

# Profile of Hypertensive Patients Registered in a Basic Health Unit

ORIGINAL

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## Abstract

**Objective:** To identify the socio-demographic profile of hypertensive patients registered in HIPERDIA in a Basic Health Unit in the city of Parnamirim-RN and to analyze their perception about this system.

**Methods:** This is a cross-sectional, descriptive study with a quantitative approach, applying a questionnaire with objective questions to 100 volunteer patients who fit the established inclusion criteria. Data were collected in February and March 2016.

**Results:** It was found a predominance of women, aged 40 to 49 years old, white and black, with incomplete high school, living with a partner and children. Most individuals reported excellent access to diagnosis of the disease, good understanding of the Hypertension and adherence to treatment. They considered the delivery of drugs by UBS as well as nursing care received as good. They reported rarely participating in health education activities and realized a great change in the quality of life with the completion of treatment.

**Conclusions:** It is concluded that the HIPERDIA need some improvements by both managers as by health professionals so that it could better assist the demands of patients.

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## Keywords

HIPERDIA; Patients; Treatment; Nursing; Hypertensive.

## Introduction

In the last century, Brazil has undergone several changes in work, leisure, food, housing, education, sanitation and health. As a result, the Brazilian life expectancy in the early twentieth century averaged 33 years old, going to 75.2 years old in 2014 [1]. Thus, an epidemiological transition marks the control of infectious and parasitic diseases by the chronic non-transmitted diseases related to a poor diet, sedentary lifestyle and increased population aging, for example, the Systemic Arterial Hypertension (SAH).

According to the VI Brazilian Hypertension Guidelines [2], HAS is a multifactor clinical condition characterized by high and sustained levels of blood pressure (BP). It is frequently associated with functional and/or structural changes in target organs (heart, brain, kidneys and blood vessels) and metabolic disorders, increasing the risk of fatal and nonfatal cardiovascular events. It is considered one of the major modifiable risk factors and a major public health problem.

In this context, there are several risk factors for HAS such as age, gender, ethnicity, obesity, salt intake, use of drugs like alcohol, sedentary lifestyle, smoking, socioeconomic factors and genetic factors [3].

In Brazil, cardiovascular diseases (CVD) have been the main cause of death. Information gathered in DATASUS [4] show that there were 333,295 deaths in 2012 from circulatory diseases. They are responsible for the high number of hospitalizations, causing high costs of treatment and control. For example in 2014, there were 1,123,142 hospitalizations for CVD recorded in the Unified Health System (SUS), generating a cost of R\$ 2,597,551,431.88.

In this sense, treating the complications of hypertension is important. Thus the resulting disabilities do not undermine the activities of daily life of people affected by this disease. It is worth noting that many of patients concurrently have other comorbidities, such as Diabetes Mellitus (DM), dyslipidemia, renal failure [5].

Thus, the Ministry of Health developed the Care Reorganization Plan for Arterial Hypertension and Diabetes mellitus (PRAHADM) in 2001 for the prevention, identification, and monitoring of cases of hypertension and DM in the basic health units of SUS. It is done through a computerized record system provided by DATASUS, called Registration System and Monitoring of Hypertensive and/or Diabetics - HIPERDIA, integrated into the National Health Card (CNS).

The HIPERDIA is an information system for health aiming to identify, register and link patients with SAH and DM municipalities by the primary care teams, conducting primary prevention actions (reduction and control of risk factors), health education, generating information for the acquisition, distribution and dispensing of medicines to patients registered and providing subsidies to workers and health managers. It also allows the planning of health care to registered and monitors diseases in the population [6].

Thus, it is understood that the identification of early cases of HAS results in the establishment of a connection between the patient and UBS where he is treated. In this way, the success of the hypertension treatment will include health professionals from systematic actions where the patient has access to services as needed.

In this context, the following questions emerged: Do the Basic Health Units (UBS) in the city of Parnamirim-RN know the profile of hypertensive patients registered in HIPERDIA? What is the perception that these patients have about this system?

To answer the questions, this work aims to analyze the perception of hypertensive patients about HIPERDIA program at a UBS in the city of Parnamirim-RN and carry out the survey of registered hypertensive patients in HIPERDIA identifying their profile.

Thus, there were few scientific publications noted to identify the profile of the registered hypertensive patients in HIPERDIA and evaluation of their perception of this system in the mentioned city, reinforcing the development of this study to add information to

managers and health professionals from the municipality UBS, to improve the HIPERDIA according to the needs of registered patients.

## Method

This is a descriptive study with a quantitative approach, performed in a Basic Health Unit (UBS) in the city of Parnamirim-RN, with 2,399 families assisted.

Thus, the following criteria were used in the sample selection: patient physically and emotionally fit to answer questions in the questionnaire, confirmed the medical diagnosis of systemic arterial hypertension (HAS) and registered in HIPERDIA program.

The study population was 700 patients registered in HIPERDIA program. However, it opted for a convenience sample applied to the inclusion criteria, totaling 100 interviewed patients. Thus, in the convenience sample the researcher selects the elements that have access, assuming that they can represent a universe [7].

This study was approved by the Ethics Committee in Research of the Potiguar University, CAAE N° 49799815.7.0000.5296 by the provisions of Resolution N° 466/2012 of the National Health Council and the rules governing research involving human beings.

The research started from the authorization of the director and the professionals responsible for the unit. Each participant had a prior explanation of the research and its purpose, ensuring their anonymity. Upon their acceptance to participate in the survey, they were asked to sign the Informed Consent Term.

Data collection was conducted in February and March 2016 in the time of HIPERDIA meetings at the UBS. A structured questionnaire with objective questions to the risk factors involving the genesis of hypertension was used to collect the data. The questionnaire was divided into two phases: the first phase with questions to identify the socio-demo-

graphic profile and the second phase with specific questions about the topic.

The last phase was to organize the findings into a database through Microsoft Excel 2010 software building graphs, charts, and tables. Descriptive statistics were used for data analysis.

## Results

Regarding the socio-demographic aspects, 57% of the total sample was female, and 43% was male. The prevalent age group was 40 to 49 years old (26%), followed by 60-69 years old (21%) and 50-59 years old (20%). Regarding skin color, 34% were white, 34% were black, and 32% were mixed race. All these data are presented in **Table 1** below:

**Table 1.** Socio-demographic aspects of hypertensive patients registered in HIPERDIA. Natal, RN, 2016.

Variables	N	%
Gender		
Female	57	57
Male	43	43
Age		
20 to 29 years old	05	05
30 to 39 years old	18	18
40 to 49 years old	26	26
50 to 59 years old	20	20
60 to 69 years old	21	21
≥ 70 years old	10	10
Skin color		
White	34	34
Black	34	34
Brown	32	32
Education		
Illiterate	15	15
Incomplete Elementary School	21	21
Complete Elementary School	18	18
Incomplete High School	22	22
Complete High School	24	24

Variables	N	%
Family Situation		
With a partner, without children	20	20
With a partner, with children	34	34
With a partner, children, and other family members	28	28
With family members, without a partner	14	14
Associated comorbidities		
AMI	07	07
CVA	03	03
Kidney Disease	01	01
DM	33	33
Diabetic foot	07	07
Amputation	03	03
None	48	48
Past-Present-Future Activities	66.47	68.75
Social Participation	64.26	62.50
Death and Dyeing	70.05	81.25

On the perceptions of patients, there were 46% of UBS patients with the access to diagnosis considered as good, 38% of respondents claim to have a good understanding of the disease. In the adherence to treatment, 37% of patients reported having a regular adherence. Regarding the access to medicines in the health service, 46% of patients rated it as good.

The care provided by nursing professionals was considered excellent by 35% of respondents, but 42% said rarely participating in the activities of the unit, but 95% reported an improvement in the quality of life of the proposed treatment as shown in **Table 2**.

## Discussion

The difference between men and women in research supports the VI Brazilian Hypertension Guidelines [2], pointing to the prevalence of male gender with hypertension in studies conducted in 35 countries. However, the results of other studies on the profile

**Table 2.** Perception of hypertensive patients registered in HIPERDIA. Natal, RN, 2016.

Variables	N	%
Access to diagnosis of the disease		
Excellent	26	26
Good	46	46
Regular	22	22
Bad	06	06
Understanding the disease		
Excellent	20	20
Good	38	38
Regular	28	28
Bad	14	14
Adherence to treatment		
Excellent	18	18
Good	32	32
Regular	37	37
Bad	12	12
Terrible	01	01
Delivery of medicine by the UBS		
Excellent	11	11
Good	46	46
Regular	29	29
Bad	12	12
Terrible	02	02
Assessment of the nursing care received		
Excellent	35	35
Good	44	44
Regular	20	20
Bad	01	01
Participation in activities on health education		
Frequently	20	20
Sometimes	42	42
Not participating	38	38
Quality of life when performing the treatment		
Excellent	52	52
Good	43	43
Regular	05	05

of registered patients in HIPERDIA confirmed the female superiority associated with increased number of women diagnosed to a better understanding of the disease, self-care and the search for health services than men [8].

Regarding the age, data from this study show that the highest incidence of the population was found between 40 and 59 years old on average, according to the study related to CVA [9], also observing a higher prevalence of the disease in this age group. This fact possibly shows the reflection of the bad lifestyle habits of today's society, leading to precocity of the first episode of CVA [10].

The VI Brazilian Hypertension Guidelines [2] mention that HAS is twice as common in non-white individuals. Brazilian studies with the simultaneous approach of gender and color showed a predominance of black women with an excess of HAS with up to 130% compared to the white women [11].

There was little variation in the level of education provided, more patients with completed high school (24%), incomplete High school (22%), incomplete elementary school (21%) and complete elementary school (18%) and a considered high proportion of illiterates (15%).

Chronic patients as are the case of hypertensive patients need to maintain a high level of care to drugs and dietary restrictions. There is the fact that the low level of education may hinder the learning process in the disease control. Adherence to treatment tends to be lower in individuals with low education, increasing the responsibility of the ESF in developing educational activities, with emphasis on disease control and health promotion [12].

As for the family situation, there are several tools to help better understand the family context according to Dias [13]. One of the best-known tools is the genogram, the illustration of the family structure with information about its members as gender, age, parentage, diseases, risk factors, employment status and death, plus the representation of the relationships between these members, such as conflicts and

alliances. For better understanding, at least three generations are important to be illustrated.

The World Health Organization states that the marital status of individuals influences in family dynamics and self-care. Alves and Calixto [14] reported that the family plays a fundamental role in the patient's treatment process, because when the family shows concern with the right treatment and the patient's health, they are more committed and involved with their health.

Of the total respondents, 48% of patients reported no having comorbidities associated and, 33% who have some comorbidity suffer from diabetes mellitus. According to Schmidt [15], DM and hypertension were the first cause of mortality and hospitalizations in the Unified Health System (SUS) and represented more than half of the primary diagnosis in people with chronic renal failure undergoing dialysis. In addition to the combination of the two chronic diseases to increased risk of renal and cardiovascular disease are directly related [16].

Access to diagnosis was considered good by 46% of UBS patients. This information is significant because to be a chronic disease; the earlier the hypertension is diagnosed, and the patient HIPERDIA is registered to start the non-pharmacological and/or drug treatment, the lower the risk of complications, hospitalizations, and decreased quality life. The diagnosis of hypertension is the arithmetic mean of the largest BP or equal to 140/90mmHg, verified in at least three different days with an interval of one week between measurements, that is, the average of the first day measures plus two subsequent measures and then it is divided by three. It is worth mentioning the care for the correct diagnosis of hypertension since it is a chronic condition that will accompany the individual throughout life [17].

It was found that 38% of respondents claim to have a good understanding of the disease and 25% had a regular understanding. In the adherence to treatment, 37% of patients reported ha-

ving a regular adherence and 32% had a good adherence. The HIPERDIA program should provide meetings of patients with healthcare professionals to provide better monitoring of blood pressure, as well as the opportunity to have more access to information as a basis for compliance with the guidelines on the medication and non-medication treatment [18].

When patients were asked about the access to medicines in the health service, 46% of them rated it as good, 29% as regular and 12% as bad. Drug treatment is indicated when the patients even performing the non-pharmacological treatment adequately; they do not achieve the reduction of blood pressure levels (<140x90mmHg).

The pharmacy the Basic Unit studied did not have all the medicines used for the control of HAS provided in the National List of Essential Medicines - RENAME 2014 [19], complicating the more effective therapeutic regimens treatment, restricting the possibility of prescription by the medical professional since most patients cannot afford to purchase medicines with their means, depending mostly and exclusively by the dispensation of the UBS. This situation is an important factor in the adherence to treatment because patients with non-dispensed prescription medications at the health unit tend to leave or not perform the treatment appropriately.

The evaluation of the care provided by nursing professionals was considered excellent by 35% of interviewed patients, good for 44%, regular by 20% and only 1% rated the service received as bad. Nursing care should be guided by health care, educational and management activities, directing the adherence to treatment and improving the quality of life of hypertensive patients [20].

During the nursing consultation risk factors that influence the control of hypertension should be focused, that is, changes in lifestyle, encouragement of physical activity, reduction of body weight when above the recommended BMI and quitting smoking. The possibilities of secondary prevention, the

maintenance of blood pressure levels below the target and the control of risk factors should also be focused [17]. The nurse has an important role in all the treatment of hypertensive patients, especially in the educational process, guiding them in the necessary care to preserve their health.

It was observed that during the nursing consultation in the ESF, cardiovascular risk stratification is not carried out using the Framingham score, which evaluates and ranks the risk of a cardiovascular event in the next ten years, as recommended by the Ministry of Health Notebook Primary Care 37 [21].

According to the above Notebook, the Framingham score is a useful tool and easy to apply in daily life. It classifies individuals by score levels of cardiovascular risk (low risk, intermediate risk, and high risk) and assists in defining behavior.

One factor that draws attention in research is often the participation of registered patients in health education activities. Most respondents (42%) stated that they participate few times, 38% do not participate, and only 20% said they often participate in this activity.

Health education is essential to motivate the patient to adopt behavior to help reduce and control blood pressure. According to the Pan American Health Organization [22], the focus of the educational process will be to guide those measures proven to reduce blood pressure, including: proper eating habits to maintain body weight and a desirable lipid profile, stimulating active life and regular physical exercise, reducing sodium intake, reducing alcohol consumption, stress reduction and smoking cessation.

It is appropriate to emphasize the perception of hypertensive patients registered in HIPERDIA about improving the quality of life with the completion of treatment, whether with medication or not. Of the total respondents, 95% reported an improvement in the quality of life. This perception of improvement stimulates the patient to perform the treatment

effectively, following the medical prescription and putting into practice in their daily lives all the changes in lifestyle guided by the health team.

## Conclusions

This study allowed knowing the socio-demographic profile of the respondents and their perception about the HIPERDIA program of a Health Unit of the Municipality of Parnamirim/RN.

One of the limitations found in the study was the lack of attendance of hypertensive patients registered in health education activities. It is known that the effective monitoring of patients is considered one of the most difficult requirements to be achieved in HIPERDIA, by the distance between patient/health team, the difficulty of monitoring or by not understanding the magnitude of the disease. It was found the need to seek alternative means to provide relevant information and put the patient closer to the health team.

Thus, it is suggested that some actions can be performed: Registration maintenance of families and individuals updated; precise definition of the territory of operation, mapping and recognition of an area linked with continuous updating; active search for registered individuals through home visits practiced by the multidisciplinary team, seek to inform them about the importance of the activities offered and their link with the Health Unit.

Other proposed measures from the study show the importance of using the Framingham score in the medical and nursing consultations. This action becomes important to estimate the absolute risk of an individual developing CVD in both genders, from simple clinical and laboratory variables. Therefore, through the monitoring of patients at higher risk injuries in target organs would be minimized and the prevention of complications of HAS would be intensified.

Because of that, this study enabled us to understand the difficulties faced in implementing the pro-

gram and explained the complex process involving many factors that can contribute to non-adherence to treatment. Such circumstances are directly related to the condition of services and health professionals, socioeconomic and demographic factors, psychosocial and cultural and family participation in treatment.

Considering the observed aspects and the importance of HIPERDIA program for hypertensive patients, its improvement is necessary, where the government at the respective Health Departments seeks a resolute form to the program meets the great demand of the patient with equity and solvability, investing in the technical training of health professionals to better assist these patients.

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