

#### **Original Article**

#### ACCESSIBILITY OF HYPERTENSIVE USERS TO HEALTH UNITS AND TREATMENT ADHERENCE

ACESSIBILIDADE DO USUÁRIO HIPERTENSO À UNIDADE DE SAÚDE E ADESÃO AO TRATAMENTO

ACCESIBILIDAD DEL USUARIO HIPERTENSO A LA UNIDAD DE SALUD Y ADHESIÓN AL TRATAMIENTO

Natasha Marques Frota<sup>1</sup>, Thiago Moura de Araújo<sup>2</sup>, Lívia Moreira Barros<sup>3</sup>, Joselany Áfio Caetano<sup>4</sup>, Zélia Maria de Sousa Araújo Santos<sup>5</sup>

We aimed to analyze the accessibility of hypertensive users to the health system with focus on treatment adherence. A cross-sectional study with quantitative approach was conducted in four Family Health Basic Units of Fortaleza-CE, Brazil. The sample consisted of 400 users. Data collection happened through a form applied from May to August 2011. About 97.5% of users were older than 40 years, and 67.2% were female. The accessibility to the referral service occurred in 47.2% of users to secondary care, of which 101 (25.2%) were referred to Emergency Units, and 88 (22.0%) were admitted to Inpatient Units. Most hypertensive patients adhered to healthy habits, except the use of dietetic sweeteners (36.0%) and physical exercise (35.0%). The hypertensive patients had good treatment adherence and difficulty in accessibility regarding counter-referral services to secondary and tertiary care services.

Descriptors: Hypertension; Health Services Accessibility; Unified Health System; Patient Compliance.

Objetivou-se analisar a acessibilidade do usuário hipertenso ao sistema de saúde com enfoque na adesão ao tratamento. Estudo transversal, com abordagem quantitativa, realizado em quatro Unidades Básicas de Saúde da Família em Fortaleza-CE, Brasil. A amostra constou de 400 usuários. A coleta de dados foi realizada por meio de formulário entre maio e agosto de 2011. Cerca de 97,5% usuários tinha idade acima de 40 anos, destes 67,2% eram mulheres. A acessibilidade ao serviço de referência ocorreu em 47,2% na atenção secundária, sendo que 101 (25,2%) foram encaminhados para Unidades de Emergência, e 88 (22,0%) foram admitidos em Unidades de Internação. A maioria dos hipertensos aderiu a hábitos saudáveis, exceto ao uso de adocantes dietéticos (36,0%) e exercício físico (35,0%). Os hipertensos apresentaram adesão eficaz ao tratamento e dificuldade de acessibilidade quanto à contrarreferência dos servicos de atenção secundária e terciária.

Descritores: Hipertensão; Acesso aos Serviços de Saúde; Sistema Único de Saúde; Cooperação do Paciente.

El objetivo fue analizar la accesibilidad de usuario hipertenso a servicios de salud con enfoque en la adherencia al tratamiento. Estudio transversal, cuantitativo, en cuatro Unidades Primarias de Salud de la Familia de Fortaleza-CE, Brasil. Muestra de 400 usuarios. La recogida de los dados ocurrió a través de formulario, de mayo a agosto de 2011. Cerca de 97,5% usuarios tenían más de 40 años y de estos 67,2% eran mujeres. La accesibilidad al servicio ocurrió en 47,2% en la atención secundaria, de los cuales 101 (25,2%) fueron remitidos a las Unidades de Emergencia y 88 (22,0%) en Unidades de Internación. La mayoría de los hipertensos adhiere bien a hábitos saludables, excepto en el uso de edulcorantes dietéticos (36,0%) y ejercicio físico (35,0%). Los hipertensos presentaran buena adherencia al tratamiento y dificultad de accesibilidad no que se refieren a la contra-referencia de servicios de atención secundaria y terciaria.

Descriptores: Hipertensión; Accesibilidad a los Servicios de Salud; Sistema Único de Salud; Cooperación del Paciente.

<sup>2</sup>Nurse. PhD in Nursing, Universidade Federal do Ceará (UFC). Fortaleza, CE, Brazil. É-mail: thiagomouraenf@yahoo.com.br

<sup>3</sup>Nurse. Master student in Nursing, Universidade Federal do Ceará (UFC). Fortaleza, CE, Brazil. E-mail: livinha\_mb@hotmail.com <sup>4</sup>Nurse. PhD in Nursing. Professor of the Graduate Program of the UFC. Fortaleza, CE, Brazil. E-mail: joselany@ufc.br

Corresponding author: Natasha Margues Frota

<sup>&</sup>lt;sup>1</sup>Nurse. PhD student in Nursing, Universidade Federal do Ceará (UFC). Fortaleza, CE, Brazil, E-mail: enfanatashafrota@vahoo.com.br

<sup>&</sup>lt;sup>5</sup>Nurse. PhD in Public Health. Professor of the Nursing Undergraduate Course and the Graduate Program in Public Health at the Universidade de Fortaleza (UNIFOR). Fortaleza, CE, Brazil. E-mail: zeliasantos@unifor.br

Rua Coronel Jucá, 291, apt 103. Meireles. CEP: 60170320. Fortaleza, CE, Brasil. E-mail: enfanatashafrota@yahoo.com.br

## INTRODUCTION

Individuals with Systemic Arterial Hypertension (SAH) require continuous supervision, support and follow-up from a multidisciplinary team that helps them adapt to the new lifestyle, given that SAH is a chronic and asymptomatic disease<sup>(1)</sup>.

However, health professionals find it difficult to make hypertensive individuals aware of their condition of patients with chronic diseases, which requires commitment and treatment adherence, both in terms of changing habits and the correct use of drugs<sup>(2)</sup>. The lifestyle changes due to chronicity constitute a barrier to adherence of hypertensive patients to non-drug treatment, especially when it comes to taking drugs in appropriate times<sup>(3)</sup>.

The problem of treatment non-adherence in individuals with chronic diseases involves not only the concept of the disease. It is a complex and multifactorial issue, involving factors related to the individual, such as age, sex, race, education, socioeconomic status, genetics and obesity; to the injury, chronicity, absence late diabetes of symptoms, and associated consequences; to beliefs, habits and life routine; to the treatment, costs, side effects, complexity and quality of life; and to the conditions of access and accessibility to health services. Furthermore, family support constitutes one of the main barriers to treatment adherence, because, in many cases, family members do not change their routine along with the patient, thus hindering the hypertension treatment<sup>(4-7)</sup>.

Investments in this respect are becoming current and relevant. However, the solution to confront the nonadherence to antihypertensive treatment still represents a challenge to the need of jointly involving the treatment of hypertensive people, their family, and the professional-user relationship<sup>(8)</sup>. Nonetheless, to enable the adherence of hypertensive patients to the disease control, it is essential the connection of three pillars – health education, comprehensive care from the health professional, and accessibility to the institution and to the health services available, guided by the principles of the Unified Health System (SUS)<sup>(9)</sup>.

The universal access to services is a broad economic, concept, involving technical-assistance, political and symbolic aspects that include a person's ability to seek and obtain health care. Thus, we verify the commitment of managers in implementing this principle by elaborating new guidelines proposals for public health policies, thus reaffirming the municipalization of actions and the system organization in the context of primary health care<sup>(10-11)</sup>.

Accessibility comprises the relationship between the location of the health care supply and users, considering, for example, the existing resources for transportation, travel time, distance, and its costs. The monitoring of people diagnosed with SAH should be conducted in the area closest to their homes, because we understand that, to optimize the service, it is essential that these health care units are easily accessible and close to the users' homes<sup>(12)</sup>.

In recent years, we observed that the implementation SUS of guidelines, such as decentralization, hierarchy, regionalization and social participation, needed reformulation in the care models and management to better meet the population's needs and rights. In a study carried out with 20 hypertensive patients, it was found that the support and embracement provided by health care professionals was relevant to the significant improvement in their treatment adherence<sup>(10,12-13)</sup>.

Thus, it is clear that a set of actions in basic health care must be developed, so they can cover the promotion, prevention, diagnosis and care offer by exercising managerial, democratic, participatory and sanitary practices directed to populations of well-defined areas<sup>(14)</sup>.

Given that SAH is a public health problem in

society, it is important that professionals, especially those working in the Family Health Strategy (FHS), possess knowledge about the difficulties experienced by hypertensive patients in the treatment adherence, in order to promote the creation and implementation of strategies that contribute to the effectiveness of SAH control in the home environment. Thus, this study aimed to analyze the health system accessibility for hypertensive users, focusing on treatment adherence.

### METHOD

This is a cross-sectional study with quantitative approach, developed in four Family Health Basic Units (UBASF) in a Regional Executive Office of Fortaleza-CE, Brazil. Currently, the city of Fortaleza is divided into six regions. We chose to conduct this study in the 4<sup>th</sup> micro regional, because according to the 4<sup>th</sup> Regional Executive Office (SER) it is estimated that there are direct assistance to residents of 29 neighborhoods, which corresponds to 42% of the area of Fortaleza. It is worth mentioning that the majority of patients (53.4%) of this regional is diagnosed with hypertension<sup>(6)</sup>. This study was conducted from May to August 2011.

The population was composed of 1,600 hypertensive patients registered in the UBASF, regardless of color, education, household income and marital status. The sample was calculated based on the SAH prevalence, 25% in the studied area<sup>(3)</sup>, totaling 400 users.

As inclusion criteria in the study we used: UBASF users registered in the *Hiperdia*, with prior diagnosis of

SAH and in outpatient follow-up in the health service. *Hiperdia* is a computerized system that enables to register and monitor patients with SAH and/or diabetes mellitus captured and linked to health units, generating information for professionals and managers of local and state departments and the ministry of health<sup>(12)</sup>.

Data collection happened through interviews with users, using a structured form previously validated and used in similar studies<sup>(14)</sup>. The instrument contained questions regarding data on the characterization of service subjects, accessibility to UBASF and treatment adherence. We chose the interview method due to the difficulty of the subjects to answer the self-administered questionnaire.

Following, the information was organized in the program Statistics Package for Social Science (SPSS, version 18.0) and presented in tables, being analyzed based on the principles of SUS, public health policies and other productions addressing the issue of SAH.

The ethical aspects were followed, since the study was conducted in accordance with Resolution No. 196/96 of the National Health Council. In order to meet the resolution, the study was approved by the Research Ethics Committee of the Universidade de Fortaleza, under Protocol No. 416/10.

#### RESULTS

Table 1 describes the socio-demographic profile of patients treated in the 4<sup>th</sup> Regional Executive Office of the city of Fortaleza, according to the absolute and relative frequencies.

Table 1 - Distribution of users according to age, sex, color, household income, education, occupation, place of I	birth,
place of residence, religion, housing conditions, and marital status. Fortaleza-CE, Brazil, 2011, n=400.	

Social variables	n	%
Age (years)		
60 and over	217	54.3
40-59	173	43.2
20-39	10	2.5
Sex		
Female	269	67.2
Male	131	32.8
Color		
Brown	219	54.8
White	127	31.8
Black	54	13.4
Monthly income		
1-2 minimum wages	199	49.8
< 1 minimum wage	142	35.4
≤ 3 minimum wages	59	14.8
Education		
Literate	148	37.0
Basic education	107	26.8
Illiterate	79	19.8
High school	54	13.4
Higher education	12	3.1
Marital status		
Married	216	54.0
Widowed	74	18.5
Divorced	45	11.3
Single	42	10.5
Stable union	23	5.7

According to Table 1, 390 (97.5%) hypertensive patients were aged 40 years and over, 217 (54.3%) of these corresponded to the elderly, i.e. aged 60 and over. As regards to gender, 269 (67.2%) were female. It was noted that the brown color predominated in 219 (54.7%) users.

As for education, it was found that 148 (37%) individuals had studied up to the beginning of elementary school, and 79 (19.8%) had no education. The low educational level influences the monthly family income, since the majority (85.3%) of participants had up to two minimum wages (MW). During the study period, the MW corresponded to R\$ 510.00 (five

hundred and ten reais). Of these, 199 (58.3%) users received from one to two MW.

With regard to the place of birth, 346 (86.5%) were born in other municipalities of the State of Ceará, and 251 (62.8%) lived in Fortaleza-CE. As regards to religion, 311 (77.7%) were Catholic, 67 (16.7%) were Protestant, and 22 (5.5%) practiced other religions.

Regarding the housing type, the majority (82.5% - 330) owned their home, while 70 (11.5%) individuals were living with relatives or in rent. Among users, 194 (48.5%) were retired, 99 (24.8%) were housewives, and 107 (26.7%) had other activities such as gardening, sewing and dressmaking, construction, general services and baking.

Health Services Accessibility	Referral		Counter-referral	
	n	%	n	%
Secondary care *				
Emergency unit	101	25.3	31	7.8
Inpatient unit	88	22.0	59	14.8
Tertiary care **				
Emergency unit	104	26.0	69	17.3
Inpatient unit	188	47.0	84	21.0

**Table 2** - Distribution of users according to the accessibility among the levels of health care. Fortaleza-CE, Brazil, 2011, n=400.

\* medium complexity level \*\* high complexity level

The accessibility of hypertensive users through referral to secondary care occurred in 47.2% of cases, of which 101 (25.2%) were referred to Emergency Units and 88 (22.0%) were admitted to Inpatient Units. As for the referral to tertiary care, 104 (26.0%) were treated in

Emergency Units and 188 (47.0%) in Inpatient Units. In most cases, the referral was caused by acute or chronic complications associated with SAH. However, the counter-referral to the UBASF source was lower, ranging from 30.6 to 77.7%, predominantly in tertiary care.

**Table 3** - Distribution of user habits according to the adherence to therapeutic control of Systematic Arterial Hypertension. Fortaleza-CE, Brazil, 2011, n=400.

Favorable habits in the hypertension control	n	%
Medication use	350	87.5
Smoking abstinence	346	86.5
Alcohol abstinence	342	85.5
Adequate sodium intake	308	77.0
White meat consumption	292	73.0
Adequate caffeine intake	276	69.0
Vegetable consumption	272	68.0
Stress management	250	62.5
Vegetable fat intake	243	60.7
Dietetic sweeteners consumption	144	36.0
Regular physical exercise	140	35.0

Most hypertensive patients adhered to the SAH therapeutic control, ranging from 60.7 to 87.5%. The individuals in study properly followed the guidelines on the use of medication (87.5%), abstaining from alcohol (85.5%) and smoking (86.5%), and proper sodium intake (77%). However, it was observed that the use of dietetic sweeteners (36.0%) and regular exercise (35.0%) were the least adopted behaviors.

### DISCUSSION

Chronic diseases, such as SAH, along with the complications arising from their development have been increasing the hospital costs and length of hospitalization. For being considered a silent disease, its prevention, especially in primary care, has been the focus of campaigns and strategies of health promotion for the general population $^{(3)}$ .

With regard to the participants' gender, there was a higher prevalence of SAH among females. Women generally have a higher perception of illness, they are more likely to self-care and seek more medical care than men, which would tend to increase the odds of having SAH diagnosed<sup>(8)</sup>. The higher incidence among females is indicated by other studies on the accessibility of hypertensive users to health services<sup>(12,15)</sup>.

It was also observed that most individuals had brown skin, which may be explained by the mixing of races in the Brazilian population. Furthermore, there was a predominance of elderly in the study population. These findings confirm the literature, because the age is directly related to the prevalence of SAH development, since the elevation of blood pressure tends to occur with aging, due to the change of the heart complacency and changes in the blood vessel wall<sup>(16-17)</sup>.

Education, income, occupation and social class are characteristics that directly affect the socioeconomic conditions of the population, given that these factors determine differences in lifestyle and integration of people in society. This can be observed in the family income presented by users of this study, where the majority received less than three minimum wages. However, it is known that individuals with higher income choose to use the private health system, which explains the lower frequency of individuals with higher purchasing power<sup>(3)</sup>.

Nevertheless, this situation is being reversed due to public policies for the SAH control and hypertensive patients of higher social classes that are using SUS because of the free distribution of antihypertensive medication in Brazilian pharmacies. Moreover, the difficult access to health units and low education contribute to non-adherence to antihypertensive treatment and outpatient follow-up, which was observed in studies with users of the states of Paraná and São Paulo<sup>(12,18-19)</sup>.

The search for a basic health unit in a certain area is favored by the proximity between the unit and the user's home. The study showed that 27.8% of users lived in the interior of the state and that were treated in the city of Fortaleza, the capital of Ceará state. This reality disagrees with one of the main guidelines of SUS, regionalization, in which the user must be at an appropriate distance to the health service, since this convenience will impact on the treatment adherence.

The number of basic units in a community is defined based on recognizing the area and the population assigned. The knowledge on the communities determines links between users and health professionals, which in turn enables the embracement and humanization of care, in the sense of making teams responsible for monitoring the health/illness of individuals and their families<sup>(20)</sup>. So, when health professionals work together with users based on the awareness of treatment adherence, users adopt strategies to prevent complications associated with SAH.

The health professional, inserted in the dynamics of social relationships, can act expanding the critical consciousness of social groups regarding the potential of strengthening/wear to which they are exposed in their ways of working and living. Therefore, the professional approach and interaction with users through the Family Health Strategy (FHS) strengthen their search for primary health care. Consequently, the health system must be able to resolve problems at all levels of care and be composed of a network of actions and services organized in hierarchical way, respecting the levels of complexity and the referral and counter-referral system<sup>(21-22)</sup>.

Educational strategies help changing the life habits, however not changing them directly affects the user access to the levels of health care. A research conducted in the state of Santa Catarina evaluated the counter-referral service of SUS, and found that 89% of discharged patients, in a program of "special discharges", needed a counter-referral, being essential the performance of primary care professionals to follow-up these patients after discharge, given that many of these services were related to various specialties, emphasizing the need for direct communication among the levels of health care, even in patients without diagnoses of chronic diseases<sup>(7)</sup>.

The present study indicates that the tertiary care has been the focus of referral for these users. The accessibility of users to the referral services of secondary and tertiary care was similar, unlike the counter-referral service, showing weakness in continuity of the adherence to antihypertensive treatment. We notice that the communication between the levels of health care might be hindering the user's treatment adherence, since it is a chronic disease.

The care actions performed in the referral and counter-referral services must meet the needs of users regarding SAH and encourage healthy lifestyles. Understanding the user in its complexity, and treat not only the disease aggravation, allows the professional to perform a holistic assessment of the patient, which favors the prevention of other comorbidities or complications, besides motivating the patient to play an active role in the antihypertensive treatment<sup>(14)</sup>.

The access to health services affects the user's behavior and the changes to healthy practices. The instructions given in service influence the therapy adherence and the reduction of health injuries. Among the conducts that should be clarified to the patient during consultations, we have the adequate daily sodium intake, which for a controlled hypertensive person is 5g/day and for a severe hypertensive is 2g/day (one teaspoon = 1g of salt). The patient should be advised to moderate sodium consumption during the preparation of meals and avoid eating certain foods. Excessive use of salt is associated with low socioeconomic status, high blood pressure and males<sup>(21)</sup>.

Another important guideline is related to the percentage of fat that should be consumed daily, being recommended the value of 30% of total calories and up to 300mg/day of cholesterol. There are general recommendations to restrict the fat consumption, like avoiding meats with high fat content, dairy, chocolate products, seafood, fried foods and oils<sup>(5)</sup>.

The regular consumption of alcohol should also be avoided by hypertensive patients. In a study conducted with hypertensive workers in São Paulo, the most frequently used drink was beer (77.8%), followed by spirits (18.5%). The effects of alcohol consumption depend basically on the amount and frequency of intake, the type of beverage used, and the nutritional condition of the individual. Moderate consumption, once or twice a week, no more than a glass of wine, a bottle of beer or a shot of liquor is tolerated by well controlled patients<sup>(23)</sup>. A study carried out in Campinas verified that the frequency of alcohol consumption was less than twice a week, and non-consumption was identified in 54.9% (p=0.006)<sup>(24)</sup>. These findings confirm the results of this study, since most users reported alcohol abstinence (85.5%), a factor that helps in the treatment adherence conducts.

Besides the guidelines applied in the individual care of hypertensive users, we highlight the national and local campaigns for the moderate alcohol consumption, due to its harmful effects to the body, associated with urban violence and traffic accidents.

It was observed that most users had healthy habits, with the exception of using dietetic sweeteners, practicing physical exercises and stress management. These items may be influenced by socioeconomic conditions and a social support network for sports<sup>(22)</sup>. Hypertensive people should have a regular practice of physical activities, because, besides contributing to decrease blood pressure, exercises can reduce the risk of coronary heart disease and stroke, also making it easier the weight control<sup>(6)</sup>.

Stress affects the pace and causes changes in the heartbeat frequency, which consequently results in increased blood pressure. This happens due to the need of the circulatory system to send more blood to the brain and muscles, when the organism needs to react in stressful situations. The difficult accessibility of users may be a predisposing factor for this stress, triggering the blood pressure elevation<sup>(22-23)</sup>.

Given the above, it is clear that the user's adherence to the antihypertensive treatment may be mediated by health service strategies, with focus on health education, since it is possible to find educational strategies in literature, such as guidelines in nursing consultation through popular knowledge. These findings demonstrate that it was possible to obtain positive results with changes in lifestyle of hypertensive patients<sup>(14)</sup>. This strategy prioritizes health promotion, in order to engage the user in self-care, so they can achieve a better quality of life.

Therefore, users should be monitored by a multidisciplinary team. Furthermore, the nursing consultation should involve an educational process aimed at changing the behavior of users regarding the control of health injuries and encourage participation in educational activities, and also involving the relatives in this practice<sup>(7)</sup>.

# CONCLUSION

Early diagnosis, along with appropriate therapeutic procedures, prevents many complications caused by SAH. However, for actions to be effective, the health professional must be aware of the factors that influence the accessibility and adherence of patients to the treatment, such as age, sex, education, income and place of birth.

Given the results of this study, we found that the majority of hypertensive patients were elderly, female, married, retired, with a monthly income of one to two minimum wages, born in other municipalities, and living in Fortaleza. The prevalence of elderly reinforces the data present in the literature, which describe this population as the individuals who have a higher number of risk factors to develop SAH. The higher frequency of individuals who come from the interior of the state confirms the occurrence of migration of the general population to the metropolitan area in search of health services and better living conditions.

In order to hypertensive patients prevent acute and chronic complications, there is need for a better treatment adherence, including both drug and non-drug therapy. In this study, it was observed that most users adhered to therapeutic procedures of hypertension control, with the exception of sweetener consumption and practice of physical activities. With the disease complications, there is need for referral to more complex services. After assistance in these secondary or tertiary care services, patients must be counter-referenced to the source units for follow-up with the FHS team.

It is important to highlight the dimension of hypertensive patients to other levels of health care, so that they can be accessible through referral. It was observed that there was a counter-referral in health services at secondary and tertiary levels, however it is urgent to develop strategies that enable greater customer accessibility to healthcare services, respecting the principles of SUS and thus contribute to their adherence to these maintenance procedures, health promotion and prevention/control of health injuries, besides reducing the assistance at institutions of high and medium complexity.

Finally, it is clear that the involvement between user and healthcare unit, through the health services accessibility, encourages users to develop activities to improve their quality of life by adhering to drug and nondrug therapies for the disease control.

The study presents as limitations the fact of including only one regional of Fortaleza. Therefore, we propose that further researches are carried out aiming to know the reality of other regionals and contribute to scientific knowledge of the professionals who work directly and indirectly with this population.

#### REFERENCES

1. Reza CG, Castro MEM, Solano GS, Torres DG, Martinez VG. O impacto do diagnóstico: experiência contada por mulheres com hipertensão arterial. Esc Anna Nery. 2010; 14(1):33-8.

2. Garcia SMS, Galvão MTG, Araújo EC, Cavalcanti AMTS. Aspectos socioepidemiológicos e clínicos de portadores de hipertensão arterial. Rev Enferm UFPE On Line [periódico na Internet]. 2007 [citado 2012 set 24]; 1(2): 181-8. Disponível em: http://www.ufpe.br/revistaenfermagem/index.php/revista /article/view/380-8808-1-

3. Lima HP, Santos ZMSA, Nascimento JC, Caetano JA.

Adesão do usuário hipertenso ao tratamento e a interface com o saber sobre o agravo. Rev Rene. 2010; 11(2):170-8.

4. Lopes MCL, Marcon SS. A hipertensão arterial e a família: a necessidade do cuidado familiar. Rev Esc Enferm USP. 2009; 43(2):343-50.

Sociedade Brasileira de Hipertensão. VI Diretrizes
 Brasileiras de Hipertensão – DBH. Arq Bras Cardiol.
 2010; 95(1):135-43.

 Santos ZMSA, Frota MA, Cruz DM, Holanda SDO.
 Adesão do cliente hipertenso ao tratamento: análise com abordagem interdisciplinar. Texto Contexto Enferm.
 2005; 14(3):332-9.

 Jesus WLA, Assis MMA. Revisão sistemática sobre o conceito de acesso nos serviços de saúde: contribuições do planejamento. Ciênc Saúde Coletiva. 2010; 15(1):161-70.

 Passos VMA, Assis TD, Barreto SM. Hipertensão arterial no Brasil: estimativa de prevalência a partir de estudos de base populacional. Epidemiol Serv Saúde.
 2006; 15(1):35-45.

9. Bloch KV, Rodrigues CS, Fiszman R. Epidemiologia dos fatores de risco para hipertensão arterial – uma revisão crítica da literatura. Rev Bras Hipertens. 2006; 13(2):134-43.

 Cunha ABO, Vieira-da-Silva LM. Acessibilidade aos serviços de saúde em um município do Estado da Bahia, Brasil, em gestão plena do sistema. Cad Saúde Pública. 2010; 26(4):725-37.

11. Faquinello P, Carreira L, Marcon SS. A unidade básica de saúde e sua função na rede de apoio social ao hipertenso. Texto Contexto Enferm. 2010; 19(4):736-44.

 Santos NR. Desenvolvimento do SUS, rumos estratégicos e estratégias para visualização dos rumos.
 Ciênc Saúde Coletiva. 2007; 12(2):429-35.

 Ministério da Saúde (BR). Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Avaliação para melhoria da qualidade da Estratégia Saúde da Família. Brasília: Ministério da Saúde; 2005. 14. Saraiva KRO, Santos ZMSA, Landim FLPL, Teixeira AC. Saber do familiar na adesão da pessoa hipertensa ao tratamento: análise com base na educação popular em saúde. Texto Contexto Enferm. 2007; 16(2):263-70.

15. Bersusa AAS, Pascalicchio, Pessoto UC, Escuder MML. Acesso ao serviço de saúde na Baixada Santista de pessoas portadoras de hipertensão arterial e diabetes. Rev Bras Epidemiol. 2010; 13(3):513-22.

16. Costa JSD, Barcelos FC, Sclowitz ML, Sclowitz IKT, Castanheira M, Olinto MTA, et al. Prevalência de hipertensão arterial em adultos e fatores associados: um estudo de base populacional urbana em Pelotas, Rio Grande do Sul, Brasil. Arq Bras Cardiol. 2007; 88(1):59-65.

 Barros MBA, César CLG, Carandina L, Torres GD.
 Desigualdades sociais na prevalência de doenças crônicas no Brasil, PNAD – 2003. Ciênc Saúde Coletiva. 2006; 11(4):911-26.

 Carvalho EA, Silva LMSS, Borges MCLA, Galiza FT.
 Acesso aos serviços de saúde da atenção básica: percepção dos idosos. Rev Pesq Cuid Fundam Online [periódico na Internet]. 2011 [citado 2012 dez 12];
 3(4):2600-7. Disponível em: http://www.seer.unirio.br/index.php/cuidadofundamental /article/view/1544/pdf\_469.

19. Costa JMBS, Silva MRF, Carvalho EF. Avaliação da implantação da atenção à hipertensão arterial pelas equipes de Saúde da Família do Município de Recife. Ciênc Saúde Coletiva. 2011; 16(2):622-33.

20. Oliveira AG, Morais IF, Azevêdo LMN, Valença CN, Sales LKO, Germano RM. O que mudou nos serviços de saúde com a estratégia saúde da família. Rev Rene. 2012; 13(2):291-9.

21. Fratini JRG, Saupe R, Massaroli A. Referência e contra referência: contribuição para a integralidade em saúde. Ciênc Cuid Saúde. 2008; 7(1):65-72.

22. Jardim PCBV, Gondim MRP, Monego ET, Moreira HG, Vitorino PVO, Souza WKSB, et al. Hipertensão arterial e alguns fatores de risco em uma capital brasileira. Bras Bras Cardiol. 2007; 88(4):452-7.

23. Lipp MEN. Controle do estresse e hipertensão arterial sistêmica. Rev Bras Hipertens. 2007; 14(2):89-93.
24. Zaitune MPA, Barros MBA, César CLG, Carandina L, Goldbaum M. Hipertensão arterial em idosos: prevalência, fatores associados e práticas de controle no Município de Campinas, São Paulo, Brasil. Cad Saúde Pública. 2006; 22(2):265-94.

Received: Oct. 24<sup>th</sup> 2012 Accepted: Jan. 28<sup>th</sup> 2013

Rev Rene. 2013; 14(4):730-9.