



Chronic and asymptomatic diseases influence the control of hypertension treatment in primary care

Cronicidade e doença assintomática influenciam o controle dos hipertensos em tratamento na atenção básica

Cronicidad y enfermedad asintomática influncian el control de los hipertensos en tratamiento en la atención básica

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ABSTRACT

Objective: To identify the association between blood pressure control and the following variables: a) bio-social and lifestyle characteristics of hypertensive patients; and b) factors related to the antihypertensive treatment. **Methods:** This is an exploratory study with 290 people with hypertension from primary care. We used a specific instrument, self-administered, with 21 questions on factors that can hinder treatment, divided into four dimensions: medication, socioeconomic, institutional and personal beliefs. We adopted a significance level of $p < 0.05$. **Results:** The control of blood pressure was associated ($p < 0.05$) with female gender, Caucasian ethnicity, primary/secondary education, not drinking alcohol, higher income and regular physical activity. Regarding the factors that can hinder treatment, there was association of hypertension control with only two questions: “feel nothing” and “have to do treatment for life”. **Conclusion:** Sociodemographic variables and beliefs concerning the absence of symptoms and chronicity of the disease influenced the control of hypertension and should be considered in the adherence process to the treatment.

DESCRIPTORS

Hypertension; Medication Adherence; Therapeutics; Life Style; Public Health Nursing.

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INTRODUCTION

Hypertension is a major risk factor for cardiovascular diseases, which cause significant impact on morbidity and mortality profiles. Thus, ischemic heart disease and stroke accounted for 12.9 million deaths worldwide in 2010, one in four deaths, which represented a significant increase when compared to the data of 1990, when one out of five resulted in deaths⁽¹⁾.

Further to this scenario, the high prevalence rates of hypertension makes it a major public health problem. It is estimated that about 30% of the Brazilian adult population is hypertensive, and this rate doubles in elderly⁽²⁻³⁾.

Despite the proven efficacy of pharmacological and non-pharmacological measures in the treatment of hypertension, poor control of blood pressure is still very frequent. A review study evaluated that the control of hypertension in Brazilian in publications showed control rates below 50% in most of them, except for two studies that showed rates of 52.4% and 57.6%⁽⁴⁾.

We highlight that, in the context of chronic diseases, the control of blood pressure is directly related to adherence to treatment. There are several factors that can interfere in the adherence process: those related to the disease, such as chronicity and absence of symptoms to drug treatment, including treatment for life, adverse events and complex dosage schedules; and in non-drug treatment, the changes in habits and lifestyles. Regarding the characteristics of hypertensive patients, we emphasize the sociodemographic variables and health beliefs institutional aspects, the characteristics of the service and the relationship with the health team⁽⁵⁾.

Therefore, considering that several factors can contribute to low blood pressure control rates, they should be identified as early as possible to establish strategies that will benefit the hypertensive. Thus, the aim of this study was to identify the association between blood pressure control and the following variables: a) bio-social and lifestyle characteristics; and b) factors related to the antihypertensive treatment in hypertensive patients assisted in primary care.

METHODS

This is a cross-sectional, exploratory, descriptive, with quantitative approach field study, part of a Project for Public Policy, sponsored by the São Paulo Research Foundation-FAPESP and approved by the Research Ethics Committee (N213/03). The sample was calculated considering a dichotomous variable in descriptive study, expecting a proportion of hypertension cases of 30%, with precision of 0.10 (0.5 below and 0.5 above) to a 99% confidence level, as a result of 250 people investigated. Inclusion criteria were: adults (> 18 years); diagnosed with hypertension in medical records; belonging to the scope of community of the District; and follow-up for at least 6 months. Exclusion criteria: pregnant women with hypertension, because of the specificities of hypertension in pregnancy, and people with a history of drug abuse or mental disorders that could invalidate the Consent Form. The study was conducted in two Basic Health Units of the western region of the city of Sao Paulo, in the state of Sao Paulo, Brazil.

Data were collected by undergraduate and graduate nursing students duly empowered to do so. An interview was conducted with hypertensives using an instrument, which had already been previously tested in studies⁽⁵⁾, including variables that can influence blood pressure control. For identification of bio-social variables we evaluated: age, gender, ethnicity (self-declared color), marital status (with or without partner), education (illiterate, primary, secondary or Tertiary education) and income (in minimum salaries)¹. The lifestyle characteristics analyzed were: physical activity (at least three times/week for 30 minutes), smoking (yes/no) and alcohol intake, identified by the Alcohol Use Disorders Identification Test (AUDIT)⁽⁶⁾.

The instrument used to evaluate the factors thought to be involved in the adherence process to the treatment had already been used in previous investigations⁽⁷⁻⁹⁾ and, in this study, their analysis have been improved. It consists of 21 questions preceded by a written guidance: "check the alternative that best matches the degree of influence that each subject could hinder treatment for hypertension". The answer alternatives, in Likert Scale, had three levels: agree (3), undecided (2) and disagree (1). The questions of this instrument have been prepared considering the expertise of the researchers on the subject, as well as literature. The questions were grouped into four dimensions: medication, socioeconomic status, institutional aspects and personal beliefs. All questions are presented in Table 2. In the preparation of the instrument, it was submitted to an expert body of judges composed of five experts in the field of hypertension and adherence to treatment, all judges were empowered to analyze the instrument's purpose and concepts. We asked questions to be evaluated individually to determine whether they were appropriate for internal consistency, if it was related to the item to be evaluated and for clarity. As for the fair valuation, each question had similar value to others. The judges body was allowed to suggest modification or deletion of items considered irrelevant, inadequate or ambiguous, and when it occurred, they could provide more appropriate substitutions. After the analysis, the changes suggested by the judges were made, being accepted as equivalent items that had at least 80% agreement between raters. It adds further that this instrument was being improved in studies in which it was applied. It is noteworthy that during the present study, an educational process with hypertensives was developed about their health problems and treatment adherence, as well as nursing staff professionals. These activities were part of a Project for Public Policy developed in Basic Health Units at the time of data collection from this study, as previously mentioned. Thus, it is considered that hypertensive patients who presented influencing factors in the adherence process to the treatment received attention.

To assess adherence to drug treatment, we used the Morisky and Green's⁽⁷⁾ instrument, widely used and validated. This instrument consists of four questions that allow dichotomous answers (yes/no). We considered adherence to treatment when responses were negative to all of the following

1 The minimum national wage per month in Brazil corresponds to R\$ 880,00 or US\$ 273,85 American dollars according to the Central Bank of Brazil on October 8th, 2016.

questions: 1 - Do you often forget to take your medication? 2 - Are you inattentive from time to time to take your medicine? 3 - Do you stop taking the medicine if you feel better? 4 - Do you stop taking the medicine if you feel worse?

The measurement of blood pressure was conducted in Basic Health Units with a validated automatic device according to the VI Brazilian Guidelines on Hypertension⁽²⁾. To minimize the white coat phenomenon, blood pressure evaluation was performed by nursing undergraduate and graduate students, properly trained to do so, in a private room, after 5 minutes of rest, with three consecutive measurements with an interval of 2 minutes, and the average of the last two measurements was used to evaluate the blood pressure control. The measurements were performed with the participant in the sitting position, with the arm supported, and close to the third intercostal space, leaning back in the chair, feet on the floor and using the cuff according to the circumference of the arm. The blood pressure control was considered for values less than 140 mmHg for systolic pressure and 90 mmHg for diastolic pressure. Associations between control of blood pressure levels and the following variables were made: bio-social, lifestyle, Morisky and Green Test and factors that may hinder the treatment of hypertension, described above. For statistical analysis, we used the chi-square test and Mann-Whitney test, with a significance level of $p < 0.05$.

RESULTS

The study included 290 hypertensive patients with mean age in the sixth decade of life, most were female (62.1%), Caucasian (54.5%), income lower than three minimum salaries (59%) and with primary and secondary education (71.9%). From the total of hypertensive patients, 60% had controlled blood pressure.

Regarding bio-social and lifestyles characteristics of hypertensive patients, it was found that there was an association ($p < 0.05$) of blood pressure control with females, Caucasian, with primary and secondary education, who did not drink alcohol beverages. Having a lower income and lack of regular physical activity was associated with lack of control (Table 1).

Table 1 – Bio-social and lifestyle characteristics of hypertensives in association with the control of blood pressure - Sao Paulo, SP, Brazil, 2010.

Variables	Hypertensives			
	Controlled		Uncontrolled	
	n	%	n	%
Age (years) p=0.123				
≤ 60	85	48.9	46	39.7
> 60	89	51.1	70	60.3
Gender p = 0.048				
Male	58	33.3	52	44.8
Female	116	66.7	64	55.2

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Variables	Hypertensives			
	Controlled		Uncontrolled	
	n	%	n	%
Ethnicity p = 0.020				
White	104	62.3	54	48.2
Not white	63	37.7	58	51.8
Marital status p = 0.945				
With partner	106	61.3	70	60.9
Without partner	67	38.7	45	39.1
Education p = 0.048				
Illiterate/Read and write	33	47.1	37	52.9
Primary/secondary	126	64.0	71	36.0
Tertiary education	4	57.1	3	42.9
Occupation p = 0.514				
Housewife	49	39.2	33	40.2
Unemployed	3	2.4	5	6.1
Retired	12	9.6	4	4.9
Self-employed	53	42.4	34	41.5
Employment bond	8	6.4	6	7.3
Family income (in minimum salary) p = 0.034				
≤ 3	96	60.8	75	73.5
> 3	62	39.2	27	26.5
Physical activity practice p = 0.023				
No	108	62.1	84	75.0
Yes	66	37.9	28	25.0
Smoking p = 0.998				
No	155	89.1	98	89.1
Yes	19	10.9	12	10.9
Alcohol intake p = 0.013				
No	112	70.4	54	54.5
Drink or stopped drinking for at least a year	47	28.6	45	45.4

There was a statistically significant association ($p < 0.05$) between the control of blood pressure and the degree of agreement with the different factors that can influence the treatment for high blood pressure in just two questions affecting the domain personal beliefs. From the total of hypertensives that indicated the alternative “agree” with the fact that “I feel nothing”, 63.7% were controlled against and 36.3% uncontrolled, and that 85.7% of those who pointed out the alternative “undecided” were also not controlled. As for “having treatment for life”, 66.1% were in agreement and were controlled hypertensive versus 33.9% uncontrolled and only two were undecided and uncontrolled (Table 2).

Table 2 – Controlled and uncontrolled hypertension according to the responses to the investigation form of hindering factors of treatment - Sao Paulo, SP, Brazil, 2010.

Factor that can hinder treatment	HYPERTENSIVES					
	Controlled			Uncontrolled		
	Agree (1) n %	Undecided (2) n %	Disagree (3) n %	Agree (1) n %	Undecided (2) n %	Disagree (3) n %
MEDICINES						
– The drugs cause adverse events p = 0.965	55 58.5	5 50.0	95 59.7	39 41.5	5 50.0	64 40.3
– I forget to take my medicine p = 0.772	96 60.4	1 50.0	59 56.2	63 39.6	1 50.0	46 43.8
– I need help to take medicine p = 0.775	35 57.4	3 75.0	116 58.3	26 42.6	1 25.0	83 41.7
– I have too many medicines to take p = 0.224	64 62.7	5 83.3	85 55.6	38 37.3	1 16.7	68 44.4
– I do not know how to take the medicines p = 0.283	66 64.1	3 75.0	86 55.1	37 35.9	1 25.0	70 44.9
– Treatment is complicated, hard p = 0.842	48 58.5	6 75.0	103 59.5	34 41.5	2 25.0	70 40.5
SOCIOECONOMIC						
– I have no money to buy medicines p = 0.645	71 60.2	1 100.0	84 57.5	47 39.8	0 0.0	62 42.5
– I have no one to watch my children/grandchildren p = 0.462	48 62.3	2 50.0	106 57.3	37.7	50.0	42.7
– I need company to go to consultations p = 0.535	31 54.4	2 100.0	124 59.6	26 45.6	0 0.0	84 40.4
– I miss work to go to consultations p = 0.706	45 54.2	2 28.6	105 61.8	38 45.8	5 71.4	65 38.2
– Distance to consultation site p = 0.934	47 58.8	1 50.0	106 59.2	33 41.3	1 50.0	73 40.8
– Lack money for transportation p = 0.140	29 55.8	1 33.3	124 59.6	23 44.2	2 66.7	84 40.4
INSTITUTIONAL						
– The waiting time is too long p = 0.965	88 58.3	2 66.7	65 59.1	63 41.7	1 33.3	45 40.9
– I did not get along with the staff team p = 0.596	64 60.4	4 50.0	90 58.8	42 39.6	4 50.0	63 41.2
– The service time is inconvenient p = 0.239	52 54.2	1 50.0	104 61.9	44 45.8	1 50.0	64 38.1
– Lack of physician for consultation p = 0.362	117 57.9	0 0.0	42 62.7	85 42.1	1 100.0	25 37.3
PERSONAL BELIEFS						
– I do not feel anything p = 0.029	72 63.7	1 14.3	83 58.5	41 36.3	6 85.7	59 41.5
– Being treated for life p = 0.013	82 66.1	2 100.0	71 50.7	42 33.9	0 0.0	69 49.3
– I do not feel the need to get treatment p = 0.734	47 58.0	5 45.5	106 59.9	34 42.0	6 54.5	71 40.1
– I do not feel I am getting better p = 0.638	77 62.0	4 50.0	77 57.0	46 38.0	4 50.0	58 43.0
– I only take medicines when I feel bad p = 0.630	56 56.6	4 66.7	94 59.1	43 43.4	2 33.3	65 40.9

Analyzing the total of hypertensive responses that indicated the alternative “agree” with the hinder factor for treatment, appointed in each issue, we highlight the following aspects. In the context of medical treatment, “forgetting” had the highest percentage of agreement (59.8%) and just over a third agreed to “adverse events” (35.7%), “too many medications” (39.1%) “I do not know how to take them” (39.5%) and “complicated treatment” (31.2%). In the socio-economic dimension, there was greater agreement for “not having money to buy the medicines” (44.5%), followed by “miss work to go to consultation” (31.9%) and “distance to consultation site” (30.6%). In the institutional aspects, the largest agreements were for “lack of physician” (74.8%) and “long wait” (57.2%), followed by “not getting along with the staff” (39.7%) and “inconvenient time of service” (36.1%). In the personal belief dimension, agreement was around 40% for “asymptomatic disease” (43.1%), “treatment for life” (46.1%) and “I do not feel better” (46.4%); and little less indicated “I do not feel the need to get treatment” (30.1%) and “only take medicine when I feel bad” (37.5%).

The data in Table 3 show that there was no statistically significant difference in the mean (standard deviation) of the degree of agreement between the controlled and uncontrolled hypertension, with the factors that can hinder treatment when assembled in the four dimensions evaluated.

Table 3 – Controlled and uncontrolled hypertensives according to the mean agreement of the four dimensions of the investigation form of hindering factors for treatment - São Paulo, SP, Brazil, 2010.

	Hypertensives			
	Controlled		Uncontrolled	
	Mean (standard deviation)		Mean (standard deviation)	
	DIMENSIONS			
Medication p = 0.729	15.54	(4.97)	15.36	(5.34)
Socioeconomic p = 0.975	8.88	(3.57)	9.03	(3.70)
Institutional p = 0.677	11.125	(3.81)	11.36	(3.63)
Personal beliefs p = 0.219	7.43	(2.7)	7.009	(2.53)

It was also observed that there was no statistically significant association between blood pressure control and the Morisky and Green Test, which evaluated the adherence to drug treatment (Table 4).

Table 4 – Controlled and uncontrolled hypertensive according to Morisky and Green test - Sao Paulo, SP, Brazil, 2010.

Variables	Hypertensives				P value	
	Controlled		Uncontrolled			
	n	%	n	%	n	%
Morisky and Green Test						
Non adherence	118	60.8	76	39.2	194	100
Adherence	60	62.5	36	37.5	96	100

DISCUSSION

The main findings of this study showed that the chronicity of the disease and the absence of symptoms of hypertension were factors reported by hypertensive patients that can hinder disease control, beyond the tension control of the association with bio-social characteristics and lifestyles of hypertensive people. Therefore, the personal beliefs of hypertensive patients on the disease and treatment deserve attention in the thematic treatment adherence. Hypertension is a disease with no specific symptoms, in most cases, and only blood pressure values can determine the diagnosis. Therefore, the lack of symptoms may further influence the degree of importance or not that hypertensive people indicate the disease and the need for treatment. Additionally, the need for treatment for life, which includes, in addition to drug therapy, changes in habits and lifestyles. A study with coronary patients, all of them hypertensive patients, showed that the majority did not consider the chronic nature of the disease, believing that the treatment would not last a lifetime and that they would cure the disease⁽¹⁰⁾. Moreover, also concerning the beliefs of hypertensive patients, it was found that just over one third indicated they “did not feel the need to get treatment” and “only take medicine when I feel bad” conditions that can also be barriers to satisfactory adherence to treatment and subsequent control of hypertension.

Adherence to treatment can be defined by the degree of match between a person’s behavior, such as taking medication, following a diet, changing habits and lifestyles, and the therapeutic proposal. The main reason for inadequate control of high blood pressure seems to be the failure of long-term treatment in both lifestyle modifications as with regard to drug therapy. Adherence problems are not always easy to detect, even more difficult is its quantification, and control of blood pressure is an objective fact which may indicate favorable performance of adherence. Attempts of an objective assessment of adherence to drug treatment is verified in the literature, and Morisky and Green Test is a frequently used instrument. The characteristics of this instrument are directed to the identification and assessment of problems and barriers of adherence. It can be used as a diagnostic tool to evaluate the degree of adherence with the proposed therapy by patients and their adherence behaviors. It also highlighted that the Morisky and Green test can identify problems related to attitudes and behavior and then target for strategies to solve the elements that may hinder adherence to treatment and consequently the control of hypertension. Perhaps, this is the great advantage of the test, as in the present study there was no association between blood pressure control and adherence to treatment by the test, only 33% of hypertensive patients presented adherence, while 60% had their blood pressure controlled values.

Noteworthy, treatment adherence in chronic diseases such as hypertension, implies behavioral changes and this is not an easy task. Subsidizing patients with information about their health problems is the first step for the health education process, but the desired changes are not enough for them to occur. Thus, the behavior is determined not only

by the cognitive aspects, but mainly emotional aspects, as beliefs, values, and perceived barriers regarding the behavior to be adopted. When the behavior in question is the adherence to certain treatment, each person makes use not only of knowledge about the disease, but also is guided by a range of reasons for adopting or not such behavior. The individual rationalizes the problem, the possible alternatives, the positive or negative aspects and tries to adjust their attitudes to what suits them best according to their beliefs⁽¹¹⁾.

It is considered that the lack of hypertension control association with the vast majority of questions in Table 2 should not be considered in the evaluation of hypertensive patients. There was significant degree of agreement as a complicating factor for treatment with important issues in drug area, such as forgetting to take medication and complex schedules, results found in other studies⁽¹²⁻¹³⁾. Accordingly, the fixed drug combination is a strategy that increases the adherence⁽¹⁴⁾. In the socio-economic dimension, the lack of money to buy medicines strengthens the control of the association found blood pressure levels with lower income. But in primary care, the HIPERDIA program - Registration System and Monitoring of Hypertensive and Diabetics⁽¹⁵⁾, which provides delivery of medications, is emphasized. In the institutional aspects, the lack of physicians is a worrying statistic, which unfortunately is still present on the national scenario. The relationship with the health team is paramount to establish favorable conditions for the involvement of the patient with their health problems; the contract of establishment in which are explicit rights and duties of both the patient and the professional can be a good strategy to do so. A study⁽¹⁶⁾ which analyzed the efficiency of the care of the Family Health Strategy from beliefs of professionals showed that 53.4% rated the service negatively, emphasizing the need to modify or eliminate barriers in order to improve the conditions of service for its users.

More than half (60%) of the studied hypertensive patients had controlled blood pressure, slightly higher rates when compared to other national studies^(4,17-19). Among the bio-social characteristics of hypertensive patients that were associated with the control, the fact that women are more controlled also coincides with the results of other studies⁽²⁰⁻²²⁾. This finding may be a matter of gender, women seem to present a better understanding of their health and therefore, seek health services more often and follow treatments. The lack of control in non-white hypertensive patients with lower income and lower education, refers to the association between these variables and hypertension. National data have shown a higher prevalence of hypertension in blacks and low-income populations. Mortality rates per 100,000 inhabitants in Brazil, in 2010, adjusted for age, for high blood pressure in white, brown and black men/women were, respectively, 11.9/17.0, 16.3/22.0, and 28.8/34.5⁽²³⁾. In this sense, a study in 17 countries evaluated the cardiovascular risk according to income, and the results showed that the number of cardiovascular events per thousand was lower ($p < 0.001$) in those with higher incomes (3.99) compared to the mean (5.38) in low income families

(6.43)⁽²⁴⁾. These data are compelling in demonstrating the significant association between socioeconomic background and cardiovascular risk factors, such as hypertension.

Therefore, inadequate habits and lifestyles predispose or may be associated with a higher prevalence of hypertension and risk factors for elevated blood pressure, such as alcohol intake and lack of regular physical activity. The association between alcohol and hypertension is well proven⁽²⁵⁾, as well as its influence on disease control. As for physical activity, the reduction of blood pressure after exercise, especially in hypertensive patients, is also well documented⁽²⁶⁾.

Populational, descriptive and exploratory studies are important, but investigations of this nature do not allow researchers to establish cause and effect relationships. The propositions of intervention studies, such as randomized controlled trials, are essential to evaluate interventions that benefit adherence to antihypertensive treatment. Another limiting factor of this study would be that the sample size, which belonged to a specific context of primary care in the city of Sao Paulo. The two health units where the data were collected belong to a university center, and therefore, results may occur differently in other contexts.

CONCLUSION

The main conclusion of this study was that only two questions – of the various factors evaluated identified as influencers in the adherence process to antihypertensive treatment – were associated with blood pressure control. Therefore, the absence of symptoms and chronicity of hypertension, closely related to personal beliefs about the disease and its treatment were relevant aspects pointed out by the studied hypertensive patients. However, it is emphasized, once more, that treatment adherence, which helps controlling the disease, preventing and minimizing damage to target organs, is a complex process. The combination of pressure control with variables such as gender, social conditions and unfavorable lifestyles exemplifies the large magnitude of the problem.

The work of nurses in the context of care for hypertensives should include all stages of care, starting out by primary prevention, through strategies focusing on the changes and the adoption of habits and healthy lifestyles. The periodic measurement of blood pressure should be part of all health assessments, it is the only way to identify changes in blood pressure levels. In the treatment, the great challenge is to control the disease, directly related to the adherence process. Thus, nurses should provide tools to meet the real needs of hypertensive patients and the nursing consultation is an instrument of action that can be useful in these circumstances. During the nursing consultation, intervening factors can be identified in the adherence process to antihypertensive treatment, related to biopsychosocial variables of the hypertensive person, such as age, gender, socioeconomic status and psycho-emotional aspects; to drug and non-drug treatment; the beliefs and knowledge about the disease and treatment; and the habits and lifestyles. Thus, the instrument presented in this study can be useful.

RESUMO

Objetivo: Identificar a associação entre o controle da pressão arterial e as seguintes variáveis: a) características biosociais e hábitos de vida dos hipertensos; e b) fatores relacionados ao tratamento anti-hipertensivo. **Métodos:** Realizou-se estudo exploratório com 290 hipertensos da atenção primária. Utilizou-se de instrumento específico, autoaplicável, com 21 questões sobre fatores que podem dificultar o tratamento, divididas em quatro domínios: medicamentos, socioeconômico, institucional e crenças pessoais. Adotou-se nível de significância de $p < 0,05$. **Resultados:** O controle da pressão arterial se associou ($p < 0,05$) com sexo feminino, etnia branca, ensino fundamental/médio, não ingerir bebida alcoólica, maior renda e atividade física regular. Quanto aos fatores que podem dificultar o tratamento, houve associação do controle com apenas duas questões: “não sentir nada” e “ter que fazer tratamento para vida toda”. **Conclusão:** Variáveis sociodemográficas e crenças relativas à ausência de sintomatologia e cronicidade da doença influenciaram o controle dos hipertensos e devem ser consideradas no processo de adesão ao tratamento.

DESCRITORES

Hipertensão; Adesão à Medicação; Terapêutica; Estilo de Vida; Enfermagem em Saúde Pública.

RESUMEN

Objetivo: Identificar la asociación entre el control de la presión arterial y las siguientes variables: a) características biosociales y hábitos de vida de los hipertensos; y b) factores relacionados con el tratamiento antihipertensivo. **Métodos:** Se llevó a cabo estudio exploratorio con 290 hipertensos de la atención primaria. Se utilizó un instrumento específico, autoaplicable, con 21 cuestiones sobre factores que pueden dificultar el tratamiento, divididas en cuatro dominios: fármacos, socioeconómico, institucional y creencias personales. Se adoptó nivel de confianza de $p < 0,05$. **Resultados:** El control de la presión arterial se asoció ($p < 0,05$) con sexo femenino, etnia blanca, educacional básica/media, no ingerir bebida alcohólica, mayores ingresos y actividad física regular. En cuanto a los factores que pueden dificultar el tratamiento, hubo asociación del control con solo dos cuestiones: “no sentir nada” y “tener que hacer tratamiento para toda la vida”. **Conclusión:** Variables sociodemográficas y creencias relativas a la ausencia de sintomatología y cronicidad de la enfermedad influenciaron el control de los hipertensos y deben considerarse en el proceso de adhesión al tratamiento.

DESCRIPTORES

Hipertensión; Cumplimiento de la Medicación; Terapêutica; Estilo de Vida; Enfermería en Salud Pública.

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