

### Characterization of older hipertensive registered in the state of sishiperdia paraíba: allowance for health surveillance

Oliveira, Jullyana Marion Medeiros de; Nóbrega, Maria Miriam Lima da; Medeiros, Fabíola de Araújo Leite; Medeiros, Ana Claudia Torres de

Veröffentlichungsversion / Published Version

Zeitschriftenartikel / journal article

#### Empfohlene Zitierung / Suggested Citation:

Oliveira, J. M. M. d., Nóbrega, M. M. L. d., Medeiros, F. d. A. L., & Medeiros, A. C. T. d. (2015). Characterization of older hipertensive registered in the state of sishiperdia paraíba: allowance for health surveillance. *Revista de Pesquisa: Cuidado é Fundamental Online*, 7(Supl.), 136-144. <https://doi.org/10.9789/2175-5361.2015.v7i5.136-144>

#### Nutzungsbedingungen:

Dieser Text wird unter einer CC BY-NC Lizenz (Namensnennung-Nicht-kommerziell) zur Verfügung gestellt. Nähere Auskünfte zu den CC-Lizenzen finden Sie hier: <https://creativecommons.org/licenses/by-nc/4.0/deed.de>

#### Terms of use:

This document is made available under a CC BY-NC Licence (Attribution-NonCommercial). For more information see: <https://creativecommons.org/licenses/by-nc/4.0>

## RESEARCH

Caracterização dos idosos hipertensos cadastrados no sishiperdia do estado da paraíba:  
subsídio para vigilância em saúde

Characterization of older hipertensive registered in the state of sishiperdia paraíba:  
allowance for health surveillance

Caracterización de los hipertensos registrados sishiperdia en el estado de paraíba: subsidio  
para la vigilancia de la salud

Jullyana Marion Medeiros de Oliveira<sup>1</sup>, Maria Miriam Lima da Nóbrega<sup>2</sup>, Fabíola de Araújo Leite Medeiros<sup>3</sup>, Ana  
Claudia Torres de Medeiros<sup>4</sup>

## ABSTRACT

**Objective:** To characterize the profile of hypertensive coverage registered in the Registration and Monitoring of Hypertensive Diabetics System (HIPERDIA Program) in the state of Paraíba, Brazil, between the years 2008-2012, considering their representation as subsidy strategies for surveillance of diseases and health promotion. **Method:** descriptive study with a quantitative approach. **Results:** Data demonstrate the similarity of the State of Paraíba to indices of Brazilian epidemiological profile. **Conclusion:** we stress the need to increase government awareness of indicators and insertion of public policies in relation to injuries that manage hypertension between the aging population in favor of measures aimed at the prevention of functional disability and allow for healthy aging. **Descriptors:** Aged, Hypertension, Health

## RESUMO

**Objetivo:** caracterizar o perfil da cobertura de hipertensos cadastrados no Sistema de Cadastramento e Acompanhamento de Hipertensos e Diabéticos (Programa HIPERDIA) no Estado da Paraíba, Brasil, entre os anos de 2008-2012, considerando sua representação como subsídio para estratégias a vigilância de agravos e promoção à saúde. **Método:** pesquisa descritiva com abordagem quantitativa. **Resultados:** demonstram a similaridade dos dados do Estado da Paraíba com os índices do perfil epidemiológico brasileiro. **Conclusão:** ressalta-se a necessidade de ampliação de indicadores e sensibilização governamental de inserção das políticas públicas, em relação aos agravos que a Hipertensão gerencia entre a população que envelhece em prol de medidas que visem à prevenção de incapacidades funcionais e permitam o envelhecimento saudável. **Descritores:** Idoso, Hipertensão, Saúde.

## RESUMEN

**Objetivo:** caracterizar el perfil de la cobertura hipertensos registrados en el Registro y control de los hipertensos diabéticos System (Programa HIPERDIA) en el estado de Paraíba, Brasil, entre los años 2008 a 2012, teniendo en cuenta su representación como estrategias de subsidios para la vigilancia de las enfermedades y promoción de la salud. **Método:** Estudio descriptivo, con enfoque cuantitativo. **Resultados:** Los datos demuestran la similitud del Estado de Paraíba a los índices de perfil epidemiológico brasileño. **Conclusión:** hacemos hincapié en la necesidad de aumentar la conciencia del gobierno de los indicadores y la inserción de las políticas públicas en relación con las lesiones que gestionan la hipertensión entre el envejecimiento de la población a favor de las medidas destinadas a la prevención de la discapacidad funcional y permiten un envejecimiento saludable. **Descriptor:** Anciano, Hipertensión, Salud.

<sup>1</sup>Nurse. Graduated from the Federal University of Rio Grande do Norte. Master's Degree by the Graduate Program in Nursing at the Federal University of Paraíba. Researcher CNPq. E-mail: jullyanamarion@hotmail.com. <sup>2</sup> Nurse. PhD in Nursing. Associate Professor of the Department of Public Health Nursing and Psychiatry; Professor of the Graduate Program in Nursing, Health Sciences Center, Federal University of Paraíba. Researcher CNPq. Director of the Center CIPE® the Graduate Program in Nursing at the Federal University of Paraíba - Brazil. Leader of the GEPFAE/UFPB. João Pessoa/PB, Brazil. E-mail: miriam@ccs.ufpb.br. <sup>3</sup> Nurse. Doctoral Student at the Graduate Program in Nursing, Health Sciences Center, Federal University of Paraíba (PPGENF-UFPB). Lecturer in the Department of Nursing at the State University of Paraíba (UEPB) Brazil. E-mail: profabiola@bol.com.br. <sup>4</sup> Nurse. Master in nursing. Doctoral Candidate in Nursing Graduate Program in Nursing, Health Sciences Center, Federal University of Paraíba. João Pessoa/PB, Brazil. E-mail: anaclaudia.tm@hotmail.com.

## INTRODUCTION

The ageing population in Brazil concurrently with the epidemiological transition, comes to life and health profiles drawing notably different from what was presented before the years 1970, happening from this decade an increase in the number of elderly and consequently changes in the profiles of morbidity and mortality.

It is known that the elderly are more susceptible to Chronic Non-Communicable Diseases (CNCD), highlighting cardiovascular disease as prevalent in this age group. Highlights that in Brazil, the North and northeast regions are larger area trend circulatory diseases.<sup>1</sup>

According to year 2008 statistics, the CNCD in Brazil occupied a representation of 31,3% and 33% of these were related to cardiovascular diseases, revealed in studies of the World Health Organization (WHO) as the leading cause of mortality population with emphasis on Systemic Arterial Hypertension (SAH)<sup>2,3</sup>

Hypertension is considered to be the most frequent disease among the cardiovascular disorders and reveals his name as a risk factor complicating other diseases in this group, such as Stroke and myocardial infarction. It is believed that this disease is being neglected in Diagnostics and treatment is often asymptomatic.<sup>4</sup>

Furthermore, HAS as high systolic blood pressure 140 mmHg or diastolic blood pressure greater than or equal to 90 mmHg, for those who do not use antihypertensive drugs.<sup>4</sup>

Another sim, its clinical manifestations can be asymptomatic, more generally are for headaches, facial flushing and malaise. The diagnosis consists of measurements in different moments and verification of elevations of blood pressure, healthy life habits being the main appearance of the disease prevention and control this. The treatment referenced is indicated by the use of antihypertensive drugs in conjunction with appropriate conduct and practice of exercises.<sup>4</sup>

They reiterate that studies age of 60 years on is the age group most affected by HAS, due to the aging process, so the increased primary prevalence in this age group.<sup>5</sup>

In primary care health programming in Brazil, within the Family Health Strategy, the control of hypertension concomitant to Diabetes happens within the Registration System and Monitoring of Hypertensive and Diabetic (HIPERDIA), developed in 2002, computerized and WEB interface.

This system is powered from their mandatory information by the municipalities with the family health Strategy through nursing and medical consultations. The proposal of the epidemiological surveillance and control of chronic non-communicable diseases (CNCD) within the HIPERDIA, theoretically, would be ideal for maintaining control of functional disability of the elderly and prevention of early deaths for cardiovascular diseases.<sup>6,7</sup>

In Brazilian elderly population, a study<sup>8</sup> epidemiological has that high blood pressure is among the most common diseases of the elderly, mostly female literacy, as described in the epidemiological profile.

Therefore, with changes in population health profiles, as well as on demography, which tends to the aging population of the country, in which the elderly are the most likely to be mown down by chronic pathologies. It is justified to the relevance of the study, to contribute in the characterization of elderly hypertensive patients presented by data information system of the unified health system of Brazil (DATASUS) related to the State of Paraíba, which bills itself as the northeastern State with the largest number of elderly.

As well as stimulate and sensitize managers and health professionals, such as nurses, to adopt diverse strategies of intervention to the patients with hypertension while avoiding the harms, from a mapping and knowledge of the health situation of the population under study.

On the understanding of the problem, becomes essential question: how has the profile of the users registered by the Registration System with Hypertension and Hypertensive and Diabetic Monitoring (the HIPERDIA Program) in the State of Paraíba?

Thus, the study aims to characterize the coverage of hypertensive patients registered in the Registration system and monitoring of Hypertensive and diabetic (HIPERDIA) in the State of Paraíba, Brazil, between the years 2008-2012, considering its representation as subsidy for the strategies of diseases surveillance and health promotion.

## METHOD

Descriptive research with quantitative approach, whose technical procedures were based on desk research into secondary sources, using the database obtained on home page of the Department of Informatics of the Unified Health System (DATASUS), retrieved from the site: <http://www.datasus.gov.br>, including information contained in the file of the HIPERDIA PROGRAMME, the Paraíba State, Brazil, in the period of years between 2008-2012 and compiled the data obtained from HIPERDIA reports.

The Paraíba State in northeastern Brazil region endowed by 223 municipality, in which the most populous cities are João pessoa (the State capital), Campina Grande, Santa Rita, Patos, Bayeux and Souza. Its economy focuses primarily on farming activities.<sup>9</sup>

This State is divided into four macroregions: Souza, Patos, Campina grande and João pessoa and set up of 25 health regions. The health care network is composed of health establishments registered in 3.593 national register of Health establishments DATASUS/MS, these 33,95% are health centres/basic unit.<sup>10</sup>

Using variables: age range (60 to 80 and more years), sex, smoking, physical inactivity, overweight, and municipalities. As well as the presence of Diabetes Mellitus type II and Chronic Renal Failure in these hypertensive senior. For the analysis of specific instruments have been created in the text editor Microsoft Office Word®. The data were collected, organized and tabulated in a database in Microsoft Excel®, in which was held the descriptive statistical treatment.

## RESULTS

On the analysis of the data, noted that in relation to the evolution of the Hiperdia program profile the State of Paraíba, the percentage of 94,6% of the municipalities joined the program from the start, in 2002. The other municipalities that corresponded to 5,4% had the adhesion between the years of 2003 to 2004. These data of significance that raises the expectation of greater coverage of the hypertensive population.

Still, the number of elderly people registered in the system of registration of hypertensive and diabetic-SIS/HIPERDIA in the time span covered by research grants 2008-2012 is 36,233 elderly, being these 62,4% female and 37,6% male.

It is observed that the period had increased and the lowest registration of these elderly hypertensive patients in the State of Paraíba, in the basic attention to health, were respectively from January to December 2009 and 2012, representing 29,3% and 10,6%, common data in all age groups.

In the year of 2008, the municipality with the largest number of registration was Campina Grande with 1.664. João Pessoa in the remaining years 2009-2012 analysis remained prevalent in the number of elderly with hypertension following respectively with 1.727, 1.318, 2.047 and 1.740. Fact possibly justified because these are the most populous regions in the State of Paraíba.

As for ages, got to the 60-64 years between senior are in higher proportion as elderly hypertensive patients registered with 25,1%, being common throughout the temporal interval of the study, in counterpoint to a lesser frequency are individuals aged 70-74 years, it was found that 19,6% of the elderly.

In relation to life habits have indicators of smoking and physical inactivity, 19,6% respectively match and 44,3%. Furthermore, the overweight complicating factor of the bad habits of life presents the proportion in relation to the number of elderly hypertensive patients with 30,8% of the population studied.

However, despite these percentiles present with lower proportions that have healthy life habits, these values is significant in relation to the effectiveness of the health services offered, once the policies and health services are holistic and individualized care to each user, and this fact compromising the health of these individuals.

Realize that those elderly participants in the Hiperdia service, a relevant portion have complications related to HAS, being 6,5% patients who have had strokes, 3,6% suffered acute myocardial infarction and relations of comorbidity feature that 36,1% of hypertensive patients have Diabetes Mellitus and 2,3% with chronic renal failure.

How to laminate and quantification of risk prognosis blood pressure (mmHg), it is population is classified mainly in medium risk with 33,4%, being the city of João Pessoa the more predominant in relation to classification of risks that stands out from low to very high.

## DISCUSSION

The delineation of the population with hypertension through hiperdia system proposes effective actions and suitable for integral care and treatment adherence, enables and reinforces the nurses, as well as other professionals, to join any therapeutic measures that focus the prevention of aggravations and complications of this disease, as well as establish educative actions in health promotion perspective. The delineation of the population with hypertension through hiperdia system proposes effective actions and suitable for integral care and treatment adherence, enables and reinforces the nurses, as well as other professionals, to join any therapeutic measures that focus the prevention of aggravations and complications of this disease, as well as establish educative actions in health promotion perspective. The delineation of the population with hypertension through hiperdia system proposes effective actions and suitable for integral care and treatment adherence, enables and reinforces the nurses, as well as other professionals, to join any therapeutic measures that focus the prevention of aggravations and complications of this disease, as well as establish educative actions in health promotion perspective.<sup>11</sup>

On this, you have to in the analysis of the results, there is a relevant population of elderly hypertensive patients. Corroborating with these findings, it is estimated that 65% of Brazilians are affected by the elderly HAS mainly referred to systolic pressure level, however by making relevant stratification of the risks of this, as well as the knowledge of comorbidities and the use of drugs.<sup>4</sup>

A study<sup>12</sup> conducted with seniors in Bambuí/RS demonstrated the high prevalence of chronic diseases, noting that the most common disease was hypertension with 61,5.

Still, a study<sup>13</sup> conducted in other Northeastern State on the causes of deaths among the elderly, it was observed that the diseases of the circulatory system is presented in emphasis among the three main groups of causes, also being considered the pathology with higher risk of death.

Among the results achieved, can once more, as well as other studies, demonstrate the phenomenon of feminization of old age permeates this population, due to the increase in life expectancy, the higher the quest for better health and absolute increase of this genre in the brazilian population that match the current default Brazilian demographic<sup>11,14</sup>.

Therefore, in a study<sup>15</sup> conducted in a basic health unit in the municipality João Pessoa/PB concerning the accession of treatment of hypertension for the elderly was found, as well as the data of this study, that the predominant age group is between 60-69 senior years, with emphasis on female literacy. Still, confirm that women have the habit of most health care, seeking more frequently in Hiperdia services.

Another study, which examined the prevalence of chronic disease in Brazil, according to the National Sample Survey and entering the PNAD-2003 to 2008, shows that

hypertension predominates among the pathologies, being more women diagnosed with HAS, due to the cultural factor, in that women have greater concern for health.<sup>16</sup>

Research reinforces the importance of the demand of care in relation to sex, and realize that women by their greater life expectancy tend to get weaker and with limitations to develop activity of daily living, due to being more likely to develop chronic diseases such as hypertension. Requiring awareness and sensitization of the female, on the search for better conditions of health and quality of life.<sup>17</sup>

As for the largest number of registration of hypertensives in the SIS-HIPERDIA in 2009 with the representation of 29,3%, justified from the epidemiological profile of this disease in Brazil, as data from the Risk and Protective Factors for Surveillance the Chronic Diseases Surveys Telefônicos- VIGTEL about morbidities show that hypertension is among the most morbidity in 2009 comprising 33,4% of the study population. In the state of Paraíba the same study found that 63,8% of the population aged 60 and over are female corresponding to the data found in this study.<sup>18</sup>

In relation to life habits, was obtained as a result predominantly sedentariness with 44,3%, resulting in a population with high rate of overweight with 30,8%. Some authors in their research confirms that the indicators presented are characterised as risk factors for the worsening of hypertension, as well as the predisposition to comorbidity, being one of the leading causes of death and disability throughout the country.<sup>4,11</sup>

Moreover, surveys show that even the elderly hypertensive individuals with knowledge of healthy practices to maintain adequate blood pressure levels as not being elitist, smoker and sedentary, yet they do not put into practice their knowledge.<sup>15</sup>

Repeated surveys, the population aging and the unhealthy lifestyle, are responsible for increments of CNCD, among these the most hypertension behaving asymptomatic.<sup>18</sup>

The complications associated with HAS presented in another study with higher prevalence stroke followed by the IAM, which refers to a serious problem of public health with greater commitment of the State of health of these individuals and concomitantly costly expenditures on health.<sup>11</sup>

Among the hypertensive elderly with Comorbidities that feature in relation to the data from the DATASUS, Diabetes Mellitus is prevalent with 36,1%. The high prevalence of hypertension and diabetes is considered in epidemiological profiles from all over the country, and the largest growth confirm progressions onset of these diseases with age, which makes relevant the increase of basic attention to meet the health needs of the population.<sup>19</sup>

Study examines the Association of Comorbidities hypertension and diabetes are often found in the temporal and geographical evolution Brazil, presenting itself as an important public health problem in the country, since they require higher spending, being these pathologies commonly associated conditions.<sup>20</sup>

## CONCLUSION

Dessarte, the characterization of the hypertensive patients registered in the Registration system and monitoring of Hypertensive and diabetic (HIPERDIA) demonstrated, through the results that the elderly hypertensive patients registered in the State of Paraíba, consistent with the epidemiological profile.

So, you know-if the relevance of considering in scientific studies of elderly hypertensive groups. Yes, for which this pathology has an important impact factor in health, in that it is believed that the full service enables a higher registration of these seniors and monitoring the health status of the basic attention to health.

This follow-up provides better coverage and epidemiological knowledge of HAS, but also promotes strategic policies for prevention of diseases of hypertension and the promotion of the health of seniors.

Among the achievements stand out, the process of feminization of old age and the search of the elderly for better health, as well as the risk factors triggered by inappropriate life habits and the interrelation of hypertension-diabetes.

However it is suggested, a magnification of indicators in relation to the study population to best characterize it, such as the expansion of demographic data partners. As well as government entities and managers awareness, as well as the whole society about the need for implementation of new health strategies and the promotion of a better quality of life of the elderly.

## REFERENCES

1. Brasil. Ministério do Planejamento, Orçamento e Gestão [Internet]. Fundação Instituto Brasileiro de Geografia e Estatística. Indicadores sociodemográficos e de saúde no Brasil 2009. Rio de Janeiro: Instituto Brasileiro de Geografia e Estatística; 2009 [acesso 2012 Mar 13]. Disponível em: [http://www.ibge.gov.br/home/estatistica/populacao/indic\\_sociosaude/2009/indicsaude.pdf](http://www.ibge.gov.br/home/estatistica/populacao/indic_sociosaude/2009/indicsaude.pdf)
2. Veras RP, Parahyba M I. O anacronismo dos modelos assistenciais para os idosos na área da saúde: desafios para o setor privado. Cad Saúde Pública [periódico na internet]. 2007 Out [acesso em 2012 Mar 13]; 23(10):2479-89. Disponível em: <http://www.scielo.br/pdf/csp/v23n10/22.pdf>
3. Brasil. Ministério do Planejamento, Orçamento e Gestão [Internet]. Fundação Instituto Brasileiro de Geografia e Estatística. Pesquisa Nacional por Amostra de Domicílios 2008. Um panorama da saúde no Brasil - acesso e utilização dos serviços, condições de



- saúde e fatores de risco e proteção à saúde. Rio de Janeiro: Instituto Brasileiro de Geografia e Estatística; 2008. [acesso 2012 Mar 13]. Disponível em: [http://www.ibge.gov.br/home/estatistica/populacao/trabalhoerendimento/pnad2008/sintese\\_pnad2008.pdf](http://www.ibge.gov.br/home/estatistica/populacao/trabalhoerendimento/pnad2008/sintese_pnad2008.pdf)
4. World Health Organization [Internet]. Noncommunicable diseases country profiles 2011. Geneva: World Health Organization 2011. [acesso 2012 Abr 27]. Disponível em: [http://www.who.int/nmh/publications/ncd\\_profiles\\_report.pdf](http://www.who.int/nmh/publications/ncd_profiles_report.pdf)
5. Brasil. Ministério da saúde. Secretaria de Atenção a Saúde. Departamento de Atenção Básica [Internet] Hipertensão arterial sistêmica para o Sistema Único de Saúde. Brasília: Ministério da saúde. 2006 [acesso 2013 jan 27]. Disponível em: [http://bvsms.saude.gov.br/bvs/publicacoes/caderno\\_atencao\\_basica15.pdf](http://bvsms.saude.gov.br/bvs/publicacoes/caderno_atencao_basica15.pdf)
6. Brasil. Ministério da Saúde. A vigilância, o controle e a prevenção das doenças crônicas não transmissíveis: DCNT no contexto do Sistema Único de Saúde brasileiro. Brasília: Organização Pan-Americana de Saúde, 2005, 80p.
7. Zillmer JGV; Schwartz E; Muniz RM. Avaliação da completude das informações do hiperdia em uma Unidade Básica do Sul do Brasil. Rev Gaúcha Enferm [periódico na internet]. 2010 [acesso 2013 Mai 27]; 31(2): 240-6. Disponível em: <http://seer.ufrgs.br/RevistaGauchadeEnfermagem/article/view/11967/10231>
8. Souza A, Costa A, Nakamura D, Mochete LN, Stevanato Filho PR, Ovando LA. Um estudo sobre hipertensão arterial sistêmica na cidade de Campo Grande, MS. Arq Bras Cardiol [periódico na internet]. 2007 [acesso em 2013 Mar 13]; 88(4):441-6. Disponível em: [http://www.scielo.br/pdf/abc/v88n4/en\\_13.pdf](http://www.scielo.br/pdf/abc/v88n4/en_13.pdf)
9. Brasil. Ministério do Planejamento, Orçamento e Gestão [Internet]. Fundação Instituto Brasileiro de Geografia e Estatística. Estados@. Rio de Janeiro: Instituto Brasileiro de Geografia e Estatística; 2009 [acesso 2012 Mar 13]. Disponível em: <http://www.ibge.gov.br/estadosat/perfil.php?sigla=pb>
10. Paraíba. Secretaria de Estado da Saúde Paraíba [Internet]. Plano Diretor de Regionalização da Paraíba. João Pessoa; 2008. [acesso 2012 Mar 13]. Disponível em: <http://www.saude.pb.gov.br/site/PDR08.pdf>
11. Borges JWP, Moreira TMM, Rodrigues MTP, Oliveira ASS, Silva DB, Santiago LM. Hypertensive patients with complications registered at HIPERDIA in fortaleza, ceara: implications for nursing care. J res fundam care online [acesso em 2013 Nov 25]. 2013 Out/Dez; 5(4):556-65. Disponível em: [http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/2014/pdf\\_925](http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/2014/pdf_925)
12. Lima-Costa MF, Firmo JOA, Uchôa E. The Bambuí Cohort Study of Aging: methodology and health profile of participants at baseline. Cad Saúde Pública [periódico na internet]. 2011 Mar [acesso em 2012 Abr 25]; 27(3):s327-s35. Disponível em: [http://www.scielo.br/scielo.php?pid=S0102-311X2011001500002&script=sci\\_arttext](http://www.scielo.br/scielo.php?pid=S0102-311X2011001500002&script=sci_arttext)
13. Magalhães APR, Paiva SC, Ferreira LOC, Aquino TA. A mortalidade de idosos no Recife: quando o morrer revela desigualdades. Epidemiol Serv Saúde [periódico na internet]. 2011 Abr/Jun; [acesso em 2012 Jun 06]; 20(2):183-92. Disponível em: <http://scielo.iec.pa.gov.br/pdf/ess/v20n2/v20n2a07.pdf>
14. Brasil. Ministério do Planejamento, Orçamento e Gestão [Internet]. Fundação Instituto Brasileiro de Geografia e Estatística. Sinopse do Censo Demográfico 2010. Rio de

- Janeiro: IBGE; 2011 [acesso 2012 Mar 13]. Disponível em: <http://www.ibge.gov.br/home/estatistica/populacao/censo2010/sinopse.pdf>
15. Dourado CS, Costa KNFM, Oliveira JS, Leadebal ODCP, Silva GRF. Adesão ao tratamento de idosos com hipertensão em uma unidade básica de saúde de João Pessoa, Estado da Paraíba. *Acta Sci Health Sci* [periódico na internet]. 2011 [acesso em 2013 Mar 13]; 33(1):9-17. Disponível em: <http://periodicos.uem.br/ojs/index.php/ActaSciHealthSci/article/view/7708/7708>
16. Barros MBA, Francisco PMSB, Zanchetta LM, César CLG. Tendências das desigualdades sociais e demográficas na prevalência de doenças crônicas no Brasil, PNAD: 2003- 2008. *Ciênc saúde coletiva* [periódico na internet]. 2011 [acesso em 2013 Mar 13]; 16(9): 3755-68. Disponível em: <http://www.scielo.br/pdf/csc/v16n9/a12v16n9.pdf>
17. Borim FSA; Guariento ME; Almeida EA. Perfil de adultos e idosos hipertensos em unidade básica de saúde *Rev Bras Clin Med.* [periódico na internet]. 2011 Mar/Abr [acesso em 2013 Mar 13]; 9(2):107-11. Disponível em: <http://files.bvs.br/upload/S/1679-1010/2011/v9n2/a1832.pdf>
18. Brasil. Ministério da saúde. Secretaria de Atenção a Saúde. Departamento de Atenção Básica [Internet]. Coordenação Nacional de Hipertensos e diabéticos. Brasília: Ministério da saúde; 2011. [acesso 2013 Jan 27]. Disponível em: <http://www.rnpd.org.br/download/publicacoes/coordhadm.pdf>
19. Henrique NN. Hipertensão arterial e diabetes mellitus: um estudo sobre os programas de atenção básica. *Rev enferm UERJ* [periódico na internet]. 2008 Abr/Jun; [acesso em 2013 Mar 13]; 16(2):168-73. Disponível em: <http://www.facenf.uerj.br/v16n2/v16n2a05.pdf>
20. Freitas LRS; Garcia L P. Evolução da prevalência do diabetes e deste associado à hipertensão arterial no Brasil: análise da Pesquisa Nacional por Amostra de Domicílios, 1998, 2003 e 2008. *Epidemiol Serv Saúde* [periódico na Internet]. 2012 Mar [acessado em 2013 Abr 01]; 21(1): 07-19. Disponível em: <http://scielo.iec.pa.gov.br/pdf/ess/v21n1/v21n1a02.pdf>

Received on: 01/09/2015  
 Required for review: no  
 Approved on: 12/11/2015  
 Published on: 30/12/2015

Contact of the corresponding author:  
 Jullyana Marion Medeiros de Oliveira  
 João Pessoa - PB - Brasil  
 Email: [jullynamarion@hotmail.com](mailto:jullynamarion@hotmail.com)