



RESEARCH

HYPERTENSIVE PATIENTS WITH COMPLICATIONS REGISTERED AT HIPERDIA IN FORTALEZA, CEARA: IMPLICATIONS FOR NURSING CARE

HIPERTENSOS COM COMPLICAÇÕES CADASTRADOS NO HIPERDIA DE FORTALEZA, CEARÁ: IMPLICAÇÕES PARA A ASSISTÊNCIA DE ENFERMAGEM

PACIENTES HIPERTENSOS CON COMPLICACIONES REGISTRADOS EN HIPERDIA, EN FORTALEZA, CEARÁ: IMPLICACIONES PARA LA ATENCIÓN DE ENFERMERÍA

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ABSTRACT

Objective: To describe the sociodemographic and clinical characteristics of hypertensive complications associated with HIPERDIA registered in Fortaleza-Ceará, glimpsing possibilities of nursing care. **Method:** Cross-sectional quantitative runs from November 2008 to November 2010, with 187 people with hypertension and associated complications HIPERDIA registered in the municipality. The data were analyzed by software Predictive Analytics Software for Windows version 17.0. **Results:** In the results, 61% of women, elderly (66.3%), nonwhite (62.6%), low educational level (59.9%). Regarding clinical characteristics 47.6% and 71.6% had diastolic and systolic changed; 35.3% overweight, 38% stroke, 19.8% AML. **Conclusion:** Nurses should take ownership of this data source and assume his role as one of the professionals responsible for monitoring individual and group those users seeking a closer relationship of care with a view to minimize the complications of hypertension. **Descriptors:** Hypertension, Complications, Nursing.

RESUMO

Objetivo: Descrever as características sociodemográficas e clínicas dos hipertensos com complicações associadas cadastrados no HIPERDIA de Fortaleza-Ceará, vislumbrando possibilidades de cuidados de enfermagem. **Método:** Estudo transversal quantitativo de novembro de 2008 a novembro de 2010, com 187 pessoas com HAS e complicações associadas cadastradas no HIPERDIA do município. Os dados foram analisados pelo software Predictive Analytics Software for Windows versão 17.0. **Resultados:** Nos resultados, 61% de mulheres, idosas (66,3%), não brancas (62,6%), com baixo nível escolar (59,9%). Em relação às características clínicas 47,6% e 71,6% tinham pressão diastólica e sistólica alteradas; 35,3% sobrepeso; 38% AVC; 19,8% IAM. **Conclusão:** O enfermeiro deve se apropriar dessa fonte de dados e assumir seu papel como um dos profissionais responsáveis pelo acompanhamento individual e coletivo desses usuários, buscando o estreitamento da relação de cuidado com vistas à minimizar as complicações da hipertensão arterial. **Descritores:** Hipertensão, Complicações, Cuidados de enfermagem.

RESUMEN

Objetivo: Describir las características sociodemográficas y clínicas de las complicaciones hipertensivas asociadas con HIPERDIA registrado en Fortaleza-Ceará, vislumbrando las posibilidades de atención de enfermería. **Método:** Estudio transversal cuantitativo de noviembre 2008 a noviembre de 2010, con 187 personas con hipertensión y las complicaciones asociadas HIPERDIA empadronados en el municipio. Los datos fueron analizados mediante el software Predictive Analytics Software para Windows versión 17.0. **Resultados:** En los resultados, el 61% de las mujeres, los ancianos (66,3%), no blancos (62,6%), el bajo nivel educativo (59,9%). En cuanto a las características clínicas 47,6% y 71,6% tenían diastólica y sistólica cambiado; 35,3% trazo sobrepeso, el 38%, el 19,8% del AML. **Conclusión:** Las enfermeras deben tomar posesión de esta fuente de datos y asumir su papel como uno de los profesionales encargados del control individual y de grupo a aquellos usuarios que buscan una relación más estrecha de la atención con el fin de minimizar las complicaciones de la hipertensión. **Descritores:** Hipertensión, Complicaciones, Enfermería.

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INTRODUCTION

High blood pressure (HBP) is a serious public health problem because of its high prevalence in the world population and high mortality rates. It is a risk factor for cardiovascular disease, along with diabetes mellitus, smoking and dyslipidemia. Also, is primarily responsible for the high prevalence of cerebrovascular accidents (CVA) is associated with 40% of cases and 25% of cases of ischemic heart disease, the two leading causes of death in the isolated country.^{1,2}

This scenario tends to accentuate with current demographic changes that happen in the world, coupled with increasingly intense spread of Western lifestyle, especially for an unhealthy diet and decreased physical activity.³

In this context, discusses the onus is generated by this chronic disease on the lives of affected subjects. The presence of this disease generates transformations in people's lives, including those related to self, justified by the possibility of aggravation in the long run, causing changes that require effort to accept and adapt to the new condition.⁴

Therefore, this condition requires establishment of a pharmacological and non-pharmacological treatment throughout his life, in order to obtain not only the control of hypertension, but also reduce cardiovascular morbidity and mortality and to improve quality of life.^{5,6} Therefore, the attention to people with hypertension is aligned to strategies that aim to mobilize the meaning assigned to risky behavior, as well as the accession process to the proposed treatment, with their own needs, possibilities and expectations as reference.⁷

In this sense, the prevention and treatment of hypertension involve guidelines for introducing new lifestyle. A professional involved with this theme is the nurse who develops his actions by

nursing consultation (EC) or in groups of health education. The relationship between the subjects strongly influences the continuity of care and is associated with greater adherence through a systematic approach, culminating in the prevention and / or control of blood pressure (BP).⁸

For nurses, the knowledge of their clientele carrier HAS enable the design of safe actions for the care and treatment adherence. Based on the foregoing, the study developed aimed to describe the sociodemographic and clinical characteristics of hypertensive complications associated with HIPERDIA registered at Fortaleza - Ceará, glimpsing possibilities of nursing care.

METHODOLOGY

It is cross-sectional, descriptive, quantitative, which integrates design umbrella Analysis of adherence to treatment of people with hypertension and associated complications, in Fortaleza, Ceará, funded by the National Council of Technological and Scientific Development (CNPq) and runs from November 2008 to November 2010.

The universe of the study corresponded to 14,200 registers users in HIPERDIA all Family Health Centers (CSF) from Fortaleza, whose information was tabulated in database software for Windows Predictive Analytics Software (PASW) version 17.0. Of this total, 1315 were tokens of complications associated with hypertension and were distributed in 71 of the 92 municipal CSF. Through formula for calculating finite sample population, there was obtained a sample equivalent to 415 people registered.

For the selection of the CSF that composed the study, the 75th percentile was traced, leaving 23 centers, located throughout the extension of the municipal territory and covering the six Regional Executive Secretariats. A sample of

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hypertensive patients with associated complications was drawn by random number table. With the collaboration of local health staff and community health workers were identified in the community, people raffled.

After identification, they organized workshops for sensitizing users to participate in the study. Almost all users invited did not attend the workshops, and only about 5.0% of them (20 people). Those users who did not attend the workshops and received home visits could also be included in the study. It is noteworthy that 118 people were excluded for the reasons described below: areas discovered by family health teams (37), addresses entered into the database were not found (81). With home visits and conducting workshops, other 110 users were excluded from the study, as reported not owning / ignore the complications listed in the register or any other complication associated with SH (56), worked all day and could not attend the interview (20), were unable to answer the questions due to dysarthria / mental disorder (10) were the death or after enrollment (24). Thus, in the end, 187 people with hypertension and associated complications registered in the county were located HIPERDIA, met the inclusion criteria of the study and agreed to participate.

Data were collected from June to September 2010, upon request of the users' consent to participate by signing an informed consent. The data collection instrument contained the following variables: sociodemographic (age, race, education and marital status), behavioral (sedentary, overweight / obesity and smoking), associated complications (left ventricular hypertrophy - LVH, heart failure - heart failure, acute myocardial infarction - MI, coronary artery disease - CAD, kidney disease and stroke).

We performed a descriptive analysis of absolute and relative frequencies concerning

sociodemographic, behavioral and associated complications. The study was approved by the Ethics in Research UECE with No. 08622921-4/2009 opinion. Ethical principles were followed in all phases of the study, in line with what advocates Resolution No. 196/96.

RESULTS AND DISCUSSION

The analysis of the demographic data of the 187 registered users who participated in the study showed that most were female (61.0%) of the corresponding age group for the elderly (66.3%), with non-white skin color (62.6%), with low education levels (one to eight years) (59.9%) and lived with a partner (60.9%), as shown in Table 1.

Table 1. Sociodemographic characteristics of users with hypertension and associated complications, registered in HIPERDIA (n = 187). Fortaleza, 2010.

| Variables | F | % |
|---------------------------------|-----|------|
| Gender | | |
| Male | 73 | 39,0 |
| Female | 114 | 61,0 |
| Age group | | |
| < 60 years old | 62 | 33,2 |
| ≥ 60 | 124 | 66,3 |
| Not filled | 1 | 0,5 |
| Race/skin color | | |
| White | 68 | 36,4 |
| Non white | 117 | 62,6 |
| Not filled | 2 | 1,1 |
| Schooling | | |
| Cannot read/write | 36 | 19,3 |
| Up to 8 years of study | 112 | 59,9 |
| > 8 years of study | 35 | 18,7 |
| Not filled | 4 | 2,1 |
| Marital/family situation | | |
| Single/divorced/widowed | 73 | 39,1 |
| Married/consensual union | 114 | 60,9 |

Regarding the clinical characteristics of the users, it was possible to observe in Table 2 that, in relation to systolic blood pressure, the higher frequency was observed among patients with stage 1 hypertension (33.2%). Systolic pressure classified as normal was present in 16.6% of respondents. With regard to blood pressure,

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diastolic BP (DBP), 38.5% of users showed pressure cipher classified as normal while only 16.6% had systolic BP (SBP) normal. As for waist circumference (WC), we found that in males the most frequently corresponded with CA Normal users (19.3%), while nearly half of women (46.0%) had AC equal to or greater than 88 cm. The assessment of body mass index (BMI) indicated that 35.3% of users were overweight.

Table 2. Clinical characteristics of users with hypertension and associated complications, registered in HIPERDIA (n = 187). Fortaleza, 2010.

| Variables | F | % |
|---|----|------|
| Systolic blood pressure * | | |
| Great (< 120 mmHg) | 22 | 11,8 |
| Normal (< 130 mmHg) | 31 | 16,6 |
| Borderline (130-139 mmHg) | 38 | 20,3 |
| Stage 1 hypertension (140-159 mmHg) | 62 | 33,2 |
| Stage 2 hypertension (160-179 mmHg) | 16 | 8,6 |
| Stage 3 hypertension (≥ 180 mmHg) | 16 | 8,6 |
| Not filled | 2 | 1,1 |
| Diastolic blood pressure * | | |
| Great (< 80 mmHg) | 26 | 13,9 |
| Normal (< 85 mmHg) | 72 | 38,5 |
| Borderline (85-89 mmHg) | 7 | 3,7 |
| Stage 1 hypertension (90-99 mmHg) | 45 | 24,1 |
| Stage 2 (100-109 mmHg) | 22 | 11,8 |
| Stage 3 hypertension (≥ 110 mmHg) | 13 | 7,0 |
| Not filled | 2 | 1,1 |
| Abdominal circumference | | |
| Male | | |
| < 102 cm | 36 | 19,3 |
| ≥ 102 cm | 34 | 18,2 |
| Female | | |
| < 88 cm | 26 | 13,9 |
| ≥ 88 cm | 86 | 46,0 |
| Not filled | 5 | 2,7 |
| Body mass index | | |
| Normal (< 25 kg/m ²) | 51 | 27,3 |
| Overweight (25 30-kg/m ²) | 66 | 35,3 |
| Obesity (≥ 30 kg/m ²) | 46 | 24,6 |
| Not filled | 24 | 12,8 |

*Classification according to the VI Brazilian Guidelines about Hypertension (2010)

Concerning the complications associated with hypertension, the most frequent users was that the stroke (38.0%), followed by AMI (19.8%) and IC (9.6%). Other complications were reported by 19.8% of users.

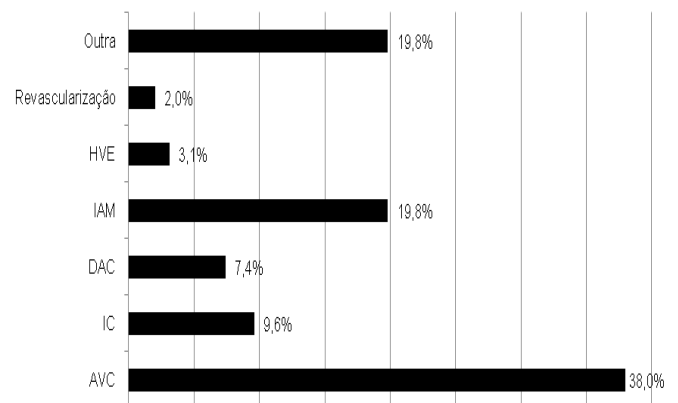


Figure 1. Complications associated with hypertension reported by users interviewed (n = 187). Fortaleza, CE, 2010.

The higher frequency relative to female users was observed in other studies.⁹⁻¹³ This fact can be explained by the higher number of women enrolled in HIPERDIA certainly due to the greater women seek medical attention, especially because they usually have a higher perception of the disease and are more likely to self-care, increasing the likelihood of having hypertension diagnosed.¹⁴ However, the VI Brazilian Guidelines on Hypertension show the equivalence of global prevalence of hypertension among men and women, being higher in men up to 50 years, reversing from the fifth decade.¹

From the perspective of gender, nurses can use the potential demand for health services by women, using it as a mobilizing the male category for the care of SAH, sensitizing their peers for continuity of care.

Regarding the predominant age group corresponding to the elderly, shows confirmation that SAH is a disease that most commonly affects people aged 60 or more. The relationship between age and BP is direct and linear, with the prevalence of hypertension than 60.0% over 65 years.¹ In this matter, the professional must be aware of the continuity of care of the elderly, noting which supports care used by viewing the family as the focus of discussions and mobilization for the care of these individuals. The participation

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of family and other social systems (religious group, working) in treatment adherence is paramount.¹⁵

When viewing the family as the focus of nursing care is essential to establish this partnership with the healthcare team so that together form a unit of health care and that by taking part in actions with the possibility of transformation, family nursing can help to detect problems and needs, discuss the diagnosis, participate in determining the goals and collaborate on the planning application and evaluation.¹⁶

Thus, treatment of chronic disease should be a collaborative process between the patient, family, nurses and other health professionals. The collaboration is not limited to hospital settings it is important in all environments and throughout the illness trajectory.¹⁷ Skip to understand the care to hypertensive patients in a systemic context of relationships, is to glimpse the process of reciprocity and thus bilateral or dialogical care.⁸

As for the emphasis on non-white race, corroborates a study in Salvador-BA with 1,439 adults of which 74.3% were black or mixed race. The prevalence of hypertension in these individuals was 66.4%.¹⁸ It has been found that some ethnic groups are more exposed to complications of hypertension than others, for reasons not fully understood.¹⁹

Regarding the prevalence of low educational level, rescues that this is one of the determinants of adherence, given the low education could hinder the assimilation of guidelines dispensed by health professionals for people with hypertension, necessary to maintain or improve their welfare.²⁰

In this sense, the guidance to the patient and family is one of the most significant aspects of nursing care and can make a difference in the

ability of patients and their families to adapt to chronic health conditions. Educated and well-informed people in general are more concerned with their health and do what is necessary to keep it.¹⁷

Thus, the health education sessions developed by the nurse should possess educational methodologies that enable better understanding of such subjects as the use of recreational resources, cultural and group formation.

The process of care facing people with hypertension, especially with regard to the educational process, carries great burden with regard to communication in nurse-patient binomial, one of the crucial points for greater adherence to treatment of hypertension. Communication with all its nuances allows a dialectical exchange of knowledge, which denotes commands that when understood and mutually constructed by the transceiver allows a bilateral exchange ratio, indispensable for the building of a therapeutic plan.²¹

With a practical approach to therapeutic communication, nurses can use it in queries to couples in order to enhance the therapeutic relationship between the user and the professional, caring and bonding between the couple. The onset of a chronic disease requires significant decisions for changes in lifestyle, which should occur in concert with her partner and family.

Thus, marital status submitted by users of this study showed that most lived with a partner, an important factor for adherence to antihypertensive treatment, as the spouse, in previous research, was the person most mentioned as supportive to the treatment.²²

Having a spouse is often an indication of high level of social support available because caregivers often spouses living with the individual

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and provide commitment and closeness. Additionally, the spouse is usually the main support system of the person and although it is not known exactly what type of support provided (emotional, instrumental or functional), the companion plays crucial role in adherence to treatment, helping to reduce the risk hospitalization and mortality.²³

Concerning the value of the PA, it was observed that a significant percentage of people with hypertension and associated complications were with SBP and DBP changed. These data are quite relevant, since it is people monitoring of CSF in Fortaleza and they already have associated complications, which worries even more. It is known that the higher the value of BP, the greater the chance of onset of MI, heart failure, stroke and kidney disease.²⁴⁻²⁶

This result can be problematical to change our therapeutic scheme and thus, the nurse can trigger a multidisciplinary network for the design of a new approach that reduces these blood pressure levels.

With respect to BMI, classification, according to the World Health Organization (WHO) showed that most users were overweight / obese. With respect to AC, it is known that, according to National Cholesterol Education Program's Adult Treatment Panel III (NCEP-ATP), measuring the AC greater than 102 cm in men and greater than 88 cm in women corresponds to an increased risk of affection by cardiovascular diseases (CVD)²⁷. This study showed that women had higher frequency values above the recommended parameter CA. Therefore, the trader may think the search for devices in the community who work with physical activity and / or dietary guidelines. The formation of community groups to develop regular physical activity can be a focus of nursing care within primary care.

The VI Brazilian Guidelines on Hypertension, identified overweight as a risk factor for hypertension and both AC and BMI were strongly associated with the occurrence of hypertension, BMI being more influential in males.¹ It is recommended to maintain the ideal weight with a BMI less than 25 kg/m², increased physical activity and reduced calorie diet. Excess weight associated with fat accumulation in the mesenteric region, called central-type obesity, visceral or androgen is associated with increased risk of atherosclerotic disease²⁸⁻²⁹.

Regarding complications, there was a high frequency of cases of stroke among hypertensive evaluated. Stroke is a neurological syndrome common in adults and is a major cause of morbidity and mortality worldwide³⁰. This high frequency reveals a serious public health problem, because in Brazil, data from the National Health System (SUS) show that stroke (ischemic and hemorrhagic) represent a major cause of death with about 90 000 cases / year. Besides the high mortality, stroke is the leading cause of disability in adults, generating high costs to SUS.³¹

These issues demand the nurse inserted in CSF tracking these people through home visits, observing the demands of care they need, which will depend on the degree of disability acquired after stroke. These visits are important mapping and stratification of these subjects regarding the nutritional demands, hygiene, ambulation, communication, commitment and social support dermatological already involved in that care.

It is worth mentioning the use of community mapping methodologies which support nursing care. The choice of instruments like genogramming enables visualizing each family in its complexity and dynamism. In a study conducted mapping of families with patients with hypertension and diabetes through these instruments, the nuclear family observed the

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presence of comorbidities such as heart disease, stroke, AMI, among others.³²

adherence, this fundamental question in minimizing cardiovascular events.³

It is estimated that about 18 million people have a stroke in 2015 and approximately one third of these cases result in death. The analyzes indicate that, in the next decade, due to the progressive aging of the population and not the control of risk factors, mortality from stroke will increase 20.0% in developing countries and 10.0% in developed countries.³³

CONCLUSION

The analysis of the sociodemographic characteristics of hypertensive patients with associated complications, registered in HIPERDIA of Fortaleza, has shown that these are predominantly elderly women, non-white, low level of education, married or living with a partner in a consensual union.

As for AMI appeared to 19.8% with CAD and 7.4%, for a total of 27.2% involvement of the coronary arteries, which agrees with the literature that shows that hypertension is present in 30% of deaths from CHD. The follow-up care to those individuals who have been affected by this condition is essential because hypertension plays an important role in disease progression in the subject after AMI, contributing to ventricular remodeling, heart failure and acceleration of atherosclerosis, and its strict control, thus the target of interest.³⁴

In general computation, registered users, had hypertension with blood pressure changes, abdominal circumference above the range considered adequate and overweight. Regarding the complications associated with hypertension, the most frequent were stroke, AMI and HF.

It was found that the HIPERDIA is a valuable tool to track users with SAH, being an important source to support nursing care in developing treatment plans that seek to minimize and reduce the complications resulting from not controlling blood pressure.

Based on the foregoing and considering that the nurse inserted in the CSF may prescribe medicines in the programs of the Ministry of Health, know about the pharmacology must permeate nursing actions aimed at prescribing and transcription of medicines in order to more accurately on the appropriateness therapy, always seeking multidisciplinary partnerships for the establishment of a safe treatment. One should also pay attention to aspects of nonpharmacological treatment, since these also interfere with BP control.

The nurse must take ownership of that data source and assume his role as one of the professionals responsible for monitoring these individual and collective users with hypertension and should make use of a greater number of educational strategies aimed at increasing knowledge of individuals affected with morbidity, and promote self-care and greater adherence to treatment.

Thus, it shows the narrowing of the basic relationship of care between health professionals and the user HAS to minimize the complications and costs to the NHS and hypertensive provide a better quality of life. One should act, permanently, with actions aimed at acquiring knowledge that guarantees users a good treatment

In caring for these people, the nurse can use strategies such as the mobilization of the male category through sensitization of female users, since these are the most people registered. Considering the age and level of education of users, health education strategies, such as individual counseling or group proves essential for treatment compliance and therefore control the impact of complication associated with SH already acquired and prevention involvement by other (s).

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These strategies should include the family, because it is device direct support to people with chronic disease, due to the familiarity of everyday life and to share the difficulties of living with a disease.

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