



PROFILE OF HYPERTENSIVE PATIENTS: BIOSOCIAL ASPECTS, PERSONAL HISTORY AND TREATMENTS

PERFIL DE PACIENTES HIPERTENSOS: ASPECTOS BIOSOCIAIS, ANTECEDENTES PESSOAIS E TRATAMENTOS

PERFIL DE LOS PACIENTES HIPERTENSOS: ASPECTOS BIOSOCIALES, LA HISTORIA PERSONAL Y TRATAMIENTOS

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ABSTRACT

Objective: to characterize the biosocial profile and personal history of hypertensive patients; to investigate pre-existing diseases and hypertension treatments. **Method:** this was a descriptive documentary study with a quantitative approach. The data were collected from the records of patients seen at the ambulatory services from the São Paulo State University, between February 2006 and March 2009. The data collected comprised information related to socio-demographics and personal and family background for 35 hypertensive patients, in the period from March to May 2009. The collected data were compiled in an Excel spreadsheet. The data was statistically analyzed in a descriptive form. Absolute numbers and percentages were used in the tables. This study was approved by the Ethics in Research Committee of the Univap (H183/2008). **Results:** the biosocial profile of the hypertensive patients was characterized by female gender, age above 50 years, and x white race. The family diseases background displayed a predominance of hypertension, diabetes mellitus I and II, dyslipidemia, and obesity. Antihypertensive inhibitors of angiotensin converting enzymes, diuretics, calcium channels inhibitors, and beta-blockers were the most frequently medicines quoted as used by these hypertensive patients. **Conclusions:** the biosocial profile of these hypertensive patients was characterized by age over 50 years, female gender, and white race. Diabetes, obesity, and dyslipidemia were identified as the prevalent pre-existing conditions. The most frequently used medicines were the inhibitors of angiotensin converting enzymes, followed by diuretics, and calcium channels inhibitors. **Descriptors:** hypertension; lifestyle; health profile.

RESUMO

Objetivo: caracterizar o perfil biossocial e antecedentes pessoais de pacientes hipertensos; investigar as doenças pré-existentes e os tratamentos da hipertensão. **Método:** estudo descritivo, documental, com abordagem quantitativa. Os dados foram coletados a partir de prontuários de pacientes atendidos em uma universidade no interior do Estado de São Paulo que atende pacientes ambulatoriais, entre fevereiro de 2006 a março de 2009. Foram coletadas as informações relacionadas aos dados sociodemográficos, antecedentes pessoais e familiares de 35 pacientes hipertensos, no período de março a maio de 2009. As informações coletadas foram compiladas no programa Excel, em forma de planilha. Os dados foram analisados sob orientação estatística, de forma descritiva. Utilizaram-se números absolutos e porcentagens para a confecção das tabelas. O projeto foi aprovado pelo Comitê de Ética em Pesquisa da Univap (H183/ 2008). **Resultados:** verificou-se que o perfil biossocial dos hipertensos caracteriza-se pelo sexo feminino, idade acima de 50 anos e cor branca. Quanto aos antecedentes familiares de doenças, prevaleceram a hipertensão arterial, o diabetes mellitus I e II, a dislipidemia e a obesidade. Os medicamentos mais citados pelos pacientes hipertensos foram os anti-hipertensivos inibidores da enzima conversora de angiotensina, seguidos dos diuréticos, inibidores dos canais de cálcio e beta bloqueadores. **Conclusões:** o perfil biossocial dos hipertensos foi caracterizado por pacientes com idade acima de 50 anos, do sexo feminino e de cor branca. Quanto à presença de doenças pré-existentes, prevaleceram o diabetes, a obesidade, e a dislipidemia. Os medicamentos mais utilizados pelos hipertensos foram os inibidores da enzima conversora de angiotensina, seguidos dos diuréticos e dos inibidores dos canais de cálcio. **Descritores:** hipertensão; estilo de vida; perfil de saúde.

RESUMEN

Objetivo: determinar el perfil bio-social y los antecedentes personal de los pacientes hipertensos, investigar las enfermedades pre-existentes y los tratamientos de la hipertensión. **Método:** estudio descriptivo, documental, con un enfoque cuantitativo. Los datos fueron obtenidos de las historias clínicas de los pacientes tratados en una universidad en el interior del Estado de São Paulo que atiende pacientes ambulatorios, entre febrero del 2006 y marzo del 2009. Se recolectó información respecto a los datos socio-demográficos, la historia personal y familiar de 35 pacientes hipertensos, en el período de marzo a mayo de 2009. Los datos fueron reunidos en hoja de cálculo en Excel. Los datos fueron analizados estadísticamente, de forma descriptiva. Utilizando números absolutos y porcentajes para la configuración de las tablas. El proyecto fue aprobado por el Comité de Ética de la Univap (H183 / 2008). **Resultados:** se encontró que los pacientes hipertensos tienen un perfil bio-social donde domina el sexo femenino, mayores de 50 años y de raza blanca. En la historia familiar de los pacientes prevaleció la hipertensión, diabetes mellitus I y II, dislipidemia y obesidad. Los fármacos más comúnmente citadas por los pacientes hipertensos fueron los inhibidores antihipertensivos de la enzima convertidora de la angiotensina, seguidos por los diuréticos, los inhibidores de los canales de calcio y los beta bloqueadores. **Conclusiones:** el perfil biosocial se caracterizó por pacientes hipertensos mayores de 50 años, de sexo femenino y de raza blanca. Con respecto a la presencia de enfermedades pre-existentes prevalecieron la hipertensión, diabetes, obesidad y dislipidemia. Los fármacos más utilizados para la hipertensión fueron los inhibidores de la enzima convertidora de angiotensina, seguido por diuréticos e inhibidores de los canales de calcio. **Descriptores:** hipertensión; estilo de vida; el perfil de la salud.

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INTRODUCTION

The Brazilian reality, as in other countries, demonstrates that systemic arterial hypertension (SAH) is a problem that reaches important part of the population, because the prevalence rate of this disease is significant.¹

Data from the Ministry of Health presents that about 20% to 31% of people in Brazil are hypertensive¹, a rate close to that of other countries like United States of America (USA), which had a rate of 29% of hypertensive in studies conducted in 2000².

The percentage of deaths by diseases of the circulatory system in Brazil was of 31% in 2003³, showing a high prevalence of these diseases in the general population and the great need for specific interventions to prevent serious consequences, such as ischemia, encephalon-vascular diseases, nephropathies, among others⁴.

The blood pressure control is performed through various mechanisms, among others the neurogenic and hormonal ones, endothelial disfunction, environmental and genetic factors⁴. However, the neurogenic mechanisms are related to the sympathetic nervous system that receives information from the arterial pressoreceptors (high pressure), the cardiopulmonary receptors (low pressure) and the arterial chemicalreceptors⁵.

The hormonal mechanisms are related to the renin-angiotensin and other kinin-kallikrein vasoactive hormones which result in hemodynamic influence in long-term and the vasopressin which is an anti-diuretic hormone aiming at increasing the plasmatic volume⁵.

The endothelial dysfunction is concerned to the variation of nitric oxide production with vasodilator action and the endothelin dysfunction in vasoconstrictor action; both are produced by endothelial cells of blood vessels and are responsible for cardiovascular regulating⁵.

Environmental factors exert important influence on BP control and are characterized by sodium intake, salt sensitivity and modulation of sodium, by the climacteric when presenting deficiency of sex hormones important for regulation of the BP, by obesity and insulin resistance due to liquid retention, renal structural changes, changes in the vascular structure and function⁵.

It is known that this disease may be related to environmental factors and also to genetic ones⁵; therefore, it is necessary to stress the importance of investigating these diseases in

the family in order to prevent their possible occurrence in old people⁶.

It is estimated that in 2025 approximately 60% of the world population will be hypertensive⁷ and the population pyramid will be more elderly, thus providing many problems, such as co-morbidities⁸. Thus, to characterize the client specifically and his/her diagnosis make the health promotional campaigns and prevention of SAH better targeted and exploited by the population, mainly regarding to cardiovascular diseases, which are still the leading causes of death in Brazil^{1,3,7-11}.

Given this context, monitoring these patients can raise the most important points to be used in therapeutic and/or preventive measures, adding essential and unique information of each person, enriching the existing treatments and strengthening educational activities.

OBJECTIVES

- To characterize the biosocial profile and personal history of hypertensive patients.
- To investigate the pré-existing diseases and the treatment of hypertension.

METHOD

This is a descriptive, documental study with a quantitative approach. Data were collected from medical records of patients seen in a Spervised Practice Center (SPC) of a University within the state of São Paulo-SP, which serves outpatients.

The SPC of this university has cared patients of all ages and various specialities since the year 2000. The professionals who adhere to the care of these patients are nurses, physiotherapists, occupational therapists and nutritionists.

To support this research, an instrument was elaborated based on the scientific literature^{13,5,7,9-11}. Health Science Descriptors (HSD) such as hypertension, lifestyle, and health profile were used. It was analyzed 280 medical records accompanied at the SPC of the University between the period from February 2006 to March 2009, however, only 35 (12.5%) met the inclusion criteria of the study.

It was considered as inclusion criteria for this study the medical records of patients older than 18 years with a diagnosis of SAH, regardless sex. Patients who were not diagnosed as SAH were excluded from the

study.

Variables related to the study were concerned to sociodemographic characteristics, personal history, pre-existing diseases and treatments.

The collected data were compiled in Excel in spreadsheet form. Data were statistically analyzed in a descriptive way. Absolute numbers and percentages for the preparation of tables were used. All this was done after the approval of the research project by the Committee for Research Ethics of Univap (H183 / 2008).

In the item drug addiction, 94.2% (33) of the records showed that the patients do not use illicit drugs and 5.7% (2) do not have this information.

The family history was related to cardiovascular diseases, infectious diseases, pre-existing diseases and living habits. About 57% (20) of the records had information concerning the family history with some cardiovascular disease, however, only 11.4% (4) of the patients had no history of cardiovascular disease in the family and 31.6% (11) of the records did not have this information.

Among the cardiovascular diseases the most pointed was SAH with 95% (19), followed by coronary artery 35% (7).

The pre-existing diseases in family

Table 1. Distribution of hypertensive and alcoholic patients São José dos Campos-SP, 2009.

Alcoholism	n	%
Social	1	2,8
Every day	2	5,7
Ex-drinkers	2	5,7
No	28	80,0
Not informed	2	5,7
total	35	100,0

The most found pre-existing diseases associated to hypertensive patients were diabetes mellitus (DM) type I and II in 28,5% (10) of the reports. The Chronic Renal Failure (CRF) was found in only 2,8% (1) of patients, obesity in 2,8% (1), dyslipidemia in 8,5% (3) of the records.

Relating to treatments, 94,2% (33) of the reports showed that the patients ingest some type of medicines and only 5.7% (2) of the reports did not have this information. Among the 33 patients who take medicines, the most

members mentioned in the records were DM type I or II in 77.7% (14), obesity in 33.3% (6), dyslipidemia in 5.5% (1) and other diseases in 33.3% (6). CRF and ARF were not reported, smoking, alcoholism or drug addiction were not mentioned in any records.

RESULTS

In relation to the sociodemographic characteristics, age among the participants prevailed over 50 years with 94,2% (33) and only 5,7% (2) of patients aged 41-50 years. Concerning gender, 60% (21) were female and 40% (14) male. In race it was prevailed the white color with 22,8% (8) against black with 5,7% (2), however no information on this item in the records was 71,4% (25).

It was investigated the profile of hypertensive patients regarding alcohol consumption and 80% (28) of the patients do not use alcoholic beverages, 5,7% (2) ingest alcohol every day, 5,7% (2) are ex-drinkers, 5,7% (2) of the records did not have this information and 2,8% (1) state they drink alcohol socially. These data are presented in table 1.

widely used for SAH were antihypertensives (AH) inhibitors of angiotensin-converting enzyme (IACE) with 51.5% (17), followed by diuretics with 36.3% (12), by inhibitors of calcium channels (ICC) with 33,3% (11), by alpha AH or beta-blockers with 30.3% (10) and others AH with 21.2% (7).

Other drugs were also cited by the sample patients of this study. It was mentioned medicines like oral hypoglycemics with 18% (6), insulin with 12% (4) and cholesterol lowering with 18% (6) (table 2).

Table 2. Number and percentage of medicines used by hypertensive patients. São José dos Campos-SP, 2009

Medicines in use	n	%
Anti-hypertensives (AH) IACE	17	51,5
diuretics	12	36,3
AH alpha or beta-blockers	10	30,3
AH INCC	11	33,3
AH others	7	21,2
Oral hypoglycemics	6	18,1
Cholesterol lowering	6	18,1
Insulin therapy	4	12,1

DISCUSSION

The prevalence rate of hypertensives in the outpatient population served by the Supervised Practice Center was 12.5% and it is a result under data from the Ministry of Health¹ and the index of EUA², but close to the results found in a study in northeastern of Brazil which found a prevalence in patients registered in PSF¹².

The prevalence index of SAH in the studied population varied widely according to the region. It is needed to emphasize that hypertensive is associated to social class, being more evident in regions with lower purchasing power, that is, in regions of lower class, with less education and less access to health services^{9,12}.

A study that compared 100 hypertensives patients in the Emergency Room (ER) to 100 outpatients showed that the hypertensives of the ER presented different characteristics in relation to higher blood pressure; lower income; higher alcohol consumption. Data analysis revealed significant differences between the two groups in terms of income, of place where pressure was measured and of not ingesting the medicines. The authors concluded that unfavorable characteristics (low income, lack of access to hospitals) can contribute to not undergoing anti-hypertensive treatment, leading to calls in emergency units¹³.

The prevalence of female gender and age over 50 years were found in this study. These data are similar to other researches^{9,14-7}, but in other studies there was a prevalence of arterial hypertension among men, and confirmed the incidence relation of SAH increases with age older than 40 years^{2,18}. The male gender also predominated in patients with AMI with difference in level of ST segment¹⁹.

A review on the epidemiology of the systemic arterial hypertension and heart failure in Brazil found that most studies still proceed from South and Southeast regions. The prevalences of SAH are mostly above 25%,

predominantly in males and the main risk factors do not differ from other countries²⁰.

It is observed that alcohol consumption was associated to hypertensive patients, because a percentage of patients drink alcohol beverages every day, socially or are ex-alcoholics. Similar rates were also found in other researches^{2,21,22}.

It is known that the abusive consumption of alcohol beverages is harmful to the cardiocirculatory system, influencing the quality of life of hypertensives and increasing spending with longer hospitalizations^{3,5,21}.

The family history showed that many patients have a history of pre-existing diseases such as SAH, DM type I or II, obesity and dyslipidemia. These data corroborate with another study²³ reporting prevalence of these diseases like family history.

It was found that there was significant association between SAH and pre-existing diseases such as DM type I or II and dyslipidemia. However, obesity and CRF have been less found. Conversely, these diseases are quoted on a large scale in other studies and are part of factors that have important influence on the arterial pressure control^{1-5,21,24,25}.

The medicines mostly often cited by AH patients were IACE, followed by diuretics, ICC, alpha or beta-blockers and others. The indication of these AH varies according to the degree of hypertension, the individual characteristics and the co-morbidities. However, the AH are effective in treating arterial hypertension and in reducing morbidity and cardiovascular mortality^{5,7,26}.

Besides that, medicines for DM type I or II, the cholesterol lowering and other drugs were mentioned in the patients' records, so this fact can demonstrate a concern in making treatment for the associated diseases following all the doctor's prescriptions.

It is estimated that in 2025 probably 60% of the world population will be hypertensive and the populational pyramid will be even more elderly, however with many related problems, such as co-morbidity⁸. Thus, to characterize

specifically the client and his/her diagnosis makes promotial campaigns for health and SAH prevention be better targeted and exploited by population, mainly regarding cardiovascular diseases, which have been still the leading causes of death in Brazil^{11,14,22}.

CONCLUSION

In this study the biosocial profile of hipertensives was characterized by patients aged over 50 years, female gender, white race, with no history of infectious diseases and allergies.

Regarding the presence of pre-existing diseases in the hipertensive patients, it was prevailed the diabetes, CRF, obesity and dyslipidemia. In relation to family history it was reported SAH, DM type I or II and obesity.

Most patients reported the use of medicines to control hypertension, such as antihypertensives IACE, diuretics and beta-blockers.

The profile characterization of the hypertensive patients is an important issue in the health area and it helps to improve multiprofessional care to these clients, claiming fully the adherence to treatment and the disease prevention.

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