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RESEARCH

Antihypertensive treatment adherence in workers of a General Hospital

Adesão ao tratamento anti-hipertensivo em trabalhadores de um Hospital Geral

Adhesión al tratamiento antihipertensivo en trabajadores de un Hospital General

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ABSTRACT

Objective: to assess antihypertensive treatment adherence and associated factors in workers from a hospital. **Method**: cross-sectional research, consisting of 108 workers who self-reported as being hypertensive. Associations between sociodemographic, work and health variables were assessed regarding adherence. **Results**: the mean age was 44.2 years, with predominance of the female sex and workers from the nursing area. Through blood pressure measurement, 25% of participants were classified as non-controlled hypertensive patients. Approximately 88% reported taking some sort of medication; however, 79.6% did not adhere to the antihypertensive treatment. In the multiple regression analysis, the independent factors for non-adherence were hypercholesterolemia (OR = 8.10; p = 0.024) and missing medical appointments (OR = 4.06; p = 0.048). **Conclusion**: we verified a significant percentage of non-adherence. Since hypertension and cholesterol are asymptomatic diseases that require continuous treatment, hypertensive patients have difficulties to understand the importance of adhering to the treatment, even being health professionals or working in hospitals.

Descriptors: Hypertension; Medication Adherence; Occupational Health; Blood Pressure; Drug Therapy.

RESUMO

Objetivo: Avaliar a adesão ao tratamento anti-hipertensivo nos trabalhadores de uma instituição hospitalar e os fatores associados. **Método:** pesquisa transversal, composta por 108 trabalhadores que se autorreferiram hipertensos. Foram analisadas associações entre variáveis sociodemográficas, de trabalho e saúde com adesão. **Resultados:** a idade média foi de 44,2 anos, com predomínio do sexo feminino e trabalhadores da área de enfermagem. Por meio da medida da pressão arterial, 25% foram classificados hipertensos não controlados. Aproximadamente 88% referiram tomar algum medicamento, porém, 79,6% não aderiam ao tratamento anti-hipertensivo. Na análise de regressão múltipla, os fatores independentes para a não adesão foram a hipercolesterolemia (OR = 8,10; p = 0,024) e faltar à consulta médica (OR = 4,06; p = 0,048). **Conclusão:** constatou-se percentual de não adesão expressivo. Em razão da hipertensão e o colesterol serem doenças assintomáticas e de tratamento contínuo, o paciente hipertenso tem dificuldades de compreender a importância da adesão ao tratamento, mesmo sendo um profissional da saúde ou trabalhando em ambiente hospitalar.

Descritores: Hipertensão; Adesão à Medicação; Saúde do Trabalhador; Pressão Arterial; Tratamento Farmacológico.

RESUMEN

Objetivo: evaluar la adhesión al tratamiento antihipertensivo en los trabajadores de una institución hospitalaria y los factores asociados. **Método:** investigación transversal, compuesta por 108 trabajadores que se autorrefirieron hipertensos. Se analizaron relaciones entre variables sociodemográficas, de trabajo y salud con la adhesión. **Resultados:** la edad media fue de 44,2 años, con predominio del sexo femenino y trabajadores del área de enfermería. Mediante la medición de la presión arterial, el 25 % fueron clasificados como hipertensos no controlados. Alrededor del 88 % declararon tomar algún medicamento, sin embargo, el 79,6 % no adherían a tratamiento antihipertensivo. En el análisis de regresión múltiple, los factores independientes para la no adhesión fueron la hipercolesterolemia (OR = 8,10; p = 0,024), así como la falta del paciente a la consulta médica (OR = 4,06; p = 0,048). **Conclusión:** se constató porcentaje de no adhesión expresivo. Debido a que la hipertensión y el colesterol alto son enfermedades

asintomáticas y de tratamiento continuo, el paciente hipertenso tiene dificultades para comprender la importancia de la adhesión al tratamiento, incluso siendo un profesional de la salud o trabajando en un entorno hospitalario.
Descriptores: Hipertensión; Cumplimiento de la Medicación; Salud Laboral; Presión Arterial; Tratamiento Farmacológico.

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INTRODUCTION

Workers are exposed to occupational hazards that interfere in the health-disease process, negatively impacting their physical[1] and mental[2] health. Among health complaints, hypertension is considered a global public health problem, representing an important risk factor for cardiovascular disease and mortality of people in full productive capacity[3]. Data from the World Health Organization (WHO)[4] estimate that about 40% of the world's population is affected by high blood pressure. In Brazil, the prevalence varies from 21.6% to 46.6%, depending on the population studied and the method of assessment[5]. A meta-analysis performed with Brazilian studies showed that in the last three decades there has been an apparent reduction of 6% in the prevalence of the disease, but, in general, the rate is still high, in the range of 30%[6]. Among hospital workers, the prevalence of hypertension is also high and is in the same 30% range[7].

To reduce the mortality and morbidity of cardiovascular diseases, it is crucial to control hypertension. However, a systematic review that assessed the control of the disease in Brazilian publications showed rates below 50% in most studies, except for two, which showed rates of 52.4% and 57.6%[8]. Controlling hypertension is directly related to treatment adherence, i.e., the follow-up of the patient to the prescribed conduct, a proper diet, changes in lifestyle, and attendance to medical appointments[9]. Several factors can contribute to non-adherence to the hypertension treatment, especially those concerning the disease, treatment, patient, psychosocial aspects, beliefs, life habits, the institution, and relationship with the health team[10].

Levels of adherence to hypertension treatment are low and vary from 8.7% to 59.6%, depending on the population studied and the type of assessment[11].

It is possible to assume that hypertensive patients who work in hospitals are more aware about the causes and consequences related to hypertension, as well as about ways of prevention and treatment and, for this reason, have a better level of treatment adherence.

OBJECTIVE

To evaluate adherence to antihypertensive treatment and associated factors of workers of a specific hospital, due to the importance of the subject in question and the scarcity of research that assessed this theme among hospital workers in Brazil.

METHOD

Ethical aspects

This study was approved by the Research Ethics Committee of the University of Taubaté and was funded. All participants signed an informed consent form, according to Resolution no. 466/12.

Study design, location and period

This is a cross-sectional, observational, descriptive, analytical, and quantitative research. Data collection was carried out in a large public hospital in São José dos Campos, state of São Paulo, Brazil. The institution had 1,727 workers in all sectors of the hospital, being 250 from the administrative area, 1,217 from the health care area, and 213 distributed in other categories such as maintenance, engineering, laundry, cleaning, lobby, and transportation.

Sample, inclusion and exclusion criteria

The study sample was composed by 108 workers of the hospital who mentioned the diagnosis of hypertension, identified from a population of 883 workers, previously drawn at random, considering a 30% prevalence for hypertension, 5% error, and 95% confidence interval. Individuals who answered "yes" to the question "do you have high blood pressure?" were considered hypertensive.

Study protocol

For data collection, self-reported questionnaires were applied with the hospital workers and blood pressure was also measured with the aid of a oscillometric automatic validated device[12], at least three consecutive times, with the cuff adjusted to arm circumference and 1 minute interval between each measurement.

The dependent variable of the study was treatment adherence, evaluated by an indirect assessment instrument "Morisky-Green Test", validated in Brazil by Strelec et al. (2003)[13]. The criterion adopted for scoring was: 0 to 3 points for non-compliant patients and 4 points for compliant patients.

The Morisky-Green test was chosen for the study because it is widely used a tool in Brazil to assess medication treatment adherence of various diseases[14], including hypertension[15]. Although no studies have conducted its translation and cross-cultural adaptation, considering all stages of the process, several authors evaluated its properties and did not invalidate its use for this purpose, despite its limitations, mainly its low sensitivity[16-17]. This can be evidenced by continuous use[18], including as a gold standard for carrying out the validation of other instruments[19]. More recently, two other adherence methods were compared and it presented good agreement with both[20].

Regarding independent variables, we collected the following data: sociodemographic (gender, skin color, marital status, study time, age), professional (time of service in the institution, place of work, occupation, hours worked per day in the hospital, taking a vacation every year, using the vacation to rest, other professional activities outside working hours, usually work on weekends, satisfaction with professional life, relationship with co-workers), workers' health (self-assessment of health, use of medication, type of medication), and hypertension (diagnostic time, blood pressure measurement, interruption of treatment of high blood pressure, reasons for stopping treatment, missing

medical appointments, reasons for missing medical appointments).

Results analysis and statistics

Descriptive analysis of data was carried out by absolute and relative frequencies, measures of central tendency (mean and median), and dispersion (standard deviation, minimum and maximum). To verify the association between independent variables to the outcomes analyzed, Chi-square Test was used and, when a quad presented expected value equal to or less than 5, Fisher's Exact Test was applied. The values of the odds ratio (OR) and their 95% confidence intervals ($CI_{95\%}$) were extracted from univariate and multiple logistic regression models. The variables that presented p-value < 20% in the univariate analysis were tested in the multiple model by the Stepward technique.

For statistical significance, a descriptive level of 5% ($p < 0.05$) was adopted. Data were typed on Excel and analyzed using the Statistical Package for the Social Sciences (SPSS) version 17.0 for Windows.

RESULTS

Table 1 shows the sociodemographic, work, and health variables of 108 workers who self-reported as being hypertensive. Most were female (75.9%), white (66.7%), with an average age of 44.2 years (SD = 9.6) with median of 45.8 years, minimum of 20.3 and maximum of 64.3 years. The average study time of workers was 14.0 years (SD = 3.9), with a median of 14, minimum of 4 and maximum of 30 years. As for career time, the average was 6.2 years (SD = 5.4), median of 5 years, with minimum time being less than a year (0.8) and a maximum of 38 years.

Regarding the area of performance, most workers were from health care (52.8%) and the nursing staff was the most prevalent occupational category in the sample (41.6%). The place of work that concentrated the largest number of employees in the sample was the hygiene and hospitality sector (21.3%), followed by the ER (10.2%). Most individuals (80.2%) worked more than 8 hours a day, with 48.1% working more than 10 hours. Most took a vacation every year (91.7%), used the vacation to rest (82.4%), had no other professional activities (68.5%), worked on weekends (74.5%), and thought their professional life could improve (61.1%). As for the relationship with co-workers, 92.1% classified it as good or very good.

Table 1 – Number and percentage of workers, according to sociodemographic, work, and health characteristics, São José dos Campos, São Paulo, Brazil, 2014

Variable	Category	n	(%)
Sex	Male	26	(24.1)
	Female	82	(75.9)
Ethnicity*	White	70	(66.7)
	Black	16	(15.2)
	Others	19	(18.1)
Marital status*	Single	22	(20.8)
	Married	57	(53.8)
	Others	27	(25.3)
Healthcare professional	No	51	(47.2)
	Yes	57	(52.8)
Occupation	Nurse technician	24	(22.2)
	Governance assistant	20	(18.5)
	Nursing assistant	12	(11.1)
	Nurse	9	(8.3)
	Physician	6	(5.6)
	Others	37	(34.3)
Place of work	Hygiene and hospitality	23	(21.3)
	Emergency room	11	(10.2)
	Medical clinic	8	(7.4)
	Others	66	(61.1)
Hours worked/day*	< 6	1	(0.9)
	6 to 8	20	(18.9)
	8 to 10	34	(32.1)
	> 10	51	(48.1)
Take a vacation every year?	No	9	(8.3)
	Yes	99	(91.7)
Use vacations to rest?	No	19	(17.6)
	Yes	89	(82.4)
Other professional activities	No	74	(68.5)
	Yes	34	(31.5)
Work weekends?	No	27	(25.5)
	Yes	79	(74.5)
Feeling regarding professional life	Very satisfied	33	(30.6)
	Could improve	66	(61.1)
	Not satisfied	8	(7.4)
	Completely dissatisfied	1	(0.9)
Relationship with co-workers*	Poor	1	(1.0)
	Average	7	(6.9)
	Good	70	(68.6)
	Very good	24	(23.5)
Self-assessment of health	Great	4	(3.7)
	Good	39	(36.1)
	Average	55	(50.9)
	Poor	10	(9.3)
Take some medication*	No	13	(12.1)
	Yes	94	(87.9)
Total		108	(100.0)

*Note: *some values were ignored.*

Only 3.7% of professionals considered their health as good and half considered it average (50.9%). Among health problems, the most frequent was back pain (66.7%) followed by urinary infection (45.4%) and high cholesterol (30.6%). In this sample, 87.9% were taking some sort of medication. Among the medications used, 46.2% of the workers used only antihypertensive medications, and 52.7% were taking antihypertensive and lipid-lowering medications.

The average time of diagnosis of hypertensive workers was 5.9 years (SD = 6.8), with a median of 4, minimum value of 0.1 and a maximum of 45 years. Concerning blood pressure measurement, the systolic pressure mean value was 124.3 mmHg (SD = 18.4), median of 125.2 mmHg, varying from 60 to 182.0 mmHg. For diastolic blood pressure, the average was of 81.8 (dp = 11.2), median of 82, minimum of 59 and maximum of 131.0. Most hypertensive workers had their blood pressure controlled (75.0%) and presented values lower than 140x90 mmHg.

Table 2 evidences that, according to the Morisky-Green instrument, 79.6% of workers did not adhere to medication treatment, 62.4% had already forgotten to take the medication, and 61.3% were careless about the medication timetable.

Regarding treatment interruption, 38.7% have interrupted and the main reason was the forgetfulness (80.5%) and not feel anything (19.7%). As for the missing medical appointments, 60.2% answered "yes", the most frequent reason also being forgetfulness.

Workers who did not adhere to pharmacological treatment had a probability of 32.4% of presenting values of blood pressure greater than or equal to 140x90 mmHg, when compared to those who adhered (0.0%) (p = 0.002), as shown by Table 3.

Regarding sociodemographic variables, there was no statistically significant association with the Morisky-Green test (p > 0.05). However,we found that among work-related variables, the professionals who took a vacation every year had higher probability of not adhering to treatment when compared to professionals who did not take a vacation every year (82.6% *versus* 42.9%; p = 0.030), with greater chance (OR = 6.31; p = 0.024) of non-adherence. As for health-related variables, we observed that professionals with hypercholesterolemia had a higher probability of non-adherence when compared to those without hypercholesterolemia (OR = 4.86; p = 0.048).

In Table 4, the fact that the variables "treatment interruption" and "missing medical appointments" presented a statistically significant association with non-adherence to treatment. For the variable interruption, there was a greater chance (OR = 4.29; p = 0.030) of professionals who interrupted treatment to not adhere when compared to those who did not interrupt it. Likewise, professionals who missed medical appointments were more likely to not adhere to treatment when compared to professionals who did not miss them (OR = 3.36; p = 0.024).

In the multiple regression analysis (Table 5), the independent factors for non-adherence were hypercholesterolemia and missing medical appointments. We observed a greater chance (OR = 8.10; p = 0.024) of professionals with hypercholesterolemia to not adhere to treatment when compared to those without hypercholesterolemia. Regarding missing medical appointments, there was greater chance (OR = 4.06; p = 0.048) of professionals who missed them to not adhere to treatment, compared to those who reported not missing them.

Table 2 – Number and percentage of individuals, according to Morisky-Green adherence, São José dos Campos, São Paulo, Brazil, 2014

Variables*	Category	n	(%)
Adherence to Morisky and Green	Adherence	19	(20.4)
	Non-adherence	74	(79.6)
Have you ever forgotten to take your medication?	No	35	(37.6)
	Yes	58	(62.4)
Are you sometimes careless about the time you should take your medication?	No	36	(38.7)
	Yes	57	(61.3)
When you are feeling well, have you ever not taken your medication?	No	67	(72.0)
	Yes	26	(28.0)
When you feel unwell due to the medication, have you ever not taken it?	No	60	(64.5)
	Yes	33	(35.5)
Total		93	(100.0)

*Note: * 7 cases do not apply and 8 were ignored.*

Table 3 – Number and percentage of individulas according to variables of interest to the study, São José dos Campos, São Paulo, Brazil, 2014

Variable	Morisky and Green	Blood Pressure (mmHg) < 140x90 n	(%)	≥ 140x90 n	(%)	*p**
	Adherence	19	(100.0)	0	(0.0)	0.002
	Non-adherence	50	(67.6)	24	(32.4)	
Total		69	(74.2)	24	(25.8)	

*Note: *Fisher's Exact Test*

Table 4 – Association analysis by Chi-square and univariate binary logistic regression, according to treatment interruption missing medical appointments, São José dos Campos, São Paulo, Brazil, 2014

Variables	Morisky and Green: Adherence n (%)	Non-adherence n (%)	p (X^2)	OR*	$CI_{95\%}$	*p*
Have you ever interrupted your blood pressure treatment?						
No	16 (28.1)	41 (71.9)	0.021	1.0	1.15 – 16.0	
Yes	3 (8.3)	33 (91.7)		4.29		0.030
Have you ever missed an appointment with your physician?						
No	12 (32.4)	25 (67.6)	0.020	1.0	1.18 – 9.59	
Yes	7 (12.5)	49 (87.5)		3.36		0.024

*Note: * the group < 140x90 was used as reference category.*

Table 5 – Multiple binary logistic regression analysis for the dependent variable Morisky-Green, São José dos Campos, São Paulo, Brazil, 2014

Variable	Category	$OR_{adjusted}$	$CI_{95\%}$	*p*
Hypercholesterolemia				
	No	1.0	1.32 – 49.90	0.024
	Yes	8.10		
Have you ever missed an appointment with your physician?				
	No	1.0	1.01 – 16.26	0.048
	Yes	4.06		

*Note: * $OR_{adjusted}$ by the variables "take vacation every year" and "hours worked/day". Hosmer and Lemeshow test p = 0.762.*

DISCUSSION

Regarding sociodemographic characteristics, this sample presents a higher educational level (average of 14 years of study) than studies that evaluated hypertension in the general population[21], as was expected, as this study was carried out with hospital workers. The prevalence of the female sex is also a common characteristic in hospitals, by the large contingent of historically female professions, such as nursing[22] and hospitality and cleaning staffs. Similarly, in other areas of health, the female sex also prevails, including in some areas of Medicine[23].

Regarding morbidities: back pain, urinary infection, and high cholesterol were the most cited. A similar result was observed in other studies conducted with nursing staffs and hospital workers[24-25]. We also verified that half the sample (50.9%) classified their health as average. The fact that they all have at least one morbidity, hypertension, and most take some medication (87.9%), may have influenced health self-assessment.

In general, we identified that the professionals were pleased with the relationship with colleagues and with the work, despite reporting that they could be improved. We found a significant rate of professionals who worked more than 8 hours a day and on weekends. The workday on the weekends is expected in this sample, since work at hospitals present this characteristic, however, a work day of more than 8 hours can indicate more than one occupation or work overload. Excessive work can also be an obstacle to the adoption of healthy practices, such as physical activity, leisure, and healthy eating habits, encouraging, especially, the emergence of risk factors for cardiovascular diseases such as hypertension and dyslipidemias.

A positive aspect is that most took vacations every year and used them to rest. However,we found that professionals who took a vacation every year had higher probability of not adhering to treatment when compared to professionals who did not take a vacation every year, presenting a 6.31 greater chance of non-adherence to treatment. Studies indicate that many patients find inconvenient to take medication out of their homes and the vacation trips are a disruption of their daily routine[26-27].

The rate of hypertensive individuals found in this study among nursing professionals was 13.7%, followed by governance assistants. This rate of high blood pressure found among nursing professionals is lower than that observed in the literature[7,28].

From the hypertensive workers who used some sort of medication, 46.2% used only antihypertensive medication, which could mean that they did not present other serious risk factors for cardiovascular diseases. However, the majority of workers (52.7%) took antihypertensive and lipid-lowering, indicating problems of hypercholesterolemia associated with hypertension.

The average time for diagnosis of hypertension was 5.9 years. The workers also presented controlled blood pressure within the normal limits according to values recommended by the VI Brazilian Guidelines of Hypertension[3]. Blood pressure control in this study proved to be more satisfactory than what was verified in the general population[21,29]. This finding may indicate that hospital workers, despite presenting factors working conditions unfavorable to blood pressure control, such as work overload, have a favorable condition regarding their training in the area of health and/or familiarity with health care, which can be a favorable factor to pressure control.

Regarding treatment adherence, we verified through the Morisky-Green instrument that 79.6% of workers were considered non-compliant, with 62.4% forgetting to take medication and 61.3% being careless about the timetable. Other studies have found similar results[30-32]. Therefore, concerning the variables of interest to the study, we observed that there was no statistically significant association between non-compliant professionals and blood pressure according to Morisky and Green. Non-compliant professionals presented a probability of 32.4% of having uncontrolled blood pressure (≥ 140x90 mmHg) when compared to those who were compliant (0.0%). Low adherence to the pharmacological treatment is an obstacle to the control of blood pressure, corroborated by other studies that identified that non-compliant patients had uncontrolled levels of blood pressure or lower levels when compared to compliant patients[21,33].

The findings of this study reveal a significant percentage of professionals who did not interrupt the pharmacological treatment and, among those who interrupted it, the most common reasons were forgetfulness, followed by not feeling anything. On the other hand, most individuals report missing appointments, presenting as reasons forgetfulness, not wanting to miss work, possible hours for the appointments, and distance. For professionals who have interrupted treatment, there was a four times greater chance not to adhere to treatment compared to those who never interrupted it. Likewise, professionals who missed medical appointments were three times more likely to not adhere to treatment when compared to professionals who did not miss them.

Among the professionals who took medication for high blood pressure, there was a higher probability of non-adherence when compared to those who reported not taking any, with three times greater chance of not adhering to treatment. This result is consistent with the approach of the Morisky and Green instrument that assesses medication treatment adherence.

In multiple regression analysis, the independent factors for non-adherence were high cholesterol and missing medical appointments. The low frequency to appointments can be related to non-adherence to treatment, since attendance to appointments provides monitoring of blood pressure, as well as, access to information regarding pharmacological treatment and other treatments, thus avoiding interruption and abandonment of the treatment to ensure a good blood pressure control as well as satisfactory adherence[34].

The third most referred morbidity in this study was hypercholesterolemia and the professionals who reported having altered cholesterol showed a four times greater chance of not adhering to treatment, when compared to individuals with normal cholesterol. Hypercholesterolemia was also the independent factor to non-adherence, which remained in the multiple model, with a 8 times greater chance of non-adherence to treatment when compared to those without hypercholesterolemia. According to the V Brazilian Guidelines of Dyslipidemias and Prevention of Atherosclerosis (2013)[35], hypercholesterolemia is a silent condition and represents one of the major risk factors for developing cardiovascular diseases and is almost always accompanied by other conditions that favor its occurrence, such as sedentary lifestyle and obesity. A study carried out in a general hospital[36] showed that 27.7% of the nursing workers presented high cholesterol and physical inactivity was reported by over half of the sample. A study carried out in the state of Rio Grande do Sul, Brazil[37], showed a statistically significant difference between the rate of hypercholesterolemia of hypertensive patients when compared to patients with normal blood pressure (38.4% *versus* 19.3%; $p<0.001$).

Hypercholesterolemia may be associated to unhealthy living habits and, therefore, non-adherence to non-pharmacological treatments. Another possibility is that these patients did not adhere to antihypertensive and lipid-lowering treatments, causing high cholesterol levels. In this sense, a retrospective cohort study[38] that aimed to analyze patients compliance with concomitant use of antihypertensive and lipid-lowering therapy showed that the rate of compliant patients with simultaneous use of these medication decreases dramatically after the beginning of the treatment, with only one in three patients presenting adherence after six months of treatment. It was also found that the patients who started treatment for hypertension and hypercholesterolemia concurrently were more likely to adhere.

It is valid to say that the assessment of treatment adherence is quite complex and difficult to be carried out. It is not uncommon to use different forms of measurement and none of them presenting a good prognosis for adherence[16]. Nevertheless, the assessment of adherence is important to depict the profile of a specific group. In this study, the Morisky and Green test was not used in isolation, since blood pressure was also analyzed, as it is a clinical outcome that showed correlation with adherence.

Study limitations

As this a study of epidemiological and descriptive character, among different categories of workers in a hospital, we were unable to explore in greater depth the more specific aspects of each of the occupational categories, among health workers and others, limiting the interpretation and explanation of some findings.

In addition, the instrument used to measure treatment adherence is limited to pharmacological adherence and does not include adherence to non-pharmacological treatments, excluding the possibility of evaluation of adherence of the patients that were not subjected to pharmacological treatment. Another aspect about the Morisky and Green test is that this instrument, although available in Portuguese, was not formally translated and adapted cross-culturally, according to the available protocols. However, its frequent use by experts possibly validates this aspect, since its content is assessed in every new study. It is worth mentioning that this is an instrument easy to be used, with a small number of questions and that allows to evaluate the patient's attitude regarding taking the medication.

Contributions to the fields of nursing, health, or public policies

This result should contribute to workers' health services to investigate adherence to pharmacological treatment of professionals with hypercholesterolemia and hypertension and to promote favorable conditions for regular monitoring in medical appointments to control diseases. In this sense, the involvement of occupational health services and managers themselves seem to be a fundamental factor for the preservation of workers' health, avoiding complications of poorly controlled diseases and consequently lower absenteeism for the health services. It is important to remember that many workers reported that one of the reasons for non-adherence to medical appointments was not missing work.

Another aspect that should be strengthened is the role of Primary Health Care, with the follow-up of teams from Basic Health Units. Often, the opening hours of Basic Health Units limits the possibility of access and monitoring of the service without hindering professional activities and commitments.

Therefore, the hospital itself and its managers have fundamental roles in the promotion and prevention of their workers' health, developing health education initiatives and group meetings focused on the workers' health with the goal of empowering them to self-manage their health condition and creating conditions for them to attend medical appointments, to increase adherence to antihypertensive treatment and healthy lifestyle habits.

CONCLUSION

The results from this study show an expressive percentage of non-adherence, a behavior corroborated by other studies. The main factors for non-adherence to treatment by workers were the presence of hypercholesterolemia and missing medical appointments. Since hypertension and cholesterol are asymptomatic diseases that require continuous treatment, hypertensive patients have difficulties to understand the importance of adhering to treatment and performing continuous follow-ups to avoid the development of complications, even being health professionals or working in hospitals.

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