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LIFESTYLE AND ADHERENCE TO TREATMENT OF SYSTEMIC ARTERIAL HYPERTENSION IN ELDERLY MEN

Estilo de vida e adesão ao tratamento de hipertensão arterial sistêmica em homens idosos

Estilo de vida y adhesión al tratamiento de hipertensión arterial sistémica de hombres mayores

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ABSTRACT

Objective: To assess the lifestyle and adherence to treatment of systemic arterial hypertension (SAH) in elderly men. **Methods**: This is a cross-sectional and descriptive study with a quantitative approach, developed with 254 elderly men, meeting the following inclusion criteria: male, aged over 60 years, undergoing follow-up of SAH evolution in primary care. Data collection took place by means of two questionnaires: a semi-structured one, containing questions related to personal and family data on health and lifestyle conditions, and the Questionnaire on Adherence to the Treatment of Systemic Arterial Hypertension, between October and December 2016. **Results**: A majority of the elderly men were aged between 70 and 79 years (93; 36.5%), marital status married/stable union (174; 68.5%) and retired (200; 78.7%). There was a predominance of hypertensive patients who stopped taking the antihypertensive medication at least once a year, and eat practically fat-free and sugar-free foods, without consumption of sugary drinks (120; 47.2%). Lifestyle is marked by the coexistence of food groups liable to improve or disturb the adherence to the treatment of hypertension in elderly subjects. **Conclusion**: Partial adherence was observed in the elderly men investigated, who adopt some healthy habits as a compensatory mechanism to maintain practices that hinder the adherence to treatment.

Descriptors: Elderly; Lifestyle; Hypertension.

RESUMO

Objetivo: *Avaliar estilo de vida e adesão ao tratamento de hipertensão arterial sistêmica (HAS) em homens idosos.* ***Métodos:*** *Trata-se de estudo transversal, descritivo, com abordagem quantitativa, desenvolvido com 254 homens idosos, obedecendo aos seguintes critérios de inclusão: sexo masculino, idade igual ou superior a 60 anos e estar em acompanhamento da evolução da HAS na atenção primária. A coleta aconteceu por meio da aplicação de dois questionários: um semi-estruturado, contendo questões relacionadas a dados pessoais e familiares de condições de saúde e de estilo de vida, e o Questionário de Adesão ao Tratamento de Hipertensão Arterial Sistêmica (QTAHAS), entre outubro e dezembro de 2016.* ***Resultados:*** *A maioria dos homens idosos apresentou idade entre 70 e 79 anos (93; 36,5 %), estado civil casado/união estável (174; 68,5 %), aposentado (200; 78,7%). Houve predomínio dos hipertensos que deixam de tomar a medicação para HAS ao menos uma vez por ano, e comem praticamente sem gordura e sem doces e bebidas açucaradas (120; 47,2%). O estilo de vida é marcado*

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pela coexistência de grupos alimentares que favorecem ao controle e descontrole da adesão ao tratamento de hipertensão em homens idosos. ***Conclusão:*** *Constatou-se a adesão parcial dos homens idosos avaliados, os quais utilizam alguns hábitos saudáveis como mecanismo compensatório para manter práticas que dificultam a adesão ao tratamento.*

Descritores: *Idoso; Estilo de vida; Hipertensão Arterial.*

RESUMEN

Objetivo: *Evaluar el estilo de vida y la adhesión al tratamiento de la hipertensión arterial sistémica (HAS) en hombres mayores.* ***Métodos:*** *Se trata de un estudio transversal, descriptivo y de abordaje cuantitativo desarrollado con 254 hombres mayores obedeciendo a los siguientes criterios de inclusión: sexo masculino, edad de 60 años o más y estar en seguimiento de la evolución de la HAS en la atención primaria. La recogida de datos se dio a través de la aplicación de dos cuestionarios: uno semi-estructurado con preguntas relacionadas con los datos personales y familiares de las condiciones de salud y del estilo de vida y el Cuestionario de Adhesión al Tratamiento de Hipertensión Arterial Sistémica (CTAHAS) entre octubre y diciembre de 2016.* ***Resultados:*** *La mayoría de los hombres mayores presentó edad entre 70 y 79 años (93; 36,5 %), estado civil casado/unión estable (174; 68,5 %) y jubilado (200; 78,7%). Hubo predominio de hipertensos que no toman la medicación para la HAS por lo menos una vez al año y comen alimentos casi sin grasa, dulces y bebidas con azúcar (120; 47,2%). El estilo de vida está marcado por la coexistencia de grupos alimentarios que favorezcan el control y descontrol de la adhesión al tratamiento de la hipertensión en hombres mayores.* ***Conclusión:*** *Se constató una adhesión parcial de los hombres mayores evaluados los cuales utilizan algunos hábitos saludables como compensación del mantenimiento de prácticas que dificultan la adhesión al tratamiento.*

Descriptores: *Anciano; Estilo de vida; Hipertensión.*

INTRODUCTION

The increase in the elderly population is a worldwide phenomenon, corresponding to 12% of the population, which represents 901 million people[1]. In Brazil, the proportion of elderly population growth is similar, which entails clinical and social demands and implications for public health[2].

With the population aging, there is an increase in the prevalence of chronic noncommunicable diseases, particularly the systemic arterial hypertension (SAH), because of its asymptomatic evolution over a long period of time and the difficulties in its control, especially in the case of men, due to resistance to change their lifestyle[3,4].

SAH is a multifactorial clinical condition characterized by elevated and sustained blood pressure (BP) levels (≥140 x 90 mmHg). It is often associated with functional and/or structural changes in target organs (heart, brain, kidneys and blood vessels) and metabolic changes, with an increased risk of fatal and nonfatal cardiovascular events, occurring with a higher prevalence in elderly men[5].

SAH can be classified according to the office blood pressure measurement, conducted in routine practice, into stage 1 (140-159/ 90-99 mmHg), 2 (160-179/ 100-109 mmHg) and 3 (≥ 180/ ≥ 110 mmHg). There is also the white-coat hypertension (abnormal values only in the office); the masked one (in-office values are normal, while out-of-the-office are not) and the isolated systolic hypertension (alteration restricted to systolic blood pressure)[5].

The estimated global prevalence of SAH is 26.4%, reaching 21.0% in the USA and Canada, 33.5% to 39.7% in the European countries, in the European countries, 15% to 21.7% in the African and Asian countries, and around 40% in Latin America[6].

An epidemiological study carried out in Brazil pointed out a prevalence of hypertension in 32.5% (36 million) of the Brazilian population, with more than 60% of the cases in the elderly and, of this total, men are in the majority. Thus, elderly men constitute the part of the population with the highest prevalence of SAH[7]. The prevalence observed was higher than that of Portugal, whose prevalence in the population is 17%, reaching 44.3% among elderly men[8].

The health service intended for the comprehensive and continuous follow-up of patients with SAH is the Family Health Strategy (FHS), whose purpose is to provide support, diagnosis and treatment of hypertension, ensuring control of the disease and reduction of complications[9].

The treatment of hypertension, aimed at reducing cardiovascular morbidity and mortality, may have a nondrug and/or medication-based approach, with the aim of gradually reducing the BP to values below 140 mmHg, for systolic blood pressure (SBP), and 90 mmHg for diastolic blood pressure (DBP)[5].

Nondrug treatment, or lifestyle change, is the recommendation for the elderly and should be the first therapeutic proposal, since this is a fundamental part of high BP management, especially in cases of mild arterial hypertension, when blood pressure levels are between 140-159/ 90-99 mmHg[10].

Habits related to healthy lifestyle, inherent to nondrug treatment, have proven efficacy in controlling blood pressure levels and reducing complications. This treatment involves changes in lifestyle, such as regular practice of physical activity, weight

reduction, lipid control, healthy eating, stress management, cessation of smoking and alcohol consumption, thus requiring the patients to maintain a lifelong management[5,11].

Physical inactivity has been considered one of the major public health problems, for being the most prevalent risk factor for SAH. Therefore, the provision of physical activity practices should be part of the work carried out by primary health care services, since regular physical exercise reduces BP and body weight[12], which is very useful for maintaining good cardiovascular health and quality of life[5].

Adopting habits related to a healthy lifestyle requires changes that are not easily accomplished, as they require discipline and patience for results to be achieved[13]. Given that, nondrug treatment is the most difficult item to accomplish on the adherence to the treatment of hypertension, since it demands a greater effort on the part of the patients, generating a serious public health problem[14].

As benefits of the adherence to nondrug treatment, the following are evidenced: the control of blood pressure levels; the reduction in the incidence or delay in the occurrence of complications, and the improvement in the quality of life of the elderly, the latter being the primary goal of the actions conducted by the health teams, aimed at optimizing elderly adherence to treatment. Thus, the promotion of adherence to the treatment of hypertension is essential for the elderly to achieve quality of life[15], since older people are more likely to adhere to drug treatment than to implement behavioral and lifestyle changes[16].

Therefore, the work was driven by the need to evaluate the degree of adherence of the elderly to the treatment of hypertension, with emphasis on their lifestyle, since the studies have shown that there is a low adherence to behavioral and lifestyle changes that are typical of nondrug treatment[15,16].

Adherence to nondrug treatment is fundamental for elaboration of strategies that optimize the engagement of the elderly in the changes in lifestyle, contributing to the improvement of the knowledge about the treatment and prevention of complications. This research, therefore, is justified for being meant to stimulate the health professionals who work in the FHS for the importance of continuously orienting and encouraging elderly people with SAH to adopt a healthy lifestyle that contributes to the improvement of the quality of life.

The aim of this study is to evaluate the lifestyle and the adherence to treatment of systemic arterial hypertension in elderly men.

METHODS

This is a cross-sectional, analytical study, with a quantitative approach, conducted with 254 elderly hypertensive men (sample error: 5% and confidence level: 95%) in the municipality of Floriano, Piauí, Brazil, located 240 km from the state capital, Teresina, with an estimated population of 57,690 inhabitants.

Data was collected between October and December 2016, and the participants were submitted to the following inclusion criteria: male gender, age equal to or greater than 60 years, and undergoing follow-up of the SAH evolution by a FHS team. Participants presenting decompensation of a mental disorder and those with advanced or terminal comorbidity were excluded.

The elderly hypertensive men were screened in their households at a single occasion. The visit was previously scheduled by the community health worker (CHW). The research was carried out through the application of two questionnaires: a semi-structured questionnaire containing questions related to personal and family data, health conditions and lifestyle, and the Questionnaire on Adherence to the Treatment of Systemic Arterial Hypertension (*Questionário de adesão ao tratamento da hipertensão arterial sistêmica - QATHAS*)[17].

Personal and family data comprised: age in completed years; self-declared ethnicity; marital status; schooling; individual and family household income in minimum wages, considering its value (R$ 880.00) at the time of collection; role of head of household for being the main breadwinner; occupation or profession.

Data regarding the health conditions covered the period of time, in completed years, since hypertension diagnosis, whether there was a first-degree family member with history of hypertension, presence of an associated disease and complications due to hypertension. Body mass index (BMI) was measured using the Techline digital scale and tape measure, following a specific classification for the elderly: low weight (<22 kg/m^2); adequate weight (22 – 27 kg/m^2) and excess weight (>27 kg/m^2)[1]. Measurement of waist circumference was performed using a tape measure, and the interpretation ranged from increased risk, in men with WC> 94 cm, and very high risk, when WC> 102 cm[18].

Lifestyle-related data comprised the practice of physical activity, smoking, alcohol consumption and daily diet (including grilled or stewed foods, fruits, legumes and vegetables, white lean meats, red or fat meats, seasoned with low salt, fried, canned or processed foods, sweets).

The adherence to the treatment of hypertension was assessed through the application of the validated QATHAS instrument[17], composed of 12 (twelve) questions and with Cronbach's alpha (α) of 0.81. QATHAS is a useful instrument for assessing adherence to the treatment of hypertension; it can facilitate the detection and measurement of adherence to the prescribed therapy and also enable the definition of goals to be achieved[19].

The response is a value of the parameter (θ) estimated for the performance of that participant. The scale can vary between 60 and 110 and, the higher the score, the greater the adherence to the treatment.

Data was stored and analyzed with use of the Statistical Package for the Social Sciences - SPSS® 19.0. The analysis plan comprised the descriptive statistics of the socioeconomic profile, health status, lifestyle and classification of treatment adherence by means of absolute and relative frequency, organized into tables. Lasty, the association between adherence to hypertension treatment and lifestyle characteristics was evaluated by means of the chi-square test ($p<0.05$) and prevalence ratio, with a 95% confidence interval. In this statistic, the participant was regarded to be adherent when QATHAS was equal to or greater than 90, and the participant with a score lower than 90 was classified as non-adherent.

The study was approved by the Ethics and Research Committee (CEP) of the Federal University of Piauí (UFPI), in compliance with the ethical precepts of Resolution No. 466/12 of the National Health Council, under Approval no. 1.668.881.

RESULTS

Considering the socioeconomic variables of the 254 elderly men undergoing treatment for hypertension, it was possible to observe a predominance of those in age group from 70 to 79 years (93; 36.5%), *pardo* (mixed-race Brazilians) as for the ethnicity (136; 53,5%), married or in a stable union (174; 68.5%) and with schooling up to elementary school (128; 50.4%) (Table I).

The individual income of the participants ranged from 1 to 3 minimum wages (MW) (218; 85.8%) and so did the family income (205; 80.7%). Participants play the role of head of household (204; 80.3%), despite the fact that most of them are retired (200; 78.7%) (Table I).

Table I - Socioeconomic characterization of the elderly undergoing treatment for systemic arterial hypertension. Floriano, Piauí, Brazil, 2016.

Variables	Absolute Frequency (n)	Relative Frequency (%)
Age group		
60 to 69 years	89	35
70 to 79 years	93	36.5
80 to 89 years	59	23.3
Above 90 years	13	5.2
Ethnicity		
White	40	15.8
Pardo (mixed-race Brazilians)	136	53.5
Black	72	28.3
Yellow	6	2.4
Civil status		
Single	16	6.3
Married/Stable union	174	68.5
Widow	46	18.1
Divorced	18	7.1
Schooling		
Illiterate	90	35.4
Elementary school	128	50.4
High school	26	10.2
Complete Higher Education	10	4.0
Individual income		
Less than 1 MW	14	5.5
1 - 3 MW	218	85.8
3 - 6 MW	22	8.7
Role of head of household		
Yes	204	80.3
No	50	19.7
Occupation		
Currently working	54	21.3
Retired	200	78.7

n: number of individuals; MW: minimum wages.

The health status of the participants are characterized by a time since diagnosis of up to 5 years (82; 32.3%); they were under pharmacotherapy (242; 95.3%) and had a family member with history of hypertension (158; 62.2%). The majority of the participants had adequate weight (119; 46.9%), but increased waist circumference (164; 65%). As for the blood pressure levels, the majority of participants presented stage 1 hypertension (86; 36.9%) (Table II).

Table II - Characterization of the health status of the elderly with systemic arterial hypertension (SAH). Floriano, Piauí, Brazil, 2016.

Variables	Absolute Frequency (n)	Relative Frequency (%)
Time since SAH diagnosis		
Up to 05 years	82	32.3
05 – 10	76	29.9
10 – 15	37	14.6
Above 15 years	59	23.2
Undergoing pharmacotherapy		
Yes	242	95.3
No	12	4.7
Family member with SAH		
Yes	158	62.2
No	96	37.8
Presenting other medical condition		
Yes	129	50.8
No	125	49.2
BMI classification		
Low weight for the elderly (< 22)	42	16.5
Adequate weight for the elderly (22 - 27)	119	46.9
Excess weight for the elderly (> 27)	93	36.6
Waist circumference		
Adequate (<94 cm)	89	35.0
Increased (>94 cm)	164	65.0
Blood pressure		
Normal	74	29.1
Pré-hipertension	52	20.5
Hipertension stage 1	86	33.9
Hipertension stage 2	25	9.8
Hipertension stage 3	17	6.7

SAH: systemic arterial hipertension; BMI: body mass index; cm= centimeters.

The participants' adherence to hypertension treatment obtained all the classification levels, but with predominance of the level in which the hypertensive patients stop taking the medication prescribed for SAH at least once a year, and eat practically fat-free and sugar-free foods, without consumption of sugary drinks (120, 47.2%). Other representative level was the one in which the hypertensive patients miss the medication on schedule at least once a month; and have salt, fat, sweets and sugary beverages reduced by half (83; 32.7%) (Table III).

The adherence of the participants to nondrug treatment is characterized by equivalent frequency between practice and non-practice of physical exercises, in addition to non-consumption of tobacco (204; 90.7%) or alcoholic beverages (180; 80%). As for healthy food, participants consume grilled food (210; 93.3%); fruits, legumes and vegetables (209; 92.9%); white and lean meats (199; 88.4%); low-sodium foods (212; 94.2%). Regarding foods to be avoided, the participants reported not consuming fried foods (128; 56.9%); canned or processed products (182; 80.9%); (138; 61.3%), but consuming red or fat meats (168; 74.7%) (Table IV).

There was a significant relationship between adherence to hypertension treatment and not smoking; consumption of fruits, legumes and vegetables; consumption of white lean meats, constituting protective factors. It is also related to fried, processed or canned foods, and to sweets, constituting exposure factors (Table IV).

This study identified habits and foods that reduce the prevalence of adherence, such as: canned foods reduce it by 67%; fried foods and sweets reduce it by 72%; and smoking reduces adherence to hypertension treatment by 81%. Foods that increase the prevalence of adherence by more than three times were also identified, such as white and lean meats, low-sodium foods and fruits, legumes and vegetables.

Table III - Classification of adherence to the treatment of systemic arterial hypertension according to the Questionnaire on Adherence to the Treatment of Systemic Arterial Hypertension (QATHAS). Floriano, Piauí, Brazil, 2016.

Description	Scale score	Absolute Frequency (n)	Relative Frequency (%)
At this level, hypertensive patients miss the antihypertensive medication at least once a week. They also fail to follow the prescribed dose, at least once a week.	< 70	1	0.4
Hypertensive patients at this level miss a dose of their hypertension medication at the prescribed time at least once a week and attend the scheduled medical appointments.	70-79.9	4	1.6
When they reach this level, hypertensive patients miss their medication at the prescribed dose at least once a month, use medication regardless of any symptom, follow pharmacotherapy routinely, and have reduced salt, fat, sweets and sugary drinks by one-third.	80-89.9	24	9.4
Hypertensive patients at this level miss their medicine on schedule at least once a month; have reduced by half the salt, fat, sweets and sugary drinks.	90-99.9	83	32.7
At this level, hypertensive patients miss their high blood pressure medication at least once a year, and eat virtually no fats, no sweets or sugary drinks.	100-109.9	120	47.2
From this level on, the hypertensive individuals do not quit taking the medication for hypertension, eat virtually no salt and follow nondrug treatment routinely.	>110	22	8.7

Table IV - Evaluation of the relationship between adherence to the treatment of systemic arterial hypertension and lifestyle. Floriano, Piauí, Brazil, 2016.

Variables	Adherence n (%)	Non-adherence n (%)	p-value	PR (95%CI)
Practice of physical exercise				
Yes	109 (48.4)	12 (41.4)	0.473	1.33
No	116 (51.6)	17 (58.6)		(0.60-2.91)
Smoking				
Yes	21 (9.3)	10 (34.5)	0.000*	0.19
No	204 (90.7)	19 (65.5)		(0.08-0.47)
Consumption of alcoholic beverage				
Yes	45 (20.0)	9 (31.0)	0.172	0.55
No	180 (80.0)	20 (69.0)		(0.23-1.30)
Grilled or stewed food				
Yes	210 (93.3)	26 (89.7)	0.468	1.61
No	15 (6.7)	3 (10.3)		(0.43-5.95)
Fruits, legumes and vegetables				
Yes	209 (92.9)	17 (58.6)	0.000*	9.22
No	16 (7.1)	12 (41.4)		(3.76-22.6)
Lean white meats				
Yes	199 (88.4)	20 (69.0)	0.004*	3.44
No	26 (11.6)	9 (31.0)		(1.41-8.35)
Low-sodium foods				
Yes	212 (94.2)	23 (79.3)	0.004*	4.25
No	13 (5.8)	6 (20.7)		(1.47-12.2)
Fried foods				
Yes	97 (43.1)	21 (72.4)	0.003	0.28
No	128 (56.9)	8 (27.6)		(0.12-0.67)
Canned or processed foods				
Yes	43 (19.1)	12 (41.4)	0.006*	0.33
No	182 (80.9)	17 (58.6)		(0.14-0.75)
Sweets				
Yes	87 (38.7)	20 (69.0)	0.002*	0.28
No	138 (61.3)	9 (31.0)		(0.12-0.65)
Red or fat meats				
Yes	168 (74.7)	25 (86.2)	0.171	0.47
No	57 (25.3)	4 (13.8)		(0.15-1.41)

Chi-squared (p); Prevalence Ratio (PR); Confidence Interval (CI).

DISCUSSION

The present study evidenced the increase in the occurrence of hypertension associated with age, which is in agreement with other studies[20,21]. The direct and linear association between aging and hypertension prevalence is due to vascular aging characterized by alterations in the microarchitecture of the vessel wall, with consequent arterial stiffening[11].

Most of the participants in the present research were *pardos*, similar to the findings of a study performed in João Pessoa, Brazil, in which 48% of the hypertensive patients were *pardos*[22]. In this sense, it is known that hypertension is twice as prevalent in nonwhite individuals[5].

In the current study, the participants were married or lived in a stable union, which corroborates the study carried out in São Paulo, in which 63% of the participants were married[23]. Being married or in stable union can contribute to a greater adherence to treatment because of the partner's encouragement to follow health recommendations[24].

As regards the low level of education of the participants of the study in question, it is known that it influences the difficulty of effective management of blood pressure and the higher prevalence of SAH. Therefore, the level of education is considered one of the determinants of therapeutic adherence[25]. The association between the control of SAH and lower schooling may reflect difficulty understanding the disease and its risk factors, as well as adherence to management measures[26].

The income between 1 and 3 minimum wages was predominant among the participants of the current research, which, in turn, are retirees/pensioners as regards their occupation. Such data corroborates the findings of the study conducted in João Pessoa, Brazil, in which 84% of the participants had a monthly income of 1 to 3 minimum wages[22]. Low socioeconomic level is identified as a factor that hinders the effective control of adherence to the treatment of hypertension[17,20].

SAH is a silent and asymptomatic long-term disease, and the early diagnosis favors a lower treatment dropout rate. In the present study, the most frequent time since the diagnosis of hypertension was up to 5 years, a similar finding to that of a study in the city of São Paulo, Brazil, in which 51.6% of the participants had a diagnosis between 1 and 5 years, keeping BP under control[27].

The participants of this research were under pharmacotherapy, which suggests actions in primary care and improving access to health services[28]. It is known that the decision regarding the moment to initiate the antihypertensive medication should be made bearing in mind the person's preference, their degree of motivation for lifestyle changes, blood pressure levels and cardiovascular risk[10].

In the current study, participants had a family history of SAH, coinciding with a study that found an association between the family history of SAH in 86.7% of the elderly in the sample[3]. Thus, the influence of the hereditary factor on the onset of cardiovascular diseases (CVD) is corroborated.

The development of hypertension represents a risk factor for other diseases, especially in the endocrine system, such as diabetes mellitus (DM), which explains the existence of other diseases among the participants[11]. SAH is also an important risk factor for cardiac and cerebrovascular complications, with repercussions on the quality of life of individuals, implying a negative impact on the overall quality of life assessment[29,30].

The present study evidenced that the majority of the elderly present adequate body mass index (BMI), whereas the waist circumference (WC) is increased. WC is an important anthropometric indicator, due to its significant association with hypertension[31]. The body composition of the elderly man shows a marked tendency of fat deposition in the abdominal region, which characterizes this alteration. Increased visceral fat is recognized as a risk factor for SAH[11].

During the collection of data for this study, the majority of the participants presented uncontrolled blood pressure, similar to a study[32] performed in Rio de Janeiro, which evidenced 87.9% of the patients with pressure levels above normal range.

The partial adherence of the participants of the current research demonstrates the complexity involved in the follow-up of the therapeutic conducts inherent to the treatment of SAH. In a study performed in the city of Picos, state of Piauí, with 118 elderly individuals, no alterations were observed in the level of adherence after health education activity[33].

The present study showed that the participants did not perform physical activity, coinciding with the finding of a study conducted in Piauí[34], in which 65.9% of the participants did not practice physical activity, claiming lack of motivation due to age and difficulty in changing their life habits. Sedentary lifestyle is considered the most prevalent risk factor for hypertension[22].

The protective effect of physical activity goes beyond the BP reduction, being associated with the reduction in cardiovascular risk factors and lower morbidity and mortality when active individuals are compared to individuals with lower physical fitness, which explains its recommendation in primary prevention and treatment of hypertension[35].

The habits of avoiding smoking and alcohol consumption are both recommended for adherence to hypertension treatment and BP management. Quitting smoking is an essential condition to reduce the risk of CVDs, mandatory in the approach of the individual with SAH, whereas the reduction or cessation of alcohol consumption reduces the BP[11].

The present study observed the association between adherence to hypertension treatment and the consumption of a group of healthy foods (grilled and stewed food, fruits, legumes and vegetables, white lean meats), and foods that are not recommended for nondrug treatment of HAS (fried and canned products, sweets)[33]. This finding demonstrates a compensatory mechanism

adopted by the participants, eating healthy foods and others that should be avoided, which suggests that the participants seek to control hypertension, but do not quit consuming the food of exposure.

Similar findings were found in the study with 385 hypertensive subjects, in which changes in diet were reported by 266 (69.1%). Of these, the vast majority (99.6%) claimed a reduction in the consumption of high-risk foods, with salt (84.2%), fat (36.2%) and sweets (26.0%) as the most cited[36]. In a complementary way, other study showed that 85.2% of participants maintained at least one unhealthy life habit[37], and another one reported the difficulty of long-term adherence to nondrug treatment[38].

It is noteworthy that the findings evidenced that the elderly evaluated in this research, despite having a low socioeconomic status, can afford consuming healthy foods. Nevertheless, the lack of a gold standard for assessment of food consumption, especially in the elderly population, stands as an important limitation[39].

The health professionals in charge of the follow-up of the elderly with SAH may use listening in planning resolutive actions; health education; guidance on healthy living habits in a clear way, aimed at self-care; and humanized practices that promote empathy, since they facilitate adherence and blood pressure control, and promote the success of the treatment[40].

Thus, health professionals can contribute significantly to the improvement of health conditions and quality of life of the patient with SAH. Health professionals should establish a dialogue-based relationship and carry out educational actions with the elderly in order to demonstrate the importance of a comprehensive change in lifestyle, preserving their empowerment. Such strategies aim at the blood pressure control and reduction of the risk of complications by subsidizing qualified and comprehensive care of the elderly with SAH.

CONCLUSION

The study of adherence to the treatment of systemic arterial hypertension, with emphasis on the lifestyle in elderly men, demonstrated partial adherence on the part of the elderly men evaluated, who adopt some healthy habits as a compensatory mechanism to maintain practices that hinder the adherence to treatment.

CONTRIBUTIONS

Aline de Sousa Falcão elaboration and study design; writing and/or revision of the manuscript. **Maira Geny Carvalho e Silva** acquisition, analysis and interpretation of data. **Adalberto Fortes Rodrigues Junior** acquisition, analysis and interpretation of data. **Silmara da Rocha Moura** acquisition, analysis and interpretation of data. **Flávia Raymme Soares e Silva** acquisition, analysis and interpretation of data. **Antônia Sylea de Jesus Sousa** writing and/or revision of the manuscript. **Erisonval Saraiva da Silva** writing and/or revision of the manuscript. **Igho Leonardo do Nascimento Carvalho** elaboration and study design; writing and/or revision of the manuscript.

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