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KNOWLEDGE AND PRACTICE OF ELDERLY PEOPLE OF A SYSTEMIC ARTERIAL HYPERTENSION PROGRAM IN BELEM-PARA

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ABSTRACT

Objective: To analyze the knowledge and practices of elderly people affected by Systemic Arterial Hypertension, enrolled in the HIPERDIA program, in a Health School Center in the metropolitan region of Belem-PA.
Materials and methods: Descriptive research, with a quantitative approach, performed with 81 hypertensive users who were aged ≥ 60 years.
Results: Knowledge about hypertension and healthy living habits, as well as practices, proved to be adequate (p<0,05).
Conclusions: Although the knowledge and practices of the elderly are satisfactory, the changes in the life habits of some users expressed deficiency, since they involve behavioral aspects of risk and this may interfere and / or hinder the effectiveness of the treatment and, consequently, the control of the Systemic Arterial Hypertension.

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INTRODUCTION

Systemic Arterial Hypertension (SAH) is a relevant public health problem in our country and stands out as one of the most common chronic Non Communicable Diseases (NCD) in the elderly, denoting the need for public policies focused on this profile of users and the improvement of primary health care (Barreto, MS, Carreira, L. and Marcon, SS, 2015). In Brazil, the Ministry of Health provides the HIPERDIA program, which monitors patients diagnosed with hypertension and/or diabetes mellitus (Brazil, 2017), as well as recommends that lifestyle changes (LSC) be approached, since they are fundamental in SAH treatment and control, because it influences well-being and the aging process (Dias, EG, Souza, BRS, Souza, FE, Jesus M. and Alves JCS, 2017). In addition, it is worth emphasizing the importance of the degree of knowledge of people with SAH about their health condition, since they reflect in a greater independence in the control of the disease and better adherence to the treatment, consequently, a satisfactory and effective therapy (Motter, FR, Olinto, MTA and Paniz, VMV, 2015). All of this contributed to the following question: what are the knowledge and practices that elderly people affected by SAH, and registered in the HIPERDIA program, have about the disease? Therefore, the objective of this study was to analyze the knowledge and practices of elderly people affected by hypertension, enrolled in the HIPERDIA program at a Health School Center in the region of Belem-Para.

MATERIALS AND METHODS

It is a descriptive research, with a quantitative approach. The place chosen was a School Health Center in Belem-Para. 81 users of the HIPERDIA program participated in the study. The sample was defined according to the number of patients with SAH enrolled in the program and the sample size calculation was established using the Cochran sampling technique (Cochran, WG, 1977), with assumptions being the sampling error of 5% and the study power estimated at 80%. Hypertensive users aged ≥60 years old of both sexes were included. Those with cognitive impairment and / or diagnosed neurological disease, described in medical records, were excluded. Data were collected between May and June 2018. After the approach, the users were referred to a reserved room, in which the Informed Consent Term was signed. A structured form was applied, divided in: sociodemographic data; knowledge about hypertension and healthy lifestyle habits; and practices, which include care related to the person with hypertension. Each question had 3 alternatives, classified as Adequate (AD), Intermediate (IM) or Inadequate (IN). The data were tabulated by the Excel program and the statistical treatment was performed through the statistical package SPSS 22.0, in which descriptive statistics were used to characterize the sample, by presenting the absolute (number) and relative (percentage) prevalence the categorical variables. Inferential statistics were performed using the chi-square test to indicate differences in the prevalence of categorical variables. We adopted a significance level of $p < 0.05$ for statistical inferences. The study was approved by the Ethics and Research Committee of the University of Para State, registry number 2.606.316.

RESULTS

Of the 81 elderly interviewed, the age of 60 to 70 years prevailed (62%); female (64%); 8 years of schooling (44%); civil status / stable marriage (53%); monthly income of 1 to 3 salaries (86%); 3 to 5 people per residence (51%), described in Table 1. The variables described were highly significant ($p < 0.05$). As can be seen in Table 2, the sample presented a higher significant prevalence ($p < 0.05$) in the AD alternatives of the questions (Q): Q1 (88%), Q2 (75%), Q3 (94%), Q4 95%), Q5 (92%), Q6 (96%), Q7 (91%), Q8 (95%), Q9 (98%), Q10 (98%), Q11 (84%), Q12 (43%), Q13 (63%) and Q14 (86%). Only Q15 presented a lower prevalence (24%). In general, regarding the questions related to knowledge about hypertension, the results found correspond: Q1- AD (88%), IM (4%), IN (8%); Q2-AD (75%), IM (19%), IN (6%); Q3-AD (94%), IM (5%), IN (1%); Q4-AD (95%), IM (1%), IN (4%); and Q5-AD (92%), IM (5%), IN (3%). Concerning knowledge about healthy habits, the findings are: Q6- AD (96%), IM (1%), IN (3%); Q7- (91%), IM (4%), IN (5%); Q8-AD (95%), IM (5%); Q9-AD (98%), IM (1%), IN (1%); and Q10-AD (98%), IN (2%). Regarding the care practices of the hypertensive person, the results show: Q11- AD (84%), IM (9%), IN (7%); Q12-AD (43%), IM (42%), IN (15%); Q13-AD (63%), IM (15%), IN (22%); Q14-AD (86%), IM (14%); and Q15- (24%) IM (65%), IN (11%).

Table 1. Sociodemographic profile of the elderly interviewed in the systemic arterial hypertension program

Variable	Prevalence	Chi-square			
	Sociodemographic data	n	%	x^2	p
Age	60 - 70 yearsold	50	62	39,18	<0,0001*
	71 - 80 yearsold	27	33		
	> 80 yearsold	4	5		
Sex	Male	29	36		
	Female	52	64	6,53	0,011*
Yearsofstudy	None	4	5		
	1 - 3 years	9	11		
	4 - 7 years	32	40		
	8 or more	36	44	38,35	<0,0001*
Civil status	Single	12	15		
	Married/ stablemarriage	43	53	38,95	<0,0001*
	Widow(er)	20	25		
	Divorced	6	7		
Monthlyincome	< 1 minimumwage	10	12		
	1 - 3 minimumwages	70	86	104,2	<0,0001*
	> 3 minimumwages	1	2		
Number of people per house	1 - 2 people	32	39		
	3 - 5 people	41	51	21,55	<0,0001*
	+ 5 people	8	10		

Source: Research protocol

Table 2. Sample prevalence of values (absolute and relative) and comparison of prevalences (chi-square)

	Questions (Q)	Prevalence	Chi-square			
		Options	N	%	x^2	p
Q1	For you, what is Hypertension?	Chronic and non communicable disease	71	88	107.8	<0,0001*
		Chronic and communicable disease	3	4		
		Acute and infectious disease	7	8		
Q2	What's the standard measure to consider as hypertension?	140x90 mmHg	61	75	66.88	<0,0001*
		130x90 mmHg	16	19		
		120x80 mmHg	4	6		
Q3	How long does Hypertension tretment last?	The whole life	76	94	133.5	<0,0001*
		The whole life, if hypertension don't get controled	4	5		
		6 months	1	1		
Q4	What can contribute to hypertension acquirement?	Cigarettes and alcahol, sedentary lifestile, excessive intake of salt and fat	77	95	138.9	<0,0001*
		Fatty food and little salt	1	1		
		Physical exercise	3	4		
Q5	Which complications Hypertension may show if not treated properly?	Renal and cardiovascular diseases	75	92	128.0	<0,0001*
		Stroke and hepatitis	4	5		
		Tuberculosisand Hansen disease	2	3		
Q6	Which food contribute to a healthy diet?	White meat, greens, leguminous plants and fruit	78	96	144.5	<0,0001*
		Salty fish, greens, canned food, fruit and bean stew	1	1		
		Fatty red meat, fries and canned food	2	3		
Q7	Which are the recommended activities to to reduce hypertension risk?	Walking, water aerobics and working out	74	91	122.7	<0,0001*
		Physical activity, domestic and labor	3	4		
		Craft activities such as painting, knitting and crocheting	4	5		
Q8	What factors from our routine can lead to hypertension?	Stress, as family and job conflicts	77	95	65.79	<0,0001*
		Prolonged rest and sedentary lifestyle	4	5		
		Good relations at work and with friends	0	0		
Q9	Which cautions must be taken by the person with hypertension?	Have a regular physical activity and healthy diet	79	98	150.2	<0,0001*
		Have a regular physical activity and a diet rich in fat and carbohydrates	1	1		
		Use cigarettes	1	1		
Q10	How the medicament must be used to hypertension's control?	Use medication as doctor's prescription	79	98	73.19	<0,0001*
		Use medication from relatives/friends who have hypertension or follow doctor's prescription	0	0		
		Use the medication only when it's necessary	2	2		
Q11	How do you prepare your food?	Avoid fat, salt and pasta excess	68	84	93.4	<0,0001*
		Consume a little salt, have canned food and pasta	7	9		
		I don't have any restriction	6	7		
Q12	How often do you verificate your blood pressure?	Weekly	35	43	12.51	0,002*
		Monthly	34	42		
		I don't use to verificate	12	15		
Q13	How often do you practice physical activity?	Daily or three times a week	51	63	32.66	<0,0001*
		Rarely	12	15		
		I don't practice physiscal activity	18	22		
Q14	How do you administrate your medications?	Always in the prescribed time	70	86	42.97	<0,0001*
		Sometimes in the prescribed time	11	14		
		I don't use to take the medications	0	0		
Q15	How often do you feel stressed in the family environment?	Never	19	24		
		Sometimes	53	65	39.40	<0,0001*
		Always	9	11		

Source: Research Protocol

Note: Q1 to Q5 correspond to knowledge about hypertension; Q6 to Q10 to knowledge about healthy living habits and Q11 to Q15 care practices. The alternatives follow the order AD, IM and IN respectively.

DISCUSSION

The socio-demographic profile found in this study corroborates the findings of other studies about hypertension in Brazil, that points out highest concentration in: the elderly with 60 to 70 years of age (Teixeira, JF, Goulart, MR, Busnello, FM and Lucia, CP, 2016); (Freitas, PDS, Matta, SR, Mendes, LVP, Luiza, VL and Campos MR, 2018); of the sex females (Motter, FR, Olinto, MTA and Paniz, VMV, 2015); (Chagas, JAS and Almeida, ANF, 2016); married / stable union (Teixeira, JF, Goulart, MR, Busnello, FM and Lucia, CP, 2016); (Machado, JC, Cotta, RMM, Moreira TR and Silva, LSD, 2016); patients living with 3 to 5 people (Motter, FR, Olinto, MTA and Paniz, VMV, 2015); (Machado, JC, Cotta, RMM, Moreira TR and Silva, LSD, 2016); people that have monthly income of 1 to 3 minimum wages (Vancini-Campanharo, CR, Oliveira, GN, Andrade, TFL, Okuno, MFP, Lopes, MCBT and Batista, REA, 2015); (Chagas, JAS and Almeida, ANF, 2016) and people that have 8 or more years of study (Mendes, LVP, Luiza, VL and Campos, MR, 2014); (Tibúrcio, MP, Melo, GSM, Balduíno, LSC, Freitas, CCS, Costa, IKF and Torres, GV, 2015). In the context of the knowledge and practices of the elderly surveyed, the study showed that they presented, above all, AD knowledge about hypertension and healthy life habits, which is very significant for the quality of life of these users and leads to the idea that they have access to information. However, despite the percentages of the IM and IN alternatives, in questions 1 and 2 be discrete, it is understood that they merit attention, since they correspond to factors that may contribute to non-compliance and ineffectiveness of the treatment. A survey of 422 people diagnosed with SAH found that, in the majority of hypertensive users, adequate knowledge about the disease was obtained, only two subjects had below-expected scores (<70%). The study also states that this index, when found, may be related to the degree of its knowledge about the disease, to the acceptance of its state, to the incitement to understand the information, as well as to its level

of education (Barreto, MS, Reiners, AAO and Marcon, SS, 2014). It is worth highlighting the importance of the hypertensive person in analyzing their own knowledge, which may favor behaviors aimed at preventing or reducing the appearance of complications due to hypertension (Bezerra, VM, Andrade, ACS, Césa, CCR and Caiaffa, WT, 2015). According to the World Health Organization, in 2008, 9.4 million deaths were due to the complications of SAH, among them Cardiovascular Diseases (CVD), and the estimate is that by 2030, 23 million people will die from CVD (Vancini-Campanharo, CR, Oliveira, GN, Andrade, TFL, Okuno, MFP, Lopes, MCBT and Batista, REA, 2015). Regarding the practices carried out by the participants, this study revealed some shortcomings. Although a satisfactory prevalence was obtained for the AD alternative, between 43% and 86%, in contrast to the percentage rates directed to knowledge, which had its lowest index above 80%, significant percentage rates were evidenced in the alternatives IM and IN. This suggests that the fact that the participants, for the most part, obtain AD knowledge about hypertension, still does not adherence to the LSC. It is fundamental that good lifestyle practices, whether inserted from the beginning of treatment, concomitant or not with pharmacological therapy, should always be encouraged over time by the multiprofessional team, since they involve the primary conditions for the control of hypertension. The same study identified that there was greater adherence to healthy lifestyle habits when the orientation came from more than one health professional (Rohrbacher, I., Corrêa, CJS, Schmitz, GLP, Rômulo, MCB and Gonçalves, PCZ, 2014). It was found in this study that although most avoided the excess of fats, salt and pasta, some consumed little salt, however, they made use of canned and pasta or they had no restriction. A research has pointed out that some risky behavioral conditions, including poor diet, contribute to the prevalent rates of hypertension. It also affirms that the option for a healthy diet is correlated with the maintenance of adequate blood pressure values, reflecting the therapeutic success of HAS (Teixeira, JF, Goulart, MR, Busnello, FM and Lucia, CP, 2016). The frequency of checking blood pressure was identified, which 15% of the participants pointed out not having this habit, what can interfere in the health and quality of life of these elderly people. The verification of pressure levels is recommended for the detection of arterial hypotension and hypertension (Tibúrcio, MP, Melo, GSM, Balduíno, LSC, Freitas, CCS, Costa, IKF and Torres, GV, 2015). This evaluation becomes essential for the control of tension levels (Motter, FR, Olinto, MTA and Paniz, VMV, 2015).

Regarding to physical activity practices, 63% of the participants stated that they practiced regular activities. However, 15% reported practicing physical activity rarely and 22% did not practice, it might be taken in account when considering the importance of non-pharmacological treatment in controlling blood pressure levels, which together with diet, includes benefits that include the decrease of pressure, weight and lipid indices. All of this makes LSC an expressive therapeutic mode. Contrary to the results found, some studies suggest a low adherence to the practice of physical activity. A study found low adherence to non-medicated treatment when only 10.2% of the patients said they practiced physical exercises and 36.7% had a balanced diet (Chagas, JAS and Almeida, ANF, 2016). A similar study, carried out with 212 hypertensive patients, found that the majority of participants did not reach recommended levels of physical activity for health promotion (Machado, JC, Cotta, RMM, Moreira TR and Silva, LSD, 2016). Although the results of this study related to the practice of physical activity have been expressed positively, it is necessary to emphasize the characteristics of the studied group, since the elderly in general have very ingrained habits, as well as physical and functional limitations characteristic of age. Some studies report that the sedentary lifestyle is common in the elderly and with SAH, which requires planning programs to encourage physical activity that fit their particularities (Machado, JC, Cotta, RMM, Moreira TR and Silva, LSD, 2016). Regarding drug adherence, only 14% do so irregularly. (Girotto, E., Andrade, SMD, Cabrera, MAS and Matsuo, T., 2013)show in their research that 59% of hypertensive patients were considered adherents to pharmacological treatment, and (Mendes, LVP, Luiza, VL and Campos, MR, 2014)that approximately 77% of patients reported that they did not stop taking their medications and 80% there were no drugs left. The findings of this study are based on adherence to pharmacological treatment, which may be associated with quality of service, assuming that adherence is linked to follow-up treatment (Martins, AG, Savaglia, SRR, Ohl, RIB, Martins, IML and Gamba, MA, 2014). It should be noted that adherence to treatment is considered as a complex behavioral process that is influenced by several factors, including the biological, psychological, socioeconomic and cultural dimensions (Martins, AG, Savaglia, SRR, Ohl, RIB, Martins, IML and Gamba, MA, 2014).When it does not occur, it may be one of the main causes of reduction of the clinical benefit and control of chronic NCD, causing health and psychosocial complications, as well as the reduction of quality of life (Freitas, PDS, Matta, SR, Mendes, LVP, Luiza, VL and Campos MR, 2018).

Concerning to the frequency the patients related to feel stressed in the family,a prevalence of 65% MI, 11% IN and 24% AD was observer – indicating the presence of the stress factor in 76% of the interviewees, whether it was routinely or not. Changes in blood pressure (BP), among other disorders, are associated with high levels of stress. Researches involving cardiovascular reactivity show that hypertensive subjects submitted to experimental sessions of emotional stress present a significant BP increase (Figueiredo, JO and Castro, EEC, 2015). In a study of the epidemiological characterization of hypertensive patients, stress had a prevalence of 53.1% among the risk factors for hypertension (Chagas, JAS and Almeida, ANF, 2016). In another study carried out with 106 participants, stress was indicated as one of the most harmful factors to the participants' lives, and its control was considered complicated (Pires, CGS and Mussi, FC, 2013). Stress is a factor of important interference in quality of life and is related to the development of several pathologies, affecting the productivity, relationships, motivation and health of the person (Figueiredo, JO and Castro, EEC, 2015).Besides, it'sconsidered one of the risk factors for non-maintenance of blood pressure control, linked to overweight, alcohol intake, smoking and poor diet (Martins, AG, Savaglia, SRR, Ohl, RIB, Martins, IML and Gamba, MA, 2014). Avoiding worries, therefore,becomes a challenge for health control and disease prevention, because it is affected by the environment, people's behavior and living conditions (Pires, CGS and Mussi, FC, 2013).

Final Considerations

The results showed significant indices referring to the knowledge and practices of the elderly participants of the study, even though the percentage values related to these

practices were less prevalent. Despite not being a discrepant percentage, the changes of habits of some users were deficient, since they involve behavioral aspects of risk, such as: inadequate feeding; partial or absent blood pressure levels verification; partial or absent physical activities; partial antihypertensive medication administration and stress.These factors may interfere and / or hinder the effectiveness of the treatment and, consequently, the control of SAH. Through this study, it was possible to reflect the importance of the commitment of the health team within the HIPERDIA Program, since the work of these professionals could reflect in the levels of knowledge and practices of the users.

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