



Journal of Nursing

Revista de Enfermagem

UFPE On Line

ISSN: 1981-8963

ORIGINAL ARTICLE

CHALLENGES OF AGING WITH HEALTH: HOSPITALIZED CLIENTS PROFILE WITH CHRONIC DISEASES

OS DESAFIOS DO ENVELHECER COM SAÚDE: PERFIL DE CLIENTES HOSPITALIZADOS COM DOENÇAS CRÔNICAS

DESAFÍOS DEL ENVEJECER CON SALUD: PERFIL DE CLIENTES HOSPITALIZADOS CON ENFERMEDADES CRÓNICAS

Carla Lube Chibante¹, Thayane Dias Santos², Fátima Helena Espírito Santo³

ABSTRACT

Objectives: to describe the hospitalized adults and elderly profile with chronic non-communicable diseases; to discuss the risk factors in adult and elderly people to have a healthy aging process. **Method:** descriptive, quantitative and cross-sectional study, being held with 60 adults and elderly in the wards of a female and male medical clinic of a University Hospital (RJ). Two different instruments were used for data collection: Socio-demographic identification and risk factor evaluation related to NCDs. For data interpretation a simple statistic analysis was performed. The research was approved by the Ethic Committee in Research, Opinion number nº 0277.0.258.000-11 **Results:** most of the hospitalized patients were male with a prevalent age group of 61 to 70 years old, showing overweight, sedentary and with inadequate diet. **Conclusion:** it is essential nursing care management by the nurse, implementing actions promoting health and active aging. **Descriptors:** Chronic Disease; Aging; Nursing Care

RESUMO

Objetivos: descrever o perfil de adultos e idosos hospitalizados com doenças crônicas não transmissíveis; discutir os fatores de risco nos indivíduos adultos e idosos na perspectiva do processo de envelhecimento saudável. **Método:** estudo descritivo, quantitativo e transversal, realizado com 60 adultos e idosos nas enfermarias de clínica médica feminina e masculina de um Hospital Universitário (RJ). Utilizaram-se dois instrumentos para coletar dados: identificação sociodemográfica e avaliação dos fatores de risco relacionados às DCNTs. Para a interpretação dos dados, foi realizada análise estatística simples. A pesquisa teve o projeto aprovado pelo Comitê de Ética em Pesquisa, parecer nº 0277.0.258.000-11. **Resultados:** a maioria dos sujeitos hospitalizados era do sexo masculino, com faixa etária prevalente de 61 a 70 anos, apresentava sobrepeso, sedentários e com dieta inadequada. **Conclusão:** é essencial que o enfermeiro realize o gerenciamento dos cuidados de enfermagem implementando ações que promovam um envelhecimento saudável e ativo. **Descritores:** Doença Crônica; Envelhecimento; Cuidados de Enfermagem.

RESUMEN

Objetivos: describir el perfil de adultos y ancianos hospitalizados con enfermedades crónicas no transmisibles; discutir los factores de riesgo en los individuos adultos y ancianos para el proceso de envejecimiento saludable. **Método:** estudio descriptivo, cuantitativo y transversal, realizado con 60 adultos y ancianos en las enfermerías de clínica médica femenina y masculina de un Hospital Universitario (RJ). Se utilizaron dos instrumentos para recoger datos: identificación sociodemográfica y evaluación de los factores de riesgo relacionados a las ECNTs. Para interpretación de los datos fue realizada análisis estadística simple. La investigación tuvo su proyecto aprobado por el Comité de Ética en Investigación, parecer nº 0277.0.258.000-11 **Resultados:** la mayoría de los sujetos hospitalizados era del sexo masculino, con faja etária prevalente de 61 a 70 años, presentaba sobrepeso, sedentarios y con dieta inadecuada. **Conclusión:** es esencial que el enfermero realice el gerenciamento de los cuidados de enfermería, implementando acciones que promuevan un envejecimiento saludable y activo. **Descritores:** Enfermedad Crónica; Envejecimiento; Cuidados de Enfermería.

¹Nurse, Master degree student in Health Care Science of the Fluminense Federal University/UFF. Niterói (RJ), Brazil. Email: carla.chibante@ig.com.br; ²Resident Nurse, Federal Hospital of State Employees/UNIRIO. Rio de Janeiro (RJ), Brazil Email: thaydsantos@hotmail.com; ³Nurse, PhD Professor in Nursing, Medical-Surgical Nursing Department, Nursing School Aurora de Afonso Costa, Fluminense Federal University/MEM/EEAAC/UFF. Niterói (RJ), Brazil. E-mail: fatahelen@hotmail.com

INTRODUCTION

Currently we experience some changes in health paradigms, and this is specially because one of the most remarkable and challenging event in today societies, that is the population aging worldwide observed. An assessment of the World Health Organization shows that there will be a significant increase of the population up to 60 years old in the next years. In 2025 there will probably be 800 million people up to 65 years old around the world.¹

This vertiginous increasing of elderly people is causing big changes in the ways of thinking and living the old age, because together with this demographic transition, there are the epidemiological transition process, characterized by the reduction of mortality by communicable infectious and parasitic diseases, increase of mortality by non-communicable diseases and by external causes, changing the big morbidity and mortality from youth groups to the elderly.²

Besides the possibility of living more, this changing in health of population profile has increased the non-communicable chronic diseases (NCDs) resulting in prevalence of disabling morbidities, which may cause significant impact on independence and quality of life of individuals and hence more costs in the health sector.

Non-communicable chronic diseases (NCDs) are disorders staying in individuals for a long period of time and mainly including cardiovascular diseases, cancer, respiratory diseases, diabetes and musculoskeletal. They are multifactorial diseases related to non-modifiable risks factors such as age, gender and race and modifiable factors related to habits such as smoking and excessive alcohol consumption, excessive consumption of saturated animal fats, excessive consumption of salt, insufficient intake of fruits and vegetables and physical inactivity.³

It is essential to do early detection of people's vulnerability, promotion and education to encourage healthy living practices decreasing the development of these chronic conditions and consequently reducing health costs of hospitalizations.

The concept of vulnerability is linked not only by personal characteristics (gender, age, ethnicity, education, income), but also by the conditions acquired during life or result from lifestyle, of developing strategies and skills to cope with trauma and disease.⁴

The aging process is a natural phenomenon affecting all human beings differently, it is

constant and continuous, influenced by many factors such as heredity, diet, health state, life experiences, environment, activity, stress producing unique effects on each person. It is characterized by a decreased functional reserve, which added to years of exposure to various risk factors, makes the elderly more vulnerable to diseases.⁵⁻⁶

It is important to invest in strategies to control non-communicable chronic diseases through the identification of risk factors for these pathologies with the implementation of prevention and promotion of health activities such as incentive to change their habits and adoption of a healthier lifestyle involving physical activity, healthy diet and limiting consumption of alcohol and tobacco during all stages of life, which can contribute to reducing mortality and complications from these diseases.¹

It is highlighted the healthy aging, central focus of the National Health Care for the Elderly, understood as the process of aging with preservation of functional ability, autonomy and quality of life. To promote healthy aging means developing actions to guide the elderly and individuals in the aging process of the importance of constantly improving of its functional abilities through the early adoption of healthy lifestyle habits and elimination of unhealthy behaviors.⁵

Due to these new characteristics of the population, Nursing need to expand its focus of research and practice to the aging process, understanding the client, whether adult or elderly, at all levels of health care, recommending actions that prioritize a long, healthy and active life. In this perspective, this study aims to:

- Describe the profile of hospitalized adults and elderly with NCD
- Discuss the risk factors in adults and elderly people in the healthy aging process.

METHODOLOGY

The article was elaborated from the monograph << Hospitalization and NCDs: educational perspectives of nurses >> presented to the Graduation Nursing Course and Bachelor of Nursing School Aurora Afonso Costa, Fluminense Federal University/UFF. Niterói- RJ, Brazil. In 2012.

This is a descriptive and cross-sectional study with a quantitative approach, performed in the wards of female and male medical clinic of a University Hospital located in the State of Rio de Janeiro/RJ.

The research investigated the total population of adults and elderly, between

January and March 2012, hospitalized in the wards of male and female medical clinic of the hospital. Thus, 60 subjects were selected using the following inclusion criteria: being 18 years old or older; being hospitalized in the female and/or male medical clinic between January and March 2012; having no physical or mental disability described in the medical records that might interfere with data collection for the research; signing of the consent form and having physician diagnosis recorded in the medical record of any NCD. Exclusion criteria were: clients with mental and/or psychiatric disorders that might interfere with participation in the research; and subjects whose medical records were not available during the data collection.

The variables in the study were: 1) demographic data: gender, age and marital status; 2) nature anthropometric data: weight, height, BMI and waist circumference; 3) health history data: changes in lipid profile and high blood pressure; 4) information about family history: among relatives of first and second degree; 5) life habits related to lifestyle: dietary pattern, physical activity and smoking.

For data collection two instruments were used: one to identify the socio-demographic variables and the other to assess the history of health along with the assessment of personal living habits, anthropometric data and risk factors associated with NCDs.

Data were collected by the researcher in the wards of male and female medical clinic, where she selected possible research subjects. After confirmation of patient records, physician diagnosis of some NCDs, the subjects were invited to participate in the study by signing the consent form. The instruments were completed by the researcher as clients responded to the questions. A total of 60 instruments were collected, having no data losses.

In the tabulation of data, Microsoft Office Excel 2007® program was used. The findings were presented in two tables with distribution of absolute and relative frequencies.

Because this research involved human beings, directly or indirectly, in whole or part, including the management of information, it becomes essential to ensure and respect the rights of the study subjects, according to Resolution 466/12 of the National Health Council of the Ministry of Health. Therefore, the protocol was approved by the Ethics Committee in Research of the University Hospital, CAAE number: 0277.0.258.000-11.

RESULTS

◆ Socio-demographic data

Among the 60 participants, 58.33% were male and 41.67% female. The age of the subjects was separated by groups and the average age was 53.20 ± 16.34 years old with a minimum age of 18 years old and maximum of 87 years old. The most prevalent age group was 61 to 70 years old (25%), followed by individuals with 51 to 60 years old (23.3%) (Table 1).

The marital status of the participants was mostly including married people who maintain stable relationships (50%). Others were single (30%), widowed (13.3%) and separated and/or divorced (6.7%). Relating the variable gender and the presence of a partner, it was found that 33.3% of men have a partner, which is opposed to women who 26.7% live without a partner (Table 1).

◆ Anthropometric data

Weight and height of the subjects were collected to calculate the Body Mass Index (BMI). The result showed that 66.7% of the subjects were overweight and 5% obese class I. About waist circumference, whose reference is different between males (<102cm) and women (<88cm), a method was used to warn people about the health risks caused by overweight and obesity. Among men, 82.85% had waist circumference above 102cm, and women, 72% were above 88 cm (Table 2).

◆ Health history data

Changes in lipid profile were observed in laboratory examinations available in the records of the clients, where they examined the rates of cholesterol and triglycerides and 38.3% of the subjects had cholesterol alteration, that is higher than 200 mg/dl. In triglycerides, 48.3% were outside the normal range, that is greater than 150 mg/dl (Table 2).

Blood pressure was measured by sphygmomanometer, doing a single measurement with the client seated. The results were classified according to the criteria of the VI Brazilian Guidelines of Hypertension⁷, finding that 51.67% of clients were with the pressure below 130x85 mmHg and 48.33% had greater than or equal to 140x90 mmHg (Table 2).

◆ Family history data

The family history of diabetes, heart disease, hypercholesterolemia and hypertension were verified. This variable was classified into three categories: no family history; presence of a family history; the

presence of two or more family history. In the study, in Table 2 there is a higher prevalence of individuals with two or more family history. Among those who reported the presence of family history for only one condition, the presence of a history of hypertension (41.17%) was highlighted.

♦ Life habits data

Dietary patterns were checked according to the daily intake of the subjects with fruits and vegetables. Thus, a consumption of 3 to 5 servings of these foods a day and consuming less than 3 servings a day were classified. Among all the subjects, 60% reported not consuming at least the 3 servings of fruits and vegetables (Table 2).

The physical activity practice was classified into three levels: 1) inactive; 2) insufficiently active (physical activity at least once a week); 3) active (physical activity with weekly practice of at least 3 times a week lasting at least 30 minutes). In the study, 78.3% of clients reported no physical activity, 13.4% practice activity at least 3 times a week and 8.3% are insufficiently active (Table 2).

Smoking habit was investigated taking into account the current or past history of smoking cigarettes. Individuals were classified as “nonsmokers”; “ex-smokers”; and “smokers”. It was identified that 26.7% of clients are smokers and 28.3% reported that they stopped smoking (Table 2).

Table 1. Socio-demographic characteristics of adults and elderly with NCDs. Niterói, January-March, 2012.

Variables	n	%		Average ± DP
GENDER (N= 60)				
Men	35	58,33		
Women	25	41,67		
AGE DISTRIBUTION (n= 60)				53,20 ± 16,34
	Men	Women	n total	% total
18 ÷ 30 years old	05	04	09	15
31 ÷ 40 years old	02	01	03	6,7
41 ÷ 50 years old	05	05	10	16,7
51 ÷ 60 years old	09	05	14	23,3
61 ÷ 70 years old	08	07	15	25
71 ÷ 80 years old	06	01	07	11,7
>80 years old	00	02	02	3,3
MARITAL STATUS (n= 60)				
	Men	Women	n total	% total
Married	20	10	30	50
Widowed	03	05	08	13,3
Single	09	09	18	30
Separated	03	01	04	6,7

Table 2. Risk Factors of adults and elderly with NCDs. Niterói, January - March, 2012.

Variables					n	%
Anthropometric Data ⁿ⁼⁶⁰						
BMI						
Under weight (<18,5)					02	3,33
Normal weight (18,5÷24,9)					15	25
Overweight (25÷29,9)					40	66,7
Obesity class I (30÷34,9)					03	5
Waist Circ.		Men		Women		
	<102 cm	06	<88 cm	07	13	21,7
	≥102 cm	29	≥88 cm	18	47	78,3
Health Hist. Data ⁿ⁼⁶⁰						
Cholesterol						
Normal (<200)					37	61,7
Out of range (≥200)					23	38,3
Triglycerides						
Normal (<150)					31	51,7
Out of range (≥150)					29	48,3
Blood Preasure						
<130x85 mmHg					31	51,67
≥140x90 mmHg					22	48,33
Family Hist. Data ⁿ⁼⁶⁰						
No history					20	33,3
1 history					17	28,3
2 or + histories					23	38,4
Life Hab. Data ⁿ⁼⁶⁰						
Dietary Patterns						
3 to 5 serving of FLV					24	40
< 3servings of FLV					36	60
Physical Activity						
Inactives					47	78,3
Insufficiently Actives					05	8,3
Actives					08	13,4
Smoking						
Nonsmokers					27	45
Ex-smokers					17	28,3
Smokers					16	26,7

DISCUSSION

This study shows that in the gender, most adults and elderly individuals were male. This data is relevant since according to estimates by the Brazilian Institute of Geography and Statistics (IBGE) the number of men is higher until 19 years old. After 20 years old there is an increase in the quantity of women expressively representing 5.8 million more women than men in Brazil with a higher concentration in the older age groups.⁸

In this sense, we can realize according to some studies, that men generally suffer more severe conditions and chronic of health throughout their life than women, with rates of hospitalization for these higher conditions, specially due to the difficulty in follow up their state of health, generating a pre-disposition for acute events, besides being more hospitalizations at a high cost.⁹⁻¹⁰ Additionally, the National Research by Household Sample (PNAD) showed that men die earlier and have less care than women. This data can be associated with the phenomenon of the feminization of old age as a result of gender inequality in life expectancy.⁸

With regard to the age profile, it is noticed that there was a higher prevalence of hospitalizations of elderly males aged 61 to 70 years old, which demonstrates a higher consumption of health services by this group due to the higher frequency of hospitalizations and the highest bed occupancy rates compared to other age groups,¹¹ however, studies have revealed that these high costs of health care in this population has not been reverted to their advantage, since the elderly do not receive a medical or psychosocial approach appropriate in these environments, and evaluated only the chief complaint and not the individual as a whole, which has created difficulties in the rehabilitation of this old and consequently successive hospitalizations.¹²

The marital status showed differences in gender, where men mostly living with a partner and women lose their mates to be alone. Studies corroborate these findings that men tend to remarry again.¹²⁻¹³

The issue of the loss of a spouse for an adult means the loss of the old one which was closest partner for many years. This loss affects more women than men because they tend to have a longer life expectancy, beyond widowers do not get much time alone, joining a new partner.⁵

In anthropometric data, the association of the measurement of waist circumference and BMI, as proposed by OMS¹, combina-da can offer a form of risk assessment and help decrease the limitations of each of the assessments isolated. Thus, the use of these two measures to better assess the risk factors for chronic diseases were chosen.

The Body Mass Index (BMI) is one of the ways used to assess the prevalence of overweight and obesity. According to the Pan American Health Organization (PAHO) obesity and overweight are important for the development of chronic diseases such as hypertension risk factors, type 2 diabetes, cardiovascular disease and some cancers.¹⁴

Another parameter used during the research for the evaluation of visceral fat was on waist circumference is associated with increased risk of cardiometabolic diseases. We observed that adults and elderly of both genders are presented above the cutoff points, which means that all subjects studied were at risk of metabolic and cardiovascular complications.

The systemic arterial hypertension (SAH) occupies a prominent place in the context of epidemiological transition, it is a chronic non-communicable disease, asymptomatic, with greater exposure and susceptibility of people to a series of injuries that can impair quality of life. It is the highest disease prevalence among diseases and non-communicable diseases. Dyslipidemia may be already the cause and consequences of various disorders, especially cardiovascular and endocrine nature.¹⁵

Health history data showed that blood pressure, cholesterol and triglyceride are with controlled values by most subjects. This question can be associated with the fact of hospitalized clients use of medications to control these variables. No studies evaluating the value of these variables during hospitalization were found. However, blood pressure and dyslipidemia are cited in articles that assess the profile of population exposure to risk factors for NCDs.¹⁶⁻¹⁷

With regard to family history of chronic diseases, there is a higher prevalence of clients with two or more histories. Because it is a non-modifiable risk factor, the presence of history for diabetes, hypercholesterolemia, hypertension and cardiovascular diseases has relevance to the subsequent development of such diseases as reported by some authors stressing the importance of considering family history as an early indicator of chronic diseases.^{15,18}

In related to lifestyle variable it was found that most clients have a poor diet in fruits and vegetables. According to WHO estimates, the World Health Report, the low intake of these food is among the main risk factors that contribute to mortality in the world, increasing the risk of chronic diseases such as cardiovascular disease and some types of cancer.¹⁹ The Ministry of Health recommends a daily intake of at least three servings of fruits and vegetables in its Food Guide.³

Physical inactivity has demonstrated a strong correlation with the development of non-communicable chronic diseases. The practice of regular physical activity has been recognized as an important component of a healthy life style. In the study, it was identified a high percentage of sedentary individuals, as well as other studies that investigated the prevalence of risk factors for chronic diseases.¹⁷⁻¹⁸

Smoking is a risk factor related to increased morbidity and mortality from coronary heart disease, hypertension, stroke, bronchitis, emphysema and cancer. Although the study has identified that the majority was classified as "non-smoker", there is a significant percentage of customers who smoke or who have quit smoking (Table 2). Thus, smoking along with physical inactivity are significant for the high medical cost.³

Due to the NCD had multiple etiology, prolonged course, the long latency period and may originate from young ages, one realizes that these diseases in the elderly constitute a serious problem, which result in certain limitations in activities of daily living (ADLs) and instrumental activities of daily living (IADL), thus causing a major impact on independence and autonomy, while also being the leading causes of death among these individuals.⁵

It is essential that nurses undertake the management of nursing care by using a systematic approach, making use of existing decision-making for research. Therefore, it is important to undertake a research of patient data, determining the nursing diagnoses and identify the results, design planning of health actions, implement interventions, and finally, evaluate the actions and the client's progress toward the expected results.⁵ Therefore, using the evidence-based practice can be back up not only for curing diseases but also for the prevention of diseases and promotion of health of the subjects from infancy to old age, thus reducing the risks and health complications throughout life, promoting a healthy and active aging.

CONCLUSION

The non-modifiable risk factors, such as gender, age and family history, and modifiable, which are amenable to intervention or control, such as overweight by BMI, waist circumference, physical inactivity, inadequate dietary patterns were identified, rates of cholesterol and high triglycerides, smoking and hypertension were verified.

It was observed that most clients are overweight, do not regularly eat fruits and vegetables, do not exercise and have a family history of disease, especially diseases of the circulatory and endocrine and metabolic. Thus, the way of living, the lifestyle and choices of each individual may indicate risk factors and vulnerability to illness and the question of the potential risk to the process of hospitalization. Therefore, it is necessary that during hospitalization nurses perform interventions aimed at hospital discharge planning, health education and guidance aimed at self-care and self care of customers in the hospital environment.

Since the chronicity comes together with the individual throughout his life, sometimes complications can occur because there is no process of stimulation of self-care. From the moment that the client feels valued and integrated into the process of care, it can also feel responsible for their own care, which fosters and rescues their autonomy and independence from this chronic condition. Then, the nurse needs to understand and intervene in the limitations of these clients in order to encourage changes in lifestyle to improve their quality of life.

REFERENCES

1. Organização Mundial da Saúde (OMS). Envejecimiento y salud. 65ª Asamblea Mundial de la Salud; 2012.

2. Costa EFA, Porto CC, Almeida JC. Semiologia do Idoso. In: Porto CC. Semiologia Médica. 4ª ed. Rio de Janeiro: Guanabara-Koogan; 2009. p.165-197.

3. Ministério da Saúde (BR). Diretrizes e recomendações para o cuidado integral de Doenças Crônicas Não-Transmissíveis: promoção da saúde, vigilância, prevenção e assistência. Brasília (DF); 2008. 72 p. - (Série B. Textos Básicos de Atenção à Saúde).

4. Nichiata LYI, Bertolozzi MR, Takahashi RF, Fracolli LA. A utilização do conceito "vulnerabilidade" pela enfermagem. Rev Latino-Am Enfermagem [Internet]. 2008 Oct [cited 2012 Oct 03]; 16(5): 923-28. Available

from: <http://dx.doi.org/10.1590/S0104-11692008000500020>

5. Eliopoulos C. Enfermagem Gerontológica. 7th ed. Porto Alegre: Artmed; 2011.

6. Costa EFA, Porto CC, Soares AT. Envelhecimento populacional brasileiro e o aprendizado de geriatria e gerontologia. Revista da UFG [Internet]. 2003 Dez [cited 2012 Sept 24]; 5(2). Available from: http://www.proec.ufg.br/revista_ufg/idoso/envelhecimento.html

7. Sociedade Brasileira de Cardiologia. VI Diretrizes Brasileiras de Hipertensão. Arq Bras Cardiol 2010; 95 (supl.1): 1-51.

8. Instituto Brasileiro de Geografia e Estatística (IBGE). Censo Demográfico Brasileiro. 2010 [cited 2012 Sept 20]. Available from: http://www.ibge.gov.br/home/estatistica/populacao/censo2010/tabelas_pdf/

9. Gomes R, Nascimento EF, Araújo FC. Por que os homens buscam menos os serviços de saúde do que as mulheres? As explicações de homens com baixa escolaridade e homens com ensino superior. Cad Saúde Pública [Internet]. 2007 Mar [cited 2012 Sept 20];23(3):565-74. Available from: <http://www.scielo.br/pdf/csp/v23n3/15.pdf>

10. Justo AM, Fernandes FECV, Sobral PHAF, Siqueira VB, Nascimento EA. Custos das internações hospitalares entre idosos usuários do Sistema Único de Saúde. J Nurs UFPE on line [Internet]. 2013 Oct [cited 2013 Oct 19]; 7 (10): 6013-8. Available from: <http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/view/3403/pdf/3661>

11. Sthal HC, Berti HW, Palhares VC. Caracterização de idosos internados em enfermaria de pronto-socorro quanto à vulnerabilidade social e programática. Esc Anna Nery [Internet]. 2010 Oct-Dec [cited 2012 Sept 23];14(4):697-704. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1414-81452010000400007

12. Alvarenga MRM, Mendes MMR. O perfil das readmissões de idosos num hospital geral de Marília/SP. Rev Latino-Am Enfermagem [Internet]. 2003 May-June [cited 2012 Sept 24]; 11(3): 305-11. Available from: http://www.scielo.br/scielo.php?pid=S0104-11692003000300007&script=sci_arttext

13. Pestana, LC. Perfil de idosos em situação de readmissão hospitalar: implicações para enfermagem gerontológica [dissertação]. Rio de Janeiro: Escola de Enfermagem Aurora de Afonso Costa, Universidade Federal Fluminense; 2011.

14. Organização Pan-Americana da Saúde (OPAS). Doenças crônico-degenerativas e obesidade: estratégia mundial sobre alimentação saudável, atividade física e saúde. Brasília, 2007.

15. Teixeira RC, Mantovani MF. Enfermeiros com doença crônica: as relações com o adoecimento, a prevenção e o processo de trabalho. Rev Esc Enferm USP [Internet]. 2009 [cited 2012 Sept 30];43(2):415-21. Available from: <http://www.scielo.br/pdf/reeusp/v43n2/a22v43n2.pdf>

16. Monteiro CA, Moura EC, Jaime PC, Lucca A, Florindo AA, Figueiredo ICR *et al.* Monitoramento de fatores de risco para doenças crônicas por entrevistas telefônicas. Rev Saude Publica [Internet]. 2005 [cited 2012 Sept 23];39(1):47-57. Available from: <http://www.scielo.br/pdf/rsp/v39n1/07.pdf>

17. Yokota RTC, Vasconcelos TF, Ito MK, Dutra ES, Baiocchi KC, Hamann EM *et al.* Prevalência de fatores de risco para doenças crônicas não-transmissíveis em duas regiões do Distrito Federal. Comun Ciênc Saúde. 2007 Out-Dez [cited 2012 Oct 12];18(4): 289-96.

18. Veras VS, Monteiro LZ, Landim CAP, Xavier ATF, Pinheiro MHNP, Montenegro Junior RM. Levantamento dos fatores de risco para doenças crônicas em universitários. RBPS [Internet]. 2007 [cited 2012 Oct 12];20(3):168-72. Available from: <http://ojs.unifor.br/index.php/RBPS/article/view/1021/2181>

19. Organização Mundial da Saúde. Relatório Mundial da Saúde. Financiamento dos sistemas de saúde: o caminho para a cobertura universal. 2010 [cited 2012 Sept 23]. Available from: http://www.who.int/whr/2010/whr10_pt.pdf

Chibante CL, Santos TD, Espírito Santo FH.

Challenges of aging with health: hospitalized...

Submission: 2013/10/27

Accepted: 2014/07/29

Publishing: 2014/09/01

Corresponding Address

Carla Lube de Pinho Chibante
Rua Silveira Martins, 164/ 905
Bairro Catete
CEP 22221-000 – Rio de Janeiro (RJ), Brazil