



Journal of Nursing

Revista de Enfermagem

UFPE On Line

ISSN: 1981-8963

ORIGINAL ARTICLE

PRIMARY CARE EVALUATION TO HYPERTENSIVES REGISTERED IN HIPERDIA

AVALIAÇÃO DA ATENÇÃO PRIMÁRIA AOS HIPERTENSOS CADASTRADOS NO HIPERDIA

EVALUACIÓN DE LA ATENCIÓN PRIMARIA A LOS HIPERTENSOS REGISTRADOS EN HIPERDIA

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ABSTRACT

Objectives: describing the epidemiological profile according to HiperDia and evaluating the work process given to hypertensive and their index of satisfaction. **Method:** a mix epidemiological study associating the exploratory descriptive data analysis in HiperDia to a survey with a random sample of 335 hypertensives. Data were analyzed based on simple descriptive statistics and presented in absolute numbers and percentages. The research project was approved by the Research Ethics Committee, under protocol 261/2009. **Results:** from the total number of patients the majority is women aged between 40 and 69 years old, exhibiting characteristics, such as smoking and physical inactivity and some sequels, and evaluating the assistance as good. Examinations are performed frequently, except the ECG. **Conclusion:** the lack of bond and communication among professionals and patients is a barrier to accessing care. **Descriptors:** Health Evaluation; Primary Health Care; Hypertension.

RESUMO

Objetivos: descrever o perfil epidemiológico segundo as informações do HiperDia e avaliar o processo de trabalho prestado a hipertensos e ao seu índice de satisfação. **Método:** estudo epidemiológico misto associando-se à análise exploratória descritiva de dados do HiperDia a um inquérito com amostra aleatória de 335 hipertensos. Os dados foram analisados à luz da estatística simples e apresentados descritivamente com números absolutos e percentuais. O projeto de pesquisa foi aprovado pelo Comitê de Ética em Pesquisa, sob o Protocolo 261/2009. **Resultados:** do total de pacientes a maioria é mulher na faixa etária entre 40 e 69 anos, apresentando características como tabagismo e sedentarismo e algumas sequelas, e avaliando a assistência prestada como boa. Exames são realizados com frequência, exceto o de ECG. **Conclusão:** a falta de vínculo e comunicação entre profissionais e usuários é uma barreira ao acesso à assistência. **Descritores:** Avaliação em Saúde; Atenção Primária à Saúde; Hipertensão.

RESUMEN

Objetivos: describir el perfil epidemiológico según informaciones del HIPERDIA y evaluar el proceso de trabajo dado a hipertensos y a su índice de satisfacción. **Método:** estudio epidemiológico mezclado asociándose al análisis exploratorio y descriptivo de datos del HIPERDIA a una encuesta con una muestra aleatoria de 335 hipertensos. Los datos fueron analizados sobre la base de la estadística simple y presentados descriptivamente en números absolutos y porcentajes. El proyecto de investigación fue aprobado por el Comité Ético de Investigación, bajo protocolo 261/2009. **Resultados:** del número total de pacientes la mayoría es de mujeres con edad entre 40 y 69 años, presentando características tales como el tabaquismo y la inactividad física y algunas secuelas, y evaluando la asistencia como buena. Los exámenes se llevan a cabo con frecuencia, excepto el ECG. **Conclusión:** la falta de ligación y comunicación entre los profesionales y los pacientes es un obstáculo para el acceso a la atención. **Descriptores:** Evaluación de la Salud; Atención Primaria de Salud; Hipertensión.

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INTRODUCTION

Systemic Arterial Hypertension (SAH) is the most common of the cardiovascular diseases. The prevalence in the urban adult population ranges from 22,3% to 43,9%, depending on the city where the study was conducted. It is estimated that there are about 17 million with hypertension in Brazil, among them, 35% of the population 40 years old and over, and that about 50% of this total do not know their diagnosis, consequently do not receive attendance.¹

That number is growing, its appearance is increasingly precocious and it is estimated that approximately 4% of children and adolescents are also carriers. On the other hand, a few decades ago, cardiovascular diseases have become the leading cause of death in Brazil, according to official records. In 2000, it accounted for over 27% of all deaths, or 255.585 people died due to diseases of the circulatory system in that year.²

Hypertension is also a major risk factor for the most common complications, such as stroke (CVA) and acute myocardial infarction (AMI), in addition to end-stage renal disease. It is related to 80% of strokes and 60% of cases of ischemic heart disease (IHD). Hypertension and its complications are also in Brazil the first cause of hospitalization in the public sector for people aged between 40 and 59 years old (17%) and among those of 60 or over (29%).¹

For being on most of its course asymptomatic, its diagnosis and treatment are often neglected, adding to this the low treatment adherence, whether medicated or not, that revolves around 30%.³

Early identification of cases and establishing a link between the carriers and the Family Health Units are essential elements for the successful control of this condition.⁴ The professionals of Primary Health Care Network (APS) have prime importance in the strategies of control of hypertension, but also in defining the clinical diagnosis and therapeutic management, both in the effort required to inform and educate the hypertensive patient, as well as provide treatment adherence.

Hypertension is a disease characterized by its high prevalence, low impact, easy clinical diagnosis, care protocols known and understood; its treatment being relatively of low cost and highly available.² However, even with these features, which could facilitate its control, it still presents itself as an important public health problem, consisting of the 5

largest health problem being faced worldwide. Why SAH is a challenge for APS, especially at the Family Health. Due to multiple factors, including a hospital-centric culture, its treatment has occurred assistematically in emergency care of hospitals without any guarantee of a proper monitoring and control services, allowing the occurrence of sequelae. The lack of relationship between patients and providers of health services is crucial to the latter condition. Maintaining the patient's motivation not to abandon the treatment is perhaps one of the greatest difficulties that health professionals face in relation to hypertensive.³

It is also important to remember that a large number of hypertensive patients have other comorbidities, such as diabetes, dyslipidemia, and obesity, which has important implications for the therapeutic management actions necessary to control a cluster of chronic conditions, whose treatment requires perseverance, motivation and continuing education.⁶

Faced with this issue, the Ministry of Health (MOH), with the aim of contributing to the reduction of morbidity and mortality associated with hypertension, and is committed to partnering with states, municipalities and society to support the reorganization of the health system, with view to improving care to patients through the development of joint actions of promotion, prevention, treatment and recovery of sufferers. Incidentally, the Plan of Reorganization of Care for SAH aims to setting guidelines and targets for attention to these disease carriers in the Single Health System (SUS), by restructuring and expanding the APS, with emphasis on primary and secondary prevention and in linking patients to the health services network.¹

Thus, it was necessary the provision of information relating to health conditions of hypertension and diabetes for both professionals directly related to attention, as the managers of all levels of government and the community could access the data and thus perform assessment of the situation of hypertension. Implementation of Health Information Systems (HIS) to assist in the monitoring of patients with hypertension and diabetes mellitus securing the organization of health services and assistance with a targeted and effective approach.¹

For this purpose, the MOH in 2001, HiperDia, a computerized system and made available to states and municipalities for the registration and monitoring of hypertension and diabetes. Having as objectives:

monitoring of patients enrolled in the reorganization plan of care for hypertension and diabetes mellitus, obtaining information for purchasing, dispensing and distribution of medications regularly and systematically to all patients registered and the definition of the epidemiological profile this population, served in outpatient facilities SUS.⁷

The actions of strategic performance of the APS for the control of high blood pressure are: early clinical diagnosis through active search of cases performing systematic gauging of arterial pressure of users on the services, in home visit and in the community; treatment of cases with an outpatient follow-up and homecare; realization of laboratory investigations Protocol; first emergency attendances hypertensive crises among other complications; preventive measures for educational actions for the control of conditions of risk and prevention of complications.⁸

Given this situation of high relevance in the context of public health, we carried out the present study aimed to describe the epidemiology of HiperDia reportedly evaluate the work process in the APS for the care of SAH according to users and their content of satisfaction.

Thus, we present below a description of the epidemiological profile of the population from the data analysis HiperDia, and the existence and frequency of protocol procedures for the control of hypertension using as a source of information the reports of service users.

METHOD

A quantitative study of socio-epidemiologic nature, through evaluative research line in Health, during the year of 2010, in the municipality of Alfenas, Minas Gerais.

In the first phase of research, it was employed the cross-sectional descriptive method, using data services from SIS to the specific cases of hypertension and diabetes mellitus, the HiperDia. In a second phase, it is also a household survey conducted with a representative sample of hypertensive of HiperDia from Alfenas, in order to identifying the level of users' satisfaction and quality of care provided to them through a checklist of actions health protocol for the approach of hypertensive patients.

The evaluation of quality of care, in the case of hypertension, was taken as a base of quality assessment of APS in the county, based on the principles of technical evaluation in health conditions through markers.

Marking condition is a technique for evaluation of health care that is based on the

idea that, from the assessment of the assistance provided to a given set of conditions or diseases, it can infer on the quality of health care in general, including resolution, proper use of complementary examinations, opportunity of the shares, access to medication or the more complex levels of the health system. In general, the quality of care for a disease or health problem serves as a marker condition if it is of: high prevalence and low incidence; easy clinical diagnosis; existence of protocols established and very well-known and low-cost treatment and high availability.⁹ Now SAH has all these features.

The research, in the first phase, was composed of all hypertensive patients registered in the municipality HiperDia and belonging to the catchment area of all units of the municipality of the Family Health Strategy (FHS). Privet owned that year, 12 units deployed FHS, being 11 in urban areas and in the countryside. The municipality of Alfenas is a typical municipality in southern Minas, headquarters of micro- and macro-regional centers, with a profile that resembles most municipalities. Moreover, studies on the subject are unknown in this region.

In the second phase of FHS 12 units were excluded from the study: two units belonging to the urban area, as they were in the process of re-registration in the Municipal Secretariat of Health and the unit of the countryside, because it is a mobile unit with points care in various districts of the city, many of them difficult to access, which could become an impediment to achieving the household survey. Furthermore, no specific funding for this research, made possible only by granting trainee grant, from the Research Foundation of the State of Minas Gerais (FAPEMIG), not included the hypertensive population residing in rural Alfenas. Therefore, the research universe to be sampled to conduct the second phase consisted of hypertensive HiperDia enrolled in nine units FHS updated that moment. Random sample stratified according to the proportion of hypertensive patients in each unit of the FHS was extracted with statistical significance level of 5%.

To conducting the household survey it was used a structured questionnaire developed for this purpose and tested in a pilot survey conducted in hypertensive patients residing in other areas of coverage than those to be sampled. The pre-test included about 10% of the total sample, ie 30 patients, thereby helping to improve and validate the survey instrument.

To assessing the level of user satisfaction, we chose to use an analogue scale of faces

adapted visual analogue scale¹⁰ for assessment of pain intensity, due to the ease of applying it and heterogeneity in schooling, often low of the research subjects. Moreover, it was inferred, from the pilot study, which shows a "face of disgust" that was more likely than classifying services as bad from the Likert scale.

Form data were entered and tabulated in Excel for further analysis in Epi Info version 3.5.2. Exploratory analysis of frequentist type and of central tendency data it was evaluated with descriptive data from HiperDia and the questionnaire. The index of user satisfaction was given from modal analysis. The statistical significance of the analysis was defined as $p < 0.05$.

The research project was approved by the Ethics Committee of the University José do Rosario Vellano (UNIFENAS) under Protocol No. 261/2009.¹¹

RESULTS AND DISCUSSION

Of the total of hypertensive patients estimated for the municipality under study, calculated from the prevalence of SAH in Brazil, 74% are registered, probably because it is a new SIS, which was in the process of redeployment in the city. Of the 2134 hypertensive individuals registered in the system 1308 were women (approximately 62%) and of these, 361 (27,5%) with associated diabetes. Among males, of the 826 subjects enrolled (38% of the universe), 191 (23%) have both diseases. In total, 25,8% of registered individuals had hypertension and diabetes combined.

The fact of the hypertensive patients were on medication at the time, such as diuretics and beta-blockers, which are known to increase insulin resistance, it could be contributing to the high prevalence of glucose intolerance in that population. Moreover, hyperinsulinemia causes increases in sympathetic nervous system activity and tubular reabsorption of sodium; actions that contribute to increased arterial pressure.¹²

The age of enrolled patients ranged from 14 to 80 years old. There was a progressive increase in the occurrence of hypertension, concentrating 70% of them aged between 40-69 as consistent with studies where the prevalence of hypertension is higher in patients older than 35.¹³ However, in women aged between 60-74 years old there has been a decline in the occurrence of this same disease. Probably, this fact is due to ovarian hormones, responsible for the lower pressure in women during perimenopause and the arrival of menopause, justifying the higher

prevalence among men from this age group, tending to approach women.¹⁴

The lowest prevalence of hypertension in males can address a sub identification of cases in men due to the fact that they seek less health services than women. Furthermore, women tend to reporting more than men health problems.¹⁵

It was found that smoking is the major risk factor associated with social habits; with 22% of the registered population are smokers. Cigarette smoking is associated with an acute increase in blood pressure and increased risk of cardiovascular disease.¹

The data showed that 56% do some physical activity regularly. However, it is necessary to assess the frequency and intensity of these activities recorded in HiperDia, since 49% of respondents reported hypertension in the study of inquiry, never having participated in walking groups conducted by units of their coverage area. Physical inactivity is a risk for chronic with higher disease prevalence in the general population factors as it rises to approximately 30% incidence of hypertension in relation to active individuals.¹

Regarding the classification of cardiovascular risk, 40% of the study population was not classified. Among patients with risk rating, 9% were at low risk, 32% medium risk, high risk also 32% and 27% very high risk. The stratification of cardiovascular risk is a significant clinical achievement, as both medically and economically, it helps rationalize preventive approach.¹⁶

There was also detected, even in exploratory phase of data that 33% of the hypertensive population had registered any of the following sequelae: 33% of coronary heart disease; 28% of renal disease; 21% of AMI; 14% of stroke; 4% of the diabetic foot and 1% amputation for diabetic foot, the coronary disease and kidney disease are the most frequent complications in this population.

In Brazil, cardiovascular diseases are the leading causes of death and loss of quality of life over time, representing over 30% of all deaths with defined causes. These diseases contribute to mortality of 16,6 million people, of which 7,2 million are due to ischemic heart disease. Already AMI is, in turn, responsible for 60.080 deaths, being considered the greatest single cause of death in the country. These data coincide with those found in developed countries. The prevalence of hypertension in patients with myocardial infarction, estimated by previous history of hypertension or high blood pressure by finding ciphers during hospitalization, is around 40% to 50% of patients.¹⁷

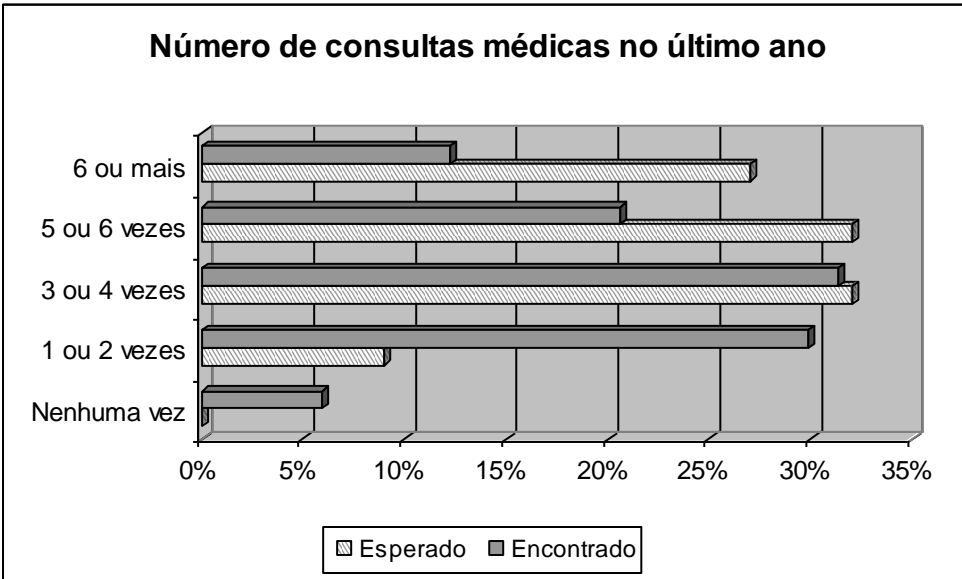
There is a close relationship between cerebrovascular disease (CVD) and hypertension, since the brain is often the cause of SAH and at the same time the main victim of this disease.¹⁸ The brain is, in general, the agency that earlier and more intensely suffers from hypertension; the longer exposure to hypertension, increased risk, and the higher rates of hypertension, also the higher the complications. Studies show that progressive risk by finding that hypertensives have a two-fold higher incidence of myocardial infarction and stroke, compared to normotensive individuals.¹⁹

Another important group is the sequel of the diabetic foot. Per year, 2% to 3% of people with diabetes can develop leg ulcers, and this percentage increases to 15% in the course of his entire life.²⁰ Overall, hospitalizations for diabetic foot are recurrent and its presence requires greater number of outpatient visits and home care. The percentage of diabetic foot was amputated 4% and 1% by diabetic foot. Emphasizes the importance of multidisciplinary teams are trained and perform the practice of foot examination of all diabetics, emphasizing the importance of regular inspection, hydration, proper nail cutting, use of appropriate footwear and proper use of medication.²¹

With respect to the study survey, 67% of the sample claimed to have spent more than 3 times in medical consultation in the past year;

and of this group, only 0.5% went to the doctor's appointment scheduled next. The waiting time on the day of examination was 15 to 30 minutes for 42% and 31 to 60 minutes to 31%. Now with regard to the duration of the medical consultation, 38% of patients take 6-10 minutes and 44% take 11-20 minutes. Authors, in a study of the doctor-patient relationship in the FHS, reported that the mean duration of the consultation is 9 minutes with a wide range of 2 to 24 minutes.²²

As provided in hypertension and diabetes Protocol in FHS of Alfenas,²³ it would be programmed care to patients stratified as low risk: at least one medical visit once a year, two nursing visits per year at a minimum, at least two meetings per patient each year. For patients classified as medium risk is scheduled the following service: 3 appointments per year, two nursing visits per year, and three meeting rooms for group activities per year. Patients classified as high and very high risk have an annual program of at least six doctors, three nursing visits, and two meetings per patient.¹ However, it was found that most of them consult with a physician or two times a year, not meeting the expected goal for attending scheduled in the protocol (Figure 1).



Source: the authors.
Figure 1. Medical consultations expected and found to hypertensive patients registered in Alfenas - MG.

In relation to home visits, 86% of patients surveyed from HiperDia did not receive doctor's visit; 87% received no visits in the last year of nursing; and 11% received visits from community health agent (CHA) just to collect signatures. The number provided by the scheduled attendance is 12 home visits by ACS,¹ ie, every month of the year, however, only 76% of respondents reported that

frequency in the last year, among others, 3% said they had not received the visit of the ACS in the last year, 1% claimed to have received one or two visits, 2% received 3-5 visits, 6% had 6-8 visits and 12% 9-11 visits per year. Regarding access to medication, 88% reported ease to purchase medications. This data is compared to the access parameters recommended by WHO,²⁴ which considers:

very low access: <50%; Low to medium access: 50% - 80%; medium to high access: 81% - 95%; very high access:> 95%, the results found in this study are classified as medium to high access.

Second Protocol to the municipal approach to hypertension and diabetes in FHS,²³ laboratory tests such as blood glucose, creatinine, potassium, serum cholesterol, triglycerides and routine urine should be performed once every two years by patients classified as low risk, and a annually by the holders of medium, high and very high risk. In the questionnaire is not used terms which designate protocol the exact tests, as these terms misunderstanding generated during pilot study. Therefore, it was decided in the final questionnaire, the use of terms popular domain, resulting in loss of specificity of information in favor of comprehensiveness and veracity.

Obtained the data that on average, over the past two years, 95% of the population underwent routine examinations, except the electrocardiogram (ECG), performed in 74%. Last year, 80% had blood glucose, 82% cholesterol, 76,6% urine, 52,2% and 78,5% ECG blood.

The laboratory tests mentioned seem to be easily accessible to the population. This fact is probably linked to their collection within the FHS unit that meets the carrier. However, the ECG, which should be one every three years for patients with low risk, and once a year for the medium, high and very high risk, was not offered for a good portion of the population that does not performs it frequently enough, or never realized (6%), perhaps caused by the unavailability of his achievement and difficulty interpreting the medical unit at the FHS (Table 1).

Table 1. Tests carried out with hypertensives registered in HiperDia of Alfenas - MG.

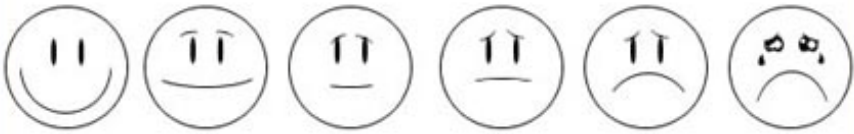
EXAM	WHEN			
	Never N (%)	Last year N (%)	2 years ago N (%)	Long time ago N (%)
Blood Glucose	3 (1%)	269 (80%)	53 (16%)	10 (3%)
Cholesterol	1 (0,3%)	275 (82%)	51 (15,4%)	8 (2,3%)
Blood	1 (0,3%)	262 (78,5%)	59 (18,2%)	11 (3%)
Urine	1 (0,3%)	256 (76,6%)	62 (18,5%)	15 (4,6%)
ECG	19 (6%)	175 (52,2%)	73 (21,8%)	67 (20%)

By taking into account the data on the risk classification of constant of HiperDia, which indicates 91% of patients classified as medium risk to very high, expected to conduct routine examinations last year, the index should have been 91%, This shows that on average 25% of hypertensive patients with significant cardiovascular risk, do not offer evidence of renal function and approximately 50% of them do not offer evidence of cardiac function with appropriate intervals.

The absence of information in 40% of a field of a SIS classifies it as precarious,

according to criterion used by Almeida et al.,²⁵ when the absence of information is equal to or greater than 30%. As well as a number of shares lower than expected health and lack of realization of the magnitude of protocol tests demonstrated above, show poor quality of care. Despite this, the user satisfaction with the system is large and very large, jointly reaching the level of 70,7% to 75,9% (Table 2).

Table 2. Average user satisfaction of the SUS registered in HiperDia of Alfenas - MG.

						
Competence of the Doctor	35,4%	38,4%	17,1%	7,9%	0,0%	1,2%
Confidence in the Doctor	33,5%	40,2%	16,5%	7,9%	0,7%	1,2%
Competence of other professionals	34,5%	38,1%	17,7%	8,5%	0,0%	1,2%
Respect from employees	32,6%	41,8%	15,5%	8,5%	0,4%	1,2%
Comfortable waiting rooms	34,1%	39,0%	16,5%	8,8%	0,4%	1,2%
Adequacy of bathrooms	33,2%	41,2%	14,5%	9,5%	0,4%	1,2%
Cleaning the unit	37,2%	37,2%	15,2%	7,9%	1,6%	0,9%
Service organization	38,4%	37,5%	14,0%	7,9%	1,3%	0,9%
Exams	31,5%	41,0%	16,8%	8,9%	0,6%	1,2%
Resolution of actions	31,7%	39,0%	15,5%	11,3%	1,3%	1,2%
Quality of services	39,3%	36,6%	13,4%	8,5%	1,3%	0,9%
Satisfaction with the FHS	39,6%	36,3%	14,0%	7,9%	1,3%	0,9%

To construct an indicator of the level of user satisfaction, four questions were asked related to professional competence; four related to the physical conditions of the unit and four related to quality of care (Table 2). It was observed that, in general, users are satisfied with the services provided. To encoding the faces used in the questionnaire with the values 10, 8, 6, 4, 2, yielded average and median of 8 points in almost all the items evaluated. The item with the worst evaluation refers to the solvability of the actions of the FHS and obtained average 7,7; the population considers the services provided as good quality. The abstention rate was 2% and only a user of the services evaluated all items with zero.

In another study by this same group,²⁶ when using the schooling parameter, it is found that the average score on the quality of access to health services among illiterate women compared the average score given by women with four years or over study, was significantly greater than the first. Ie, the social indicator "schooling" the lower the higher the satisfaction with the health services provided. When it took into account research that other social indicators, such as average family monthly income or health system used (or dependent users of Supplemental Health Care System SUS - SSAM), for example, the upper layers better assessed the quality of services that were provided to him than the working classes. The above research was on access to health services in regional health Alfenas, which covers 26 municipalities, with a population of 48,000 inhabitants. In all, 2.500 questionnaires were applied in household sample.

With this in mind, one can see that research on the satisfaction of users of health services, doesn't always reflect quality, from a

technical point of view, and is influenced by the level of education of users who try to make it more critical of the higher your level of education.

Another important aspect to be discussed is that SAH, as a systemic disease with high prevalence, especially in the elderly, sufferers should possess greater assistance regarding assistance by the multidisciplinary team of specialist appointments and scheduling, which is one the goals of the Plan of Reorganization. However, the proportion of patients evaluated by experts was relatively low even with the performance of the Support Center for Family Health (NASF). The proportion of patients evaluated by a speech therapist was 3% of the interviewed patients; by psychologist, 4%; by physiotherapist, 13%; nutritionist, 19%; by dentists, 23%; and by ophthalmologists 28%.

With respect to psychological, physical therapy and nutritional care it cannot infer anything that is not made one pressing need in the management of hypertensive patients, however, ophthalmic and dental evaluation are mandatory.

One study showed that lack of control of hypertension is a predisposing factor for the development of retinopathy Hypertensive factor, since 23% of hypertensive patients had signs of hypertensive retinopathy, while only 2,64% of normotensive and 9,37% of suspected SAH presented the pathology.²⁷

Pharmacological treatment of hypertension may, in some cases, causing side effects in the oral environment such as dry mouth, altered taste and stomatitis.²⁸ Moreover, diverse therapy used in the treatment of this disease can interfere directly or indirectly in dental procedures, due to interactions drug, to induce postural hypotension and changes in mood. Another key point of dental care is the creation of programs aimed at raising

awareness of the need for care to oral health. Many respondents, particularly the elderly, have reported almost all teeth extracted, this being the justification used for not consulting with the dentist. However, 100% of the units and the Family Health Alfenas rely on the presence of the oral health team, including the dentist.

There is also a significant association between hypertension and hearing loss, and hearing loss in the population suggests that SAH is an accelerating factor in the degeneration of hearing due to aging. This is due to the need of the cells depend on an adequate supply of oxygen and nutrients, now this supply depends on the functional and structural integrity of the heart and blood vessels. Consequently, the hypertension can cause bleeding in the inner ear, can lead to sudden or progressive hearing loss and also the increase in blood viscosity, causing a decrease in capillary blood flow decreases oxygen transport causing tissue hypoxia.²⁹

It was also observed that among patients evaluated by a speech therapist, 80% are 60 or over, which represents 4.5% of the total population in this age group and therefore should only ever be undergoing speech therapy routine evaluation by likelihood of developing presbycusis. Authors reported that the hearing loss or presbycusis in elderly with an incidence of 5 to 20% in persons at least of 60 and about 60% in people over 60 years old. Hypertension, in turn, increases the risk for this disease.³⁰

In accordance with the Brazilian Society of Cardiology,²⁰ SAH to be multifactorial and involves asymptomatic and guidelines focused on multiple goals, there is need for the formation of a multidisciplinary team for its assistance. However, the same consensus does not mention the need for this team audiologist. Now this professional Under Article 442 is empowered to participate in diagnostic teams, performing evaluation of oral and written communication, speech and hearing and speech therapy to work on issues related to other sciences. So as hypertension is a risk factor for hearing loss, and the appearance of such loss must be ascertained in this population, the professional audiologist, as responsible for hearing assessment should be included effectively in the multidisciplinary team involved in hypertension.

CONCLUSION

The realization of this study in a primary care setting enabled to meet the profile of a group of hypertensive patients accompanied by HiperDia of a midsize town in the interior

of Minas Gerais. The recorded data demonstrate the need for investments in medical consultations and by professional experts, as well as greater realization of ECG and protocol standards.

The collected data also reveal that there is a need to organize a service with an emphasis on self-protection and self-perception of these patients, emphasizing the importance of behavioral change. The education of patients with SAH is the simplest way to achieving these goals. In addition to a greater involvement of professionals who participate in service programs, maintaining a bond approach, communication and vision patients as unique. For this, you need to be aware, individual and family so that such changes occur and, indeed, for linking knowledge that can improve the quality of life.

There is the need that the organs responsible for information systems and computerization in Brazil to implement and innovate with new programs to the characteristics of HiperDia, and provide specific training for professionals directly involved in the registration and monitoring of hypertension and diabetes, also offering continuing education for those responsible for feedback systems for further research are drawn from their data.

FINANCING

Study carried out with the support of Research Foundation of the State of Minas Gerais, Institutional Program of Scientific Initiation Scholarships, 2009-2010. Alfenas (MG), Brazil.

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Submission: 22/07/2013

Accepted: 16/09/2014

Published: 01/04/2015

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