logistic regression model.

In the univariate analysis, the results showed that 224 (53.7%) study participants kept their blood pressure under control and 262 (62.8%) received appropriate monitoring in the FHS. For the anthropometric variables, 166 (40.3%) interviewees presented overweight, 287 (68.8%) altered waist circumference, 200 (48%) did not practice physical exercise and 272 (65.2%) used one or two drugs for hypertension treatment (Table 2).

Table 2 – Univariate analysis of factors associated with inadequate blood pressure, according to the clinical and anthropometric profile. Maringá, PR, Brazil, 2016

	Blood Pressure		Gross Analysis		
	Adequate†	Inadequate†	OR	95% CI	p
Monitoring in 2015					
Adequate	139 (33.3)	123 (29.5)	1		
Inadequate	85 (20.4)	70 (16.8)	0.93	0.62-1.38	0.724
BMI					
Normal	50 (12)	35 (8.4)	1		
Overweight	92 (22.1)	74 (17.7)	1.46	0.86-2.48	0.158*
Obesity	82 (19.6)	84 (20.2)	1.14	0.67-1.95	0.607
Waist circumference					
Normal	74 (17.7)	56 (13.4)	1		
Increased	150 (36)	137 (32.9)	1.2	0.79-1.83	0.377
Number of Drugs					
1 to 2	154 (36.9)	118 (28.4)	1		
3 to 4	62 (14.9)	66 (15.8)	1.38	0.91-2.11	0.126*
> 5	8 (1.9)	9 (2.1)	1.46	0.55-3.92	0.443
Side Effects of Medication					
Yes	27 (6.5)	35 (8.4)	1		
No	167 (40)	136 (32.6)	1.59	0.91-2.76	0.098*
Sometimes	30 (7.2)	22 (5.3)	0.9	0.49-1.63	0.73
Forgets to take medication					
No	173 (41.5)	151 (36.2)	1		
Yes	16 (3.8)	10 (2.4)	0.71	0.31-1.62	0.425
Sometimes	35 (8.4)	32 (7.7)	1.04	0.61-1.77	0.863
Physical exercise					
Active	80 (19.2)	45 (10.8)	1		
Sedentary	99 (23.7)	101 (24.2)	1.81	1.14-2.86	0.011*
Moderately active	45 (10.8)	47 (11.3)	1.85	1.07-3.21	0.027*
Follows diet prescribed by professional					
Yes	136 (32.6)	100 (24)	1		
No	23 (5.5)	26 (6.2)	1.53	0.82-2.85	0.172*
Sometimes	65 (15.6)	67 (16.1)	1.4	0.91-2.15	0.122*
Receives Professional Orientations					
Yes	82 (19.6)	90 (21.6)	1		
No	92 (22.1)	59 (14.1)	1.71	1.09-2.66	0.017*
Sometimes	50 (12)	44 (10.5)	1.37	0.81-2.30	0.234
Diabetes (DM)					
No	148 (35.5)	114 (27.4)	1		
Yes	76 (18.2)	79 (18.9)	1.34	0.90-2.01	0.140*
Smoker					
No	188 (45.1)	166 (39.8)	1		
Yes	36 (8.6)	27 (6.5)	0.84	0.49-1.45	0.554
Alcohol Drinker					
No	217 (52.1)	189 (45.4)	1		
Yes	7 (1.6)	4 (0.9)	0.65	0.18-2.27	0.507

Legend: †: n (%); OR: Odds Ratio; CI: Confidence Index; *p-value < 0.20, variables included in the multivariate logistic regression model.

Among the interviewees, 236 (56.6%) reported following a diet prescribed by health professionals and 172 (41.2%) said they received information about morbidity, treatment and appropriate medication use, 155 (37.2%) suffered from DM, 63 (15.1%) were active smokers and 11 (2.6%) consumed alcoholic beverages daily (Table 2).

In the adjusted analysis, the results appoint that people aged ≥ 60 years and retired/pensioners have 1.47 times (95%CI=1.27-2.04) and 1.53 times (95%=1.13-2.18) higher chance, respectively of presenting adequate blood pressure control (Table 3).

Table 3 – Multivariate analysis of factors associated with inadequate blood pressure. Maringá, PR, Brazil, 2016

	Blood Pressure		Adjusted Analysis		
	Adequate†	Inadequate†	ORadj	95% CI	p
Age					
20 to 59 years	95 (22.8)	62 (14.8)	1		
> 60 years	129 (30.9)	131 (31.5)	1.47	1.27-2.04	0.018
Occupation					
Employed	58 (13.9)	38 (9.1)	1		
Unemployed	56 (13.4)	35 (8.4)	0.89	0.49-1.63	0.725
Retired	110 (26.4)	120 (28.8)	1.53	1.13-2.18	0.034
Physical Exercise					
Active	80 (19.2)	45 (10.8)	1		
Sedentary	99 (23.7)	101 (24.2)	1.83	1.11-2.99	0.016
Moderately Active	45 (10.8)	47 (11.3)	1.94	1.09-3.46	0.024
Receives Professional Orientations					
Yes	82 (19.6)	90 (21.6)	1		
No	92 (22.1)	59 (14.1)	1.69	1.06-2.69	0.025
Sometimes	50 (12)	44 (10.5)	1.26	0.73-2.18	0.395

Legend: †: n (%); OR: Odds Ratio; CI: Confidence Index. Only those variables with $p < 0.05$ were maintained in the model.

People who reported no physical exercise and who are moderately active have 1.83 times (95%CI=1.11-2.99) and 1.94 times (95%CI=1.09-3.46) higher chances, respectively, of inadequate blood pressure. Those who mentioned not receiving any type of information on hypertension complications, encouragement of self-care practices, correct medication use and possible side effects have 1.69 times (95%CI=1.06-2.69) higher chance of inadequate blood pressure (Table 3).

● DISCUSSION

This study identified a high occurrence (46.7%) of people receiving hypertension treatment, accompanied in the FHS, who have inadequate blood pressure, corroborating a study⁽⁶⁾ carried out in the state of Paraná, with a similar population and showing non-compliance with therapy as the main risk factor for inadequate blood pressure values. A study conducted in Indonesia⁽²⁾ found that only 25% of the interviewees had adequate blood pressure control, showing as determinants the fragility in the background diagnosis and factors related to the knowledge about the disease.

In this study, a higher prevalence of women with hypertension, low education and economic status and living with relatives was found, corroborating a study carried out in São Paulo⁽³⁾, justifying women as being more active in the search for the diagnosis and treatment of chronic diseases, and more compliant with the treatment.

A significant association was identified between inadequate blood pressure and people over 59 years old and retirees / pensioners. Similar results were found in a study carried out in Ceará.⁽⁵⁾ The importance of care focused on elderly persons and how the economic situation intervenes in the health-disease process can be inferred. Older age and lower purchasing power may affect the knowledge about the disease and understanding about medications, self-care guidelines, changes in lifestyle and eating habits, contributing to inadequate blood pressure.⁽³⁾

Although there is no significant association between anthropometric markers and inadequate blood pressure, the high prevalence of overweight and obesity identified in the study is worrying, with data similar to a study carried out in Indonesia⁽²⁾, which indicates an increase in the obese population, causing harmful effects on health and interfering directly in the success of the treatment.

In the multivariate analysis, the BMI did not present statistical significance with inadequate blood pressure, but the number of overweight individuals (39.8%) was also worrisome, as were altered abdominal circumference (68.9%), in line with other studies carried out in the country.⁽¹⁷⁻¹⁸⁾ In these aspects, the need for promotional strategies is pointed out for weight reduction and changes in eating habits, considering that adiposity has a potential effect on the proper physiological mechanism of the organism, contributing to an increase in blood pressure.⁽¹⁷⁾

The Ministry of Health (MH) and BCS suggest the adoption of actions that encourage the practice of self-care, with a cognitive and behavioral approach of the user, aiming to evaluate their food consumption and how changes can occur without causing impact in the social, economic, family and religious dynamics of these people.⁽¹⁹⁾ In the case of hypertensive people, the incentive to use a low-salt diet is a measure that can assure pressure control, as the excessive consumption of sodium is associated with the stress symptoms of the disease.^(11,20)

Nevertheless, most of the interviewees reported following the diet prescribed by health professionals. A study carried out in Porto Alegre, Brazil, which evaluated the knowledge of hypertensive people on high-salt foods, resulted in insufficient knowledge, considering that the subjects are monitored regularly at a specialized outpatient clinic, pointing out the need for nutritional guidelines and encouragement of healthy eating habits.⁽²¹⁾

In this aspect, care is provided by the nursing team and by the nutrition professionals, who work at the Family Health Support Center (NASF), with actions to evaluate an adequate diet and prescription of a dietary plan, individual and effective for the population assisted by its team and which is also suggested by the Ministry of Health. These actions need to be defined based on case management, with the medical team responsible for monitoring and evaluating the results.^(20,22)

Another measure the health professionals need to adopt is the encouragement to perform physical activities, also recommended by the Ministry of Health and the BCS^(11,19-20), as a practice to regulate body weight, reduce the accumulation of abdominal adiposity accumulation and improve hypertensive symptoms. In this study, the practice of physical exercise showed a significant association with inadequate blood pressure, in which sedentary and infrequently active individuals are more vulnerable to having difficulty to maintain adequate blood pressure, resembling a clinical randomized trial, performed in a population with similar clinical characteristics.⁽²³⁾

Likewise, the data corroborate a study carried out in the interior of São Paulo, in which most interviewees who reported practicing physical activity presented adequate pressure values. The guided practice of physical activities supports the pressure control due to its hypotensive effect on the organism, besides contributing to body weight maintenance. Its indication needs to be equitable though, according to the clinical condition, physical and health limitations.^(11,17,20) It is emphasized that; although the results do not appoint an association between inappropriate blood pressure and the number of drugs used, the health professionals need to provide frequent orientations on medication use and possible side effects.⁽²⁴⁻²⁵⁾ In a study involving a population with clinical characteristics similar to this research, the results appointed insufficient knowledge on the disease, symptoms and treatment and the complexity of the prescribed drugs as risk factors for non-compliance with the pharmacological therapy.⁽²⁴⁾

A study⁽²⁵⁾ in Marília-SP found that the interviewees, even when classified as non-compliant, refused to report that they did not comply with the pharmacological therapy and pointed out the importance

of following the therapeutic plan. This contradiction is justified by the study participants' social and cultural factors. The authors concluded that several reasons influenced non-compliance, such as the occurrence of different events in the daily routine, forgetting to take medications and also the knowledge about medication, which indicates the importance of the guidelines and professionals asking about the continuous and strict adoption of the treatment, as prescribed by the medical team, and of referral to the psychologist for the sake of bonding and guaranteed compliance with the treatment chosen.

Nevertheless, the guidelines the professionals provided were reported as insufficient and showed a significant association among patients with inadequate blood pressure. Health professionals need to meet the population's health needs, especially those working in PHC, so that treatment compliance is effective, and mortality and hospitalization rates due to the chronic disease are avoided, stimulating autonomy and a better quality of life for chronic patients. It is also the duty of the State to fulfill its obligations regarding the investment of resources in the health area for the sake of care delivery.⁽⁶⁾

The study also showed a low number of people who consume alcohol daily, resembling a study⁽⁵⁾ performed with elderly people with hypertension, living in a city in the state of Ceará, justifying a modifiable risk factor that can be solved through health education actions. Alcohol abuse is considered a factor that hinders adherence to pharmacological treatment, mainly due to the harmful effects its consumption caused, as well as popular and cultural beliefs about the interaction of the drink with the medication.⁽¹⁵⁾

Although the results presented an expressive number of hypertensive patients who suffer from DM as an associated morbidity, it was not significantly associated with inadequate blood pressure, which corroborates a study⁽⁵⁾ carried out in Ceará. Nevertheless, it is important to evaluate the burden of diabetes in the quality of life of hypertensive people, mainly because of its limiting potential on daily tasks. According to the degree of chronicity, diabetes can lead to several problems related to its complications, such as blindness, amputation of limbs and cardiovascular problems, being a worrying and challenging disease for public health policies in Brazil and in the world, demanding that health professionals be equipped to use effective measures in the control and prevention of diseases related to the condition.^(4-5,20)

The study is limited to the instrument that addresses self-reported variables, such as the practice of physical activities. There are several instruments in the literature that discuss the topic more comprehensively, especially studies recommended by the Ministry of Health, such as VIGITEL.⁽¹⁸⁾ The reverse causality bias, which is inherent to studies with this methodological approach, may have altered the results of some associations.

Finally, studies with professionals are necessary to understand the difficulties in performing the daily activities within their function and which compromise the health of people who depend on the provision of public health services, contributing to new organizational management strategies, offering effective and problem-solving services, based on the prevention of problems and reduction of costs on hospitalizations due to preventable causes.

● CONCLUSION

It was observed that people over 59 years old who are retired / pensioners had inadequate blood pressure. A more careful follow-up by health professionals is necessary, considering that people of advanced age with lower purchasing power have more difficulty in treatment compliance, self-care practices and changes in lifestyle, which may interfere in blood pressure control.

Sedentary lifestyle and obesity were prevalent in the study, requiring new interventions and problem-solving measures by health professionals, who are involved in the diagnosis and treatment of chronic diseases and monitoring of treatment outcomes. The lack of guidance by health professionals for people with hypertension was associated with inadequate blood pressure, demanding the planning and organization of the work process according to the needs of the population, aiming at reducing diseases due to complications deriving from hypertension. The State needs to meet the human resource and financial needs with a view to the development of care practices at the health services.

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