



Arterial hypertension in the elderly accompanied in primary care: profile and associated factors^a

Hipertensão arterial em idosos acompanhados na atenção primária: perfil e fatores associados

Hipertensión arterial en ancianos acompañados en la atención primaria: perfil y factores asociados

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ABSTRACT

Objective: to analyze blood pressure control in elderly hypertensives accompanied by a Basic Health Unit of the Federal District, determining the sociodemographic profile and the associated risk factors. **Method:** this is a cross-sectional study with 133 elderly hypertensive patients. Variables related to sociodemographic factors, life habits, clinical factors and adherence to drug therapy were evaluated through the application of semistructured instruments and validated scales. Results with $p < 0.05$ were considered significant. **Results:** the elderly presented controlled blood pressure (56.4%) predominantly. The majority of the participants were female and women also had a higher rate of uncontrolled blood pressure (86.2%). Older age was associated with higher blood pressure values ($p = 0.031$). Alcoholism ($p = 0.020$) and mean body mass index of 33.0 ($p < 0.000$) were factors associated with hypertension adherence to therapy had more controlled values of systolic and diastolic blood pressure. **Conclusion and implications for the practice:** it was verified that there is a strong association between the risk factors discussed and the lack of control of the blood pressure of elderly hypertensive, especially with regard to advanced age, alcoholism, obesity and overweight, and it is necessary to reorient the planning and strategies of promotion of health and prevention of diseases directed at the elderly hypertensive in the scope of primary health care.

Keywords: High Blood Pressure; Risk Factors; Health Promotion; Primary Health Care; Public Health Nursing.

RESUMO

Objetivo: Analisar o controle da pressão arterial de idosos hipertensos acompanhados por uma Unidade Básica de Saúde do Distrito Federal, determinando o perfil sociodemográfico e os fatores de risco associados. **Método:** Trata-se de um estudo transversal realizado com 133 idosos hipertensos. Foram avaliadas variáveis relacionadas aos fatores sociodemográficos, hábitos de vida, fatores clínicos e adesão à terapêutica medicamentosa através da aplicação de instrumentos semiestruturados e escalas validadas. Resultados com $p < 0,05$ foram considerados significativos. **Resultados:** Os idosos apresentaram pressão arterial controlada (56,4%) de forma predominante. A maioria dos participantes foi do sexo feminino e as mulheres também apresentaram maior taxa de descontrole (86,2%). A idade avançada mostrou associação com maiores valores pressóricos ($p=0,031$). Alcoolismo ($p=0,020$) e índice de massa corporal médio de 33,0 ($p<0,000$) foram fatores associados com a hipertensão arterial. **Conclusão e implicações para a prática:** Verificou-se que existe forte associação entre os fatores de risco abordados e a falta de controle da pressão arterial de idosos hipertensos, principalmente no que diz respeito à idade avançada, alcoolismo, obesidade e sobrepeso, sendo necessário reorientar o planejamento e as estratégias de promoção da saúde e prevenção de agravos, voltadas a idosos hipertensos no âmbito da atenção primária à saúde.

Palavras-chave: Pressão Arterial Alta; Fatores de risco; Promoção da Saúde; Atenção Primária à Saúde; Enfermagem em Saúde Comunitária.

RESUMEN

Objetivo: analizar el control de la presión arterial en ancianos hipertensos acompañados por una Unidad Básica de Salud del Distrito Federal, determinando el perfil sociodemográfico y los factores de riesgo asociados. **Método:** se trata de un estudio transversal realizado con 133 ancianos hipertensos. Se evaluaron variables relacionadas a los factores sociodemográficos, hábitos de vida, factores clínicos y la adhesión a la terapéutica medicamentosa, a través de la aplicación de instrumentos semiestruturados y escalas validadas. Los resultados con $p < 0,05$ se consideraron significativos. **Resultados:** los ancianos presentaron presión arterial controlada (56,4%) de forma predominante. La mayoría de los participantes fue del sexo femenino y las mujeres también presentaron mayor tasa de descontrol (86,2%). La edad avanzada mostró asociación con mayores valores de presión ($p = 0,031$). El etilismo ($p = 0,020$) y el índice de masa corporal promedio de 33,0 ($p < 0,000$) fueron factores asociados a la hipertensión arterial. **Conclusión e implicaciones para la práctica:** se constató que existe una fuerte asociación entre los factores de riesgo abordados y la falta de control de la presión arterial de los ancianos hipertensos, principalmente en lo que se refiere a la edad avanzada, al alcoholismo, a la obesidad y al sobrepeso, siendo necesario reorientar la planificación y las estrategias de promoción de la salud y prevención de agravos, dirigidos a ancianos hipertensos en el ámbito de la atención primaria de la salud.

Palabras clave: Presión Arterial Alta; Factores de Riesgo; Promoción de la Salud; Atención Primaria de la Salud; Enfermería en Salud Comunitaria.

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INTRODUCTION

The aging of the Brazilian population is a fact that is linked to urbanization, social and economic changes and globalization, affecting how people live, work and feed. As a result, the incidence of obesity and physical sedentary lifestyle has increased, important risk factors for chronic non-communicable diseases (NCDs).¹ In Brazil, these diseases constitute a serious public health problem, corresponding to 68.3% of death causes, especially cardiovascular diseases.^{2,3}

Approximately 66 million people report chronic diseases in Brazil, being the Southeast, with 29.5 million individuals, the Brazilian region where CNCD are the most prevalent diseases, with more than a third of the national rate. In the Midwest, on the other hand, the number of individuals is lower, with 4.7 million people reported with chronic diseases, 817 thousand of them in the Federal District,⁴ the location of this study.

Important NDC, arterial hypertension (HT) is a condition characterized by elevation and sustentation of blood pressure (BP) levels. Generally, dyslipidemia, abdominal obesity and diabetes mellitus (DM) are risk factors for this condition. Inadequate BP control is directly related to stroke (STRK), acute myocardial infarction (AMI), heart failure (HF) and chronic kidney disease (CKD), serious events that reduce longevity and quality of life, implying declining global functionality, especially the elderly.⁵

Due to the changes because of aging, such as morphological, metabolic and psychic alterations, elderly individuals are at higher risk for developing arterial hypertension, which may be considered the most prevalent condition in the elderly attended by Basic Health Units (BHU).⁶ Facing this, the Brazilian Ministry of Health (MS) implemented a care line for elderly, called "Strategies for promoting healthy aging", in order to qualify care for this population and reorganize health services, in special attention to Primary Health Care (PHC).⁷

It is worth highlighting the importance of nursing in PHC, with functions that range from the management and maintenance of UBS functioning to actions directed at individuals, families and community, in order to guarantee integral assistance, health promotion and protection and disease prevention, including in the monitoring and control of HT in elderly individuals.⁸

Estimates show a prevalence of 35.8% of HT among Brazilians, with men being the majority.⁹ The Brazilian Society of Cardiology listed the main risk factors for HT, being: age, sex and ethnicity, overweight and obesity, high salt intake, alcoholism, sedentary lifestyle, socioeconomic factors and genetics,⁵ being essential that, in addition to the treatment, the modifiable factors are also reversed for BP control.¹⁰

The individual cost of a chronic disease is high and is usually associated with work and productivity loss, and other factors that negatively influence household income, with an estimated \$ 4.18 billion in treatment costs from 2006 to 2015 and that cardiovascular diseases, whose HT is a risk factor, are those that generate

or require the highest expenses related to hospital admissions and procedures of medium and high complexity.⁴

It is imperative to invest in prevention and control of blood pressure values of hypertensive elderly, since knowing this population profile can help in the construction of public policies and in the reduction of HT disorders. Based on this context, the aim of this study was to analyze the blood pressure control of hypertensive elderly accompanied by a Basic Health Unit of the Federal District, determining the sociodemographic profile and the associated risk factors.

METHODS

It is a cross-sectional study carried out in a Basic Health Unit in the Federal District from January to July 2017. The study population consisted of hypertensive participants referenced in this unit. The sample was from convenience and formed by 133 elderly hypertensive patients' participants. Individuals with continuous blood pressure values ≥ 140 mmHg for systolic blood pressure (SBP) and ≥ 90 mmHg for diastolic blood pressure (DBP) were considered hypertensive.⁵

Individuals with 60 years of age or older, diagnosed with Arterial Hypertension for at least 3 months and who participated in the follow-up group to hypertensive patients adopted at the unit were eligible. Patients with mental illness, neoplasms under treatment, and those participants who did not complete any of the instruments applied or whose instruments could not be interpreted due to illegible handwriting, erasure and duplicity of answers were excluded.

For the data collection it was used: (a) a semi-structured instrument to determine the socio-demographic and socio-economic profile, (b) a semi-structured instrument on the use of medicines in general, (c) instrument on quality of life and physical activity, (d) instrument for assessing nutritional status and body composition, and e) modified scale of adherence to treatments - *Morisky-Green* test.¹¹

For the analysis of the biochemical and immunological parameters, 15 mL of blood were collected in the antecubital vein using vacuum tubes with the participant in a 12-hour fast for the determination of total cholesterol and triglycerides. To measure the body mass, a *Filizola*® scale with accuracy of 100 g was used; regarding the stature, a vertical metric scale with accuracy of 1 mm was used.

The body composition was evaluated using the Dual Energy X-Ray Absorptiometry (DEXA) with equipment of the *General Electric-GE*® brand, model 8548 BX1L, year 2005, Lunar DPX type, with software *Encore Program* 2005. The examination was performed by a trained technician. For carrying out the procedure, all participants removed their metal belongings (bracelets, earrings, rings, engagement rings, etc.), moved to a supine position on the equipment table, so that they were completely centralized in comparison with the sides of the table. The parti-

Participants were instructed to extend their lower limbs, and a Velcro tape was used to keep them close and support the feet, so that they were at an angle of approximately 45° to the vertical plane. The upper limbs remained extended and positioned along the body, without contact with the trunk.

The BP measurement was performed by auscultatory technique, after 10 minutes of rest, in a calm environment, with the participant seated, with the legs uncrossed, feet resting on the floor, back resting on the chair, relaxed and silent.

From the data collected, we divided the participants into two groups: 1) individuals with controlled BP (Controlled BP) and 2) individuals with uncontrolled BP (Uncontrolled BP). Next, we listed the researched variables that are risk factors for uncontrolled blood pressure and consequent positive influencers for the prevalence of Hypertension.

The following variables were analyzed: sex, marital status, occupation, age, income, schooling, smoking, alcoholism, sedentary lifestyle, time of diagnosis of hypertension, Body Mass Index (BMI), Body Fat Percentage (BFP), total cholesterol, triglycerides, SBP and DBP values, and adherence to drug therapy. High BMI was considered to be a value above 24.9 for overweight and 29.9 for obesity.¹² The values considered abnormal for total cholesterol and triglycerides were >190 mg/dL and >150 mg/dL, respectively.¹³

Data were organized in spreadsheets of *Microsoft Excel*® 2016 and analyzed using *IBM Package for the Social Sciences (SPSS*®) version 20.0. The statistical tests used were Pearson's Chi-Square and *t-Student*. Logistic regression was used to determine the independent effect of association between independent variables and uncontrolled blood pressure. For the preparation of the final model, multivariate logistic regression was used, including study variables using the *forward stepwise* method. The odds ratio (OR) was estimated, with a significance level of 5% and a 95% confidence interval.

All participants were informed about the risks and benefits of the research and that the results were used as the basis of the scientific work. They were ensured anonymity and their privacy was preserved by replacing their names with identification numbers, which were included in the data collection instruments. They were told that they could refuse to participate in the study when they deemed it appropriate, with no personal loss. They signed a Free and Informed Consent (FIC). This study was submitted to the Ethics and Research Committee (CEP) of the Foundation for Teaching and Research in Health Sciences of the Federal District State Health Department (FEPECS/SES-DF), pursuant to Resolution 466/2012 of the National Health Council (CNS), approved on December 8, 2015 according to opinion number 1.355.211 and CAEE 0367215.5.0000.5553.

RESULTS

The mean age of the study participants was 63.2±10.5 years, with a predominance of those with controlled BP (56.4%), mean

income of R\$ 1,729.00±1,549.00, with emphasis on married (49.62%) and retirees (41.4%). It is possible to note that women, who were also the majority (87.2%), had a higher rate of uncontrolled blood pressure (86.2%) when compared to men. The mean schooling level observed was 6.9 ± 3.9 years (Table 1).

There was a predominance of non-smokers (94%), non-alcoholics (91.73%) and non-sedentary individuals (81.9%), curiously without significant association with blood pressure control (Table 2). Participants the highest average disease time presented uncontrolled BP the (127.9±98.5 months). High BMI (33.0±6.0) showed significant relation with uncontrolled blood pressure. Accordingly, uncontrolled blood pressure is associated with higher BFP average (43.8±8.2), total cholesterol (203,2±41,8) and triglycerides (165,3±80,3), without much statistical relevance. In both groups, a moderate adherence to drug therapy was predominated, with an important but not significant relation between adherence and control of blood pressure levels (Table 3).

After multivariate logistic regression were applied, the variables were adjusted according to their association with non-control of blood pressure, eliminating the confounding variables. As verified, individuals with uncontrolled BP are more likely to be older than those with controlled BP. Accordingly, individuals with uncontrolled PA have a higher chance of presenting high BMI, alcoholism, and higher values of SBP and DBP in relation to those who maintain adequate BP control, as shown in Table 4.

DISCUSSION

This study analyzed the factors that influence uncontrolled blood pressure in hypertensive elderly patients monitored in a Primary Care Facility in the Federal District. In order to do so, sociodemographic factors and life habits, clinical factors, and the characterization of SBP and DBP were investigated and, finally, the factors associated with uncontrolled of BP were listed according to logistic regression.

A study included a sample of 124 hypertensive patients followed by a Brazilian UBS, of whom 65.3% had uncontrolled BP, a higher percentage when compared to the 43.6% of hypertensive patients who composed the sample of 133 participants. This study also shows that the majority of participants with uncontrolled BP are female,¹⁴ which is consistent with the results obtained. Another study from 2016 with 190 hypertensive female elderly participants showed that 43.2% of them had uncontrolled BP.¹⁵

In the United States, the rate of blood pressure control indicated by the study was 52.8%,¹⁶ whereas in Europe the control rate was 51.2% to 65.4%,¹⁷ values similar to the 56.4% evidenced here. In Ghana, on the other hand, a study showed unsatisfactory control of 33.3% among the participants previously diagnosed with HT, whereas among those without a previous diagnosis, approximately 70% presented pre-hypertensive and hypertensive stages.¹⁸ This evaluation cannot be established, since all participants in our study had previous hypertension.

Table 1. Sociodemographic factors associated to blood pressure control in the elderly. Brasília, Distrito Federal, Brazil, 2017.

Characteristics	N (%)=133	Controlled BP		Uncontrolled BP		P
		N	%	N	%	
Gender						0.463
Female	116 (87.2)	66	88	50	86.2	
Male	17 (12.8)	9	12	8	13.8	
Marital Status						0.644
Single	20 (15.04)	10	13.3	10	17.3	
Married	66 (49.62)	37	49.3	29	50	
Divorced	10 (7.52)	5	6.7	5	8.6	
Widower/widow	37 (27.82)	23	30.7	14	24.1	
Occupation						0.798
Active	29 (21.8)	13	17.3	16	27.6	
Retired	55 (41.4)	32	42.7	23	39.6	
Inactive	49 (36.8)	30	40	19	32.8	
Age (M±SD) *	63.2±10.5	62.4±8.9		64.2±11.4		0.031
Income (M±SD) **	1,729.00±1,549.00	1,614.00±1,367.00		1,877.00±1,759.00		0.368
Education (M±SD) *	6.9±3.9	7.3±3.9		6.4± 4.0		0.198

* in years;

** in reais (R\$).

Table 2. Life habits and their association with the arterial pressure control of the elderly. Brasília, Distrito Federal, Brazil, 2017.

Characteristics	N (%)=133	Controlled BP		Uncontrolled BP		P
		N	%	N	%	
Smoking						0.540
Yes	8 (6)	5	6.7	3	5.2	
No	125 (94)	70	93.3	55	94.8	
Alcoholism						0.175
Yes	11 (8.27)	8	10.7	3	5.2	
No	122 (91.73)	67	89.3	55	94.8	
Sedentarism						0.997
Yes	24 (18.05)	13	17.3	11	19	
No	109 (81.95)	62	82.7	47	81	

The sample verified in this study was composed of 87.2% of women, where 43.1% had uncontrolled BP, which further reiterates the estimates. A study with a larger sample was conducted in Brazil. In 2015, with 15,105 hypertensive patients.⁹ In it, the prevalence of HT was higher among men than among women. Based on this scenario, we can infer that hypertension is not

conditioned to sex. Both men and women have similar rates of HT, as well as uncontrolled BP.

Some structural and physical changes are caused by aging, among them changes in the cardiovascular system. In women, the climacteric and menopause alterations, such as arterial stiffness, may be responsible for the prevalence of HT in the

Table 3. Clinical factors, characterization of SBP and DBP, adherence to drug therapy and its association with the arterial pressure control of the elderly. Brasília, Distrito Federal, Brazil, 2017.

Characteristics	N (%)=133	Controlled BP	Uncontrolled BP	P
		N	N	
Diagnosis of HT (M±SD)*	122.0±92.8	117.5±88.6	127.9±98.5	0.152
BMI (M±SD)	31.4±5.5	30.2±4.9	33.0±6.0	0.006
BFP (M±SD)	42.4±8.0	41.1±7.6	43.8±8.2	0.085
Total cholesterol (M±SD)	199.8±39.0	197.5±37.1	203.2±41.8	0.451
Triglycerides (M±SD)	162.1±77.2	159.9±75.6	165.3±80.3	0.786
SBP (M±SD)**	133.8±17.6	121.6±8.8	150.1±12.3	<0.000
DBP (M±SD)**	78.2±10.4	74.5±7.4	83.1±11.7	<0.000
Adherence				0.138
Low	28	12 (16)	16 (27.6)	
Moderate	63	37 (49.3)	26 (44.8)	
High	42	26 (34.7)	16 (27.6)	

HT: Arterial hypertension; BMI: Body mass index; PGC: Percentage of body fat; PAS: Systolic blood pressure; PAD: Diastolic blood pressure

* *time in months;

** in mmHg

Table 4. Associated factors with non-control of arterial pressure in the elderly after multivariate logistic regression analysis. Brasília, Distrito Federal, Brazil, 2017.

Factors	OR	IC	P
Advanced age	2.14	1.77-5.15	0.040
Alcoholism	1.32	1.03-1.94	0.020
High PAS	1.55	1.09-2.65	<0.000
High PAD	1.99	1.70-2.70	<0.000
High BMI	1.70	1.52-2.79	<0.000
Female Sex	1.15	0.90-1.44	0.266
Low income	0.63	0.27-2.30	0.410
Low education level	0.88	0.38-1.99	0.154
High PGC	0.82	0.66-1.36	0.756
High Total Cholesterol	1.43	0.82-2.44	0.108
High Triglycerides	0.98	0.61-1.44	0.688
Smoking	0.78	0.55-1.32	0.754
Sedentarism	1.27	0.73-2.13	0.395

OR: Odds ratio; HF: 95% confidence interval; PAS: Systolic Blood Pressure; BMI: Body mass index; PAD: Diastolic Blood Pressure; BFP: Percent Body Fat

elderly.²⁰ Studies also showed an intrinsic relationship between age and the uncontrolled blood pressure.^{10,19}

It is possible to note that high alcohol consumption is associated with elevated levels of SBP and DBP, as well as increased cholesterol levels and BMI values. These effects are important factors that lead to damage to the cardiovascular system, which can lead to hypertension.²⁰

The average BMI for individuals with uncontrolled blood pressure was 33.0±6.0, higher than the average identified in a similar study conducted in Portugal in 2017 with 709 individuals, where the average was 30.03±4.95.²¹ Another study also correlates a higher value of BMI with uncontrolled BP.²²

The Brazilian Association for the Study of Obesity and Metabolic Syndrome indicates that high BMI values are associated

with rates of arterial hypertension and other cardiovascular diseases, however, it points out that the waist-height ratio is a better predictor for cardiometabolic risk factors in both sexes and suggests the use of this one.¹²

The rate of therapeutic adherence in a study of 231 participants was 19.7%. Of the non-adherents, 33.2% had average adherence and 47.1% had low therapeutic adherence. Those participants with higher adherence rate had average BP values of 125.5x85.3 mmHg.²³ The benefits of adherence to treatment are needed to establish relation and promote appropriate treatment.^{24,25} Comparing with the results obtained, participants with low adherence have higher rates of uncontrolled BP, and they have higher average of SBP and DBP. Thus, it can be verified that low adherence to therapy is an important risk factor for uncontrolled blood pressure.

The high cost of purchasing antihypertensive drugs, the use of different combinations of pharmacological classes and too many tablets are predictive factors for non-adherence. Non-adherence to costs has been surpassed in Brazil by free access to pharmacotherapy in an outpatient clinic level promoted by SUS.²⁶ The use of poly-pills with a combination of different active ingredients is indicated as a viable strategy to improve compliance with drug treatment,²⁷ which can be adopted by the public health system as a tool to improve BP control.

It is worth mentioning that hypertensive individuals present a great cost to the health system. It is estimated that the annual cost for treatment of hypertension in the public health system is R\$398.9 million, representing 1.43% of SUS' total expenditures. HT is a potential clinical predictor for aggravation, longer length of hospital stay, and higher treatment cost.²⁸

A study carried out in a Reference Unit of medium complexity in Recife, financed by SUS, presented the amounts paid in Reais for the procedures carried out within one year. Cardiology exams cost R\$223.8 thousand, and 34.2% of them were diagnostic procedures. For clinical procedures, an appointment in cardiology had a cost of R\$167.100. The cost of cardiovascular and hypertension drugs was R\$1.95 million, representing 24.6% of all expenses.²⁹

In a study with data from 2008 to 2012 within the scope of SUS revealed 4.125 hospital admissions for cardiovascular diseases, corresponding to an average of 825 hospitalizations per year. Together with neoplasias, cardiovascular diseases represented the most expensive class, with an absolute total cost of R\$12,600, of which 51.2% were SUS' hospitalization costs.³⁰

Recent comparison of the population of Latin America with other parts of the world shows that hypertension is a common risk factor for cardiovascular disease, which makes it essential to know the local epidemiological patterns of hypertension.³¹

Through a successful strategy of the Brazilian Society of Cardiology, a registry of the current clinical practice for the treatment of HT in Brazil was carried out and also pointed out that better knowledge about the way in which the control and the

treatment of hypertensive occurs, as well as studies that show the characteristics of the Brazilian population, will allow the implementation of policies aimed at improving this procedure and, thus, contribute to a change in the epidemiological profile and decrease of cardiovascular morbidity and mortality in Brazil.³²

Like this research, most of the studies found in the literature for the topic "hypertension and blood pressure control" were carried out in Basic Health Care Facilities and Family Health Facilities. The importance of Primary Care in this context is verified, since prevention and promotion can avoid complications due to chronic non-communicable diseases, such as hypertension.^{15,33,34}

UBS, where data from this study were collected, has an organized support program for hypertensive individuals, with professionals having a great bond with patients, which may be justification for some variables that were not statistically significant and did not appear as risk factors. The nursing team is highly qualified and invests heavily in prevention and health education, as well as self-care.

It is important to take interdisciplinary actions that contribute to the management and control of hypertension and other cardiovascular diseases. The groups are tools that can complement the actions promoted by healthcare practitioners, enabling patients to share experiences and experience knowledge and practices, assisting in the treatment.³⁴

Some of the variations found between this and other studies may be due to methodological differences. The cross-sectional design of this study is limited in the interpretation of the results, since it does not enable establishment of causal or temporal relationships, making it difficult to know if the factors are a consequence of the disease or preceded its occurrence. The use of BMI as one of the variables rather than the waist-to-height ratio was also an adverse factor. However, the results were positive, since they showed characteristics specific of the population studied and demonstrated the importance of a qualified health system, with the primary care considered the gateway to the network.

CONCLUSION AND IMPLICATIONS FOR PRACTICE

This study provided an analysis of blood pressure control and associated risk factors. We also draw the socio-demographic profile of the study participants. It was verified that there is a strong association between the risk factors approached and the lack of control of the blood pressure of hypertensive elderly, mainly with respect to advanced age, consumption of alcoholic beverage, obesity and overweight, according to BMI values.

In revisiting this context, nursing emerges as the profession that deals directly and consistently with the elderly population in primary care, especially in the Family Health Strategy model, adopted nationally. To carry out a survey of the sociodemographic and clinical profile of the elderly is an effective tool for the care

practice, regarding the monitoring and control of arterial hypertension and is a differential in the care of the elderly hypertensive, since it allows planning and implementation of specific actions against the risk factors, preventing the progression of HT to more severe conditions.

The contributions of this study to the knowledge about arterial hypertension in elderly population are worth to be highlighted, although the design does not make possible the generalization of the findings. It is recommended to reorient the planning and strategies of health promotion and prevention of grievance aimed at the elderly hypertensive in the scope of primary health care, which presents great resolving power as a gateway to the system.

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