

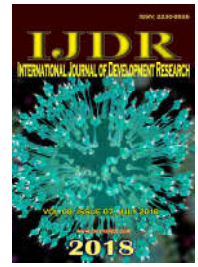


ISSN: 2230-9926

Available online at <http://www.journalijdr.com>

# IJDR

*International Journal of Development Research*  
Vol. 08, Issue, 07, pp.21791-21795, July, 2018



ORIGINAL RESEARCH ARTICLE

OPEN ACCESS

## ASSOCIATION BETWEEN CHRONIC ILLNESSES AND SELF-PERCEPTION OF HEALTH IN ELDERLY PEOPLE

<sup>1</sup>Érica Paula Santos Pessoa, <sup>2</sup>Geane Figueredo Santos, <sup>1</sup>Priscila Barbosa Oliveira Côrtes, <sup>1</sup>Talita Sousa Vitória, <sup>1</sup>Letícia Oliveira Gois and <sup>3</sup>Isnanda Tarciera da Silva

<sup>1</sup>Physiotherapy Undergraduate by Northeast Independent College, Vitória da Conquista, Bahia, Brazil

<sup>2</sup>Physiotherapist graduated by Northeast Independent College, Vitória da Conquista, Bahia, Brazil

<sup>3</sup>Master in Health Sciences, Professor of the Physiotherapy Degree at Northeast Independent College, Vitória da Conquista, Bahia, Brazil

### ARTICLE INFO

#### Article History:

Received 20<sup>th</sup> April, 2018

Received in revised form

06<sup>th</sup> May, 2018

Accepted 21<sup>st</sup> June, 2018

Published online 30<sup>th</sup> July, 2018

#### Key Words:

Self-perception,  
Chronic illness,  
Aging population.

### ABSTRACT

The goal is to examine the connection between chronic illnesses and self-perception of health in elderly people. It is an epidemiological study, census-based with a cross-sectional design and a quantitative approach of descriptive and exploratory nature. The elderly participant of this research were the ones that attended at the Social Assistance Reference Center of Barra do Choça-BA, where there were applied three questionnaires the Mini Mental State Examination, followed by the Brazilian Old Age Schedule and, at last the questionnaire of non-transmittable chronic illnesses taken from PNAD. Of the 25 elderly people assessed, 67.9% reported having a good health self-perception, and when comparing their recent health with 5 years ago, 64.3% considered their health worse. The presence of chronic illnesses is not a determining factor to provide health negative perception. There are various factors that influence the elderly self-perception of health, but in accordance with this study, there wasn't association between chronic illnesses and self-perception of health.

Copyright © 2018, Érica Paula Santos Pessoa et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Érica Paula Santos Pessoa, Geane Figueredo Santos, Priscila Barbosa Oliveira Côrtes, Talita Sousa Vitória, Letícia Oliveira Gois and Isnanda Tarciera da Silva. 2018. "Association between chronic illnesses and self-perception of health in elderly people", *International Journal of Development Research*, 8, (07), 21791-21795.

### INTRODUCTION

The non-transmittable chronic illnesses (NTCI) affect thousands of people around the world, representing more than 70% of the causes of death in Brazil where the most common co morbidities are heart conditions, neuropsychiatric illnesses, chronic respiratory illnesses, cancer and diabetes (IBGE, 2013). The risk factors with more predominance are inadequate eating habits, sedentarism, abusive consumption of alcohol and drugs, which contribute to the rise of chronic illnesses (CRUZ *et al.*, 2017). Getting to know the environmental, economic and social determinants that intervene in the expressions of these illnesses it is possible to perform actions' planning that have as goal the prevention and reduction of them.

\*Corresponding author: Érica Paula Santos Pessoa,  
Physiotherapy Undergraduate by Northeast Independent College,  
Vitória da Conquista, Bahia, Brazil.

A report by the World Health Organization (WHO) in 2014 announced that of the 38 million deaths in 2012 by NTCI, 42% were premature and preventable (OPAS, 2015). This way, NTCI are a major public health problem that affects people's quality of life, causing disabilities and negatively affecting the individual health (OLIVEIRA *et al.*, 2017). Health nowadays is considered a complete state of physical, mental and social well-being, however little is said about the psychosocial aspects like the health self-perception, which represents great relevance in the subject well-being. Self-perception of health involves the assessment that the individuals make about their own health, can be in a positive or negative way. It involves physical and emotional aspects that may affect the individual's quality of life, besides being an important health indicator that contributes to the individual's mortality rates and physical malfunctions (Nunes *et al.*, 2012). Self-assessment is of multidimensional in character, which can be influenced by

psychological, demographic and socioeconomic aspects (Confortin *et al.*, 2015). Knowing the factors that affect the self-perception of health helps in the elderly profile design and enables the search for strategies to change the conditions that intervene in a negative way this population. In the literature it is possible to check that the self-perception is related to several factors, however little is stated about the association with NTCI, being that these pathologies present a high incidence in the current population. This way, the study has as goal to analyze the association of chronic illnesses and self-perception of health in elderly people.

## MATERIALS AND METHODS

It is an epidemiological study, census-based with a cross-sectional design and a quantitative approach of descriptive and exploratory nature that is part of a subproject of the main project titled "Self-perception of health and linked factors in elderly participants in recreational activities in community". It was performed with all the elderly of both sexes participating in the group of recreational activities of the Center of Reference and Social Assistance (CRAS) of a city in the interior of Bahia, The place was chosen by convenience for the facility of access to the information. The cognitive impairment assessed by the Mini Mental State Examination (MMSE) was adopted as exclusion criteria, having a hearing impairment that comitted the questionnaire's application and didn't appear in the interaction group during the collection period. The elderly that accepted to participate in the research signed the Informed Consent Form (ICF) and they were aware that the study is of voluntary nature and that they could stop participating in the research at any time without this causing any kind of burden. Data collection was carried out at CRAS before or after the interactive group meeting and if necessary it could be performed at another place of the elderly's preference.

It was applied an instrument drawn by the authors of this study, which was composed of validated questionnaires in Brazil: the MMSE (Folstein, 1975), followed by the Brazilian Old Age Schedule (BOAS) (Veras, 2008) and, final questions on non-transmittable chronic illnesses taken from the National Sample Survey of the Domicile (PNAD) (Ibge, 2003). The instrument was applied by four physiotherapy undergraduate students who were properly trained and standardized inter and intra evaluated, following the criteria established by the authors for the application of each questionnaire. The MMSE is an instrument that assesses the subjects cognitive function, investigating aspects such as spatial and temporal orientation, comprehension, repetition, immediate memory and evocation, language, calculation and attention (Folstein *et al.*, 1975). The score used in this study was proposed by Bertolucci *et al.* (1994), which considers the Brazilian elderly schooling. This varies from 0 to 30 points, that characterize the individual who presents  $\geq 26$  points as normal; the suggested cutoff points were 13 for illiterates, 18 for low / medium schooling, and 26 for high schooling. The MMSE is a low-cost test, in addition to being easy to apply however it should not be used for diagnostic purposes and rather to evaluate cognitive functions, requiring a complementary investigation (Melo, 2015). BOAS is a multidimensional instrument created in 1986 in England that assesses several socio-communitarian aspects of the elderly population (Meira *et al.*, 2014). It was translated and validated to Brazil in 2007 and has high credibility because it is based on other instruments with acceptable standards of validity.

The BOAS is shared in 9 sections, being: section I: general information; section II: physical health; section III: use of medical and dental services; section IV: daily life activities; section V: social resources; section VI: economic resources; section VII: mental health; section VIII: necessities and problems affecting the respondent; section IX: interviewer's evaluation. In this study, there were used only sections I and II (VERAS; DUTRA, 2008). The non-transmittable chronic illnesses questionnaire, extracted from the National Household Sample Survey (PNAD) 2003, which consists of a sociodemographic search of the local population with national coverage. This questionnaire enables the verification of the prevalence of chronic illnesses and the existence of some limitation that prevents the person from performing their daily chores, as well as to check the frequency that these individuals use the health services (Barros *et al.*, 2006). The data tabulation was done in the Epi Data Software v. 3.1, in double typing to delete errors that may occur in the database feeding process. The analysis was performed in a descriptive and analytical form in SPSS v. 21.0. The descriptive analysis counts on the distribution of absolute and relative frequencies for the categorical variables and for the numerical variables, there were analyzed mean and standard deviation. To investigate the link between the variables, the Pearson Chi-square test and the Fisher's exact test were performed using a significance level of 5% ( $p \leq 0.05$ ). This was approved by the Research Ethics Committee (CEP) of the Independent Northeast College, under the opinion number approval 1,859,534 and CAAE 62562916.6.0000.5578, according to all norms and determinations of Resolution 466/12 of the National Health Council for research with humans.

## RESULTS

In this study, 74 subjects were evaluated, 5 were deleted because they were not 60 years old, 1 because was cognitively impaired, 30 because they didn't attend CRAS recreational activities and 10 because refused participation, this way the total of 28 elderly people participated in the study. In Table 1 it is possible to check that the gender with the highest prevalence was female (78.6%). In relation to the age group, 57.1% were 60-69 years of age, and 64.3% of the elderly were literate. In relation to the monthly income of the studied population, 60.7% receive less than 1 minimum salary. In the definition of the elderly health conditions, 67.9% stated as having a good health self-perception and when comparing their recent health with 5 years ago 64.3% considered their health worse (Table 2). Of the 28 elderly people interviewed, 25 use medications and have some type of chronic illness, with spinal diseases having a higher prevalence in this population (60.7%). Concerning the daily life basic activities, 96.4% of the elderly were considered independent. It was assessed that there is no relation between self-perception of health and chronic illnesses reported by the elderly (Table 3). Of the 25 subjects who had some type of chronic illness, 18 assessed their health in a positive way, even using medications. Of the individuals with spine condition (64.7%) and with hypertension (81.3%), most part declared positive self-perception.

## DISCUSSION

The Self-perception is a major indicator of health status that when considered bad, rises the risk of morbidities and mortalities, harming the elderly's well-being (Ribeiro *et al.*, 2018).

**Table 1. Population sociodemographic Characterization. Vitória da Conquista, 2017**

VARIABLE	N	%
<b>Sex</b>		
Male	6	21,4
Female	22	78,6
<b>Age group</b>		
60-69	16	57,1
70-79	11	39,3
80 or more	1	3,6
<b>Can read and Write</b>		
Yes	18	64,3
No	10	35,7
<b>Marital Status</b>		
Married/Living Together	19	67,9
Widow(er)	8	28,6
Never married	1	3,5
<b>Amount of Children</b>		
None	1	3,6
Until 3 children	7	25,0
4 or more	20	71,4
<b>Monthly Income</b>		
Less than 1 salary*	17	60,7
1 salary* or more	11	39,3

\*MS: Minimum salary. Source: Research Data

**Table 2. Description of the elderly health conditions. Vitória da Conquista, 2017**

VARIABLE	N	%
<b>Self- perception of Health</b>		
Great	1	3,6
Good	19	67,9
Bad	6	21,3
Terrible	1	3,6
Doesn't know/ Didn't answer	1	3,6
<b>Health Comparison with 5 years ago</b>		
Better	3	10,7
Same thing	7	25,0
Worse	18	64,3
<b>Fall on the last 3 months</b>		
Yes	4	14,3
No	24	85,7
<b>In continence episodes</b>		
Yes	4	14,3
No	24	85,7
<b>Medication use</b>		
Yes	25	89,3
No	3	10,7
<b>DLBA *Functionality</b>		
Dependent	1	3,6
Independent	27	96,4
<b>DLIA **Functionality</b>		
Dependent	15	53,6
Independent	13	46,4
<b>Presence of chronic illness</b>		
Yes	25	89,3
No	3	10,7
<b>Presence de spine condition</b>		
Yes	17	60,7
No	11	39,3
<b>Presence of arthritis</b>		
Yes	10	35,7
No	18	64,3
<b>Presence of Diabetes Mellitus</b>		
Yes	8	28,6
No	20	71,4
<b>Presence of Hypertension</b>		
Yes	16	57,1
No	12	42,9
<b>Presence of heart condition</b>		
Yes	3	10,7
No	25	89,3

\*DLBA: Daily life basic activities.

\*\*DLIA: Daily life Instrumental activities.

Source: Research Data

**Table 3. Relation between self-perception of health and chronic illnesses Vitória da Conquista, 2017**

VARIABLE	Self-perception of health				p-value
	Positive		Negative		
	N	%	N	%	
<b>Presence of chronic illnesses</b>					<b>1,000</b>
Yes	18	72,0	7	28,0	
No	2	66,7	1	33,3	
<b>Medicine use</b>					<b>0,188</b>
Yes	19	76,0	6	24,0	
No	1	33,3	2	66,7	
<b>Presence of spine condition</b>					<b>0,419</b>
Yes	11	64,7	6	35,3	
No	9	81,8	2	18,2	
<b>Presence of arthritis</b>					<b>0,400</b>
Yes	6	60,0	4	40,0	
No	14	77,8	4	22,2	
<b>Presence of Diabetes Mellitus</b>					<b>1,000</b>
Yes	6	75,0	2	25,0	
No	14	70,0	6	30,0	
<b>Presence of Hypertension</b>					<b>0,231</b>
Yes	13	81,3	3	18,8	
No	7	58,3	5	41,7	
<b>Presence of heart condition</b>					<b>1,000</b>
Yes	2	66,7	1	33,3	
No	18	72,0	7	28,0	

Source: Research Data

Health perception is highlighted as a subjective element, however it enables a large comprehension of the particular individual needs and factors that influence the patient's daily life, like life habits, disabilities and socioeconomic factors. This way, it is up to the professional to check the aspects that may contribute and promote improvements in the individual's health status (Carvalho *et al.*, 2012). In this research it was possible to check that 67.9% of the elderly had a positive self-perception of health. This result corroborates with the study done by Dresch *et al.* (2017), who assessed a group of 50 elderly people living in a city in Vale do Rio dos Sinos, and even though they are suffering from chronic illnesses and living with all limitations generated, 52% of the elderly consider their health to be good. Data also found in the research performed by Pilger, Menon and Mathias (2011) in which 54.6% of the elderly had a positive self-perception. Chronic illnesses leads to many disabilities and bring great harm to the individual's health, however the presence of these comorbidities is not a determinant factor to provide a negative perception of health according to this study, of which 89.3% of the elderly were carriers of some type of chronic illness. Considering the presence of multiple comorbidities, these individuals are prone to the use of polypharmacy (Almeida *et al.*, 2017). Of the individuals evaluated, 89.3% use medicines and even with this high rate the elderly reported having a good health perception (76%).

The presence of chronic illness as well as the use of medicine on a continuous basis could bring some kind of discontent on the elderly's part, being exhaustive to adjust the daily routine of medication administration (SILVA *et al.*, 2012). According to Confortin *et al.* (2015), the use of polypharmacy, something common in patients with chronic illnesses, can cause clinical changes like some type of side effect, deteriorating health conditions and consequently the perception of health becomes negative. For subjects in this research, the presence of chronic illnesses and the use of medications are not factors that directly influence health self-perception. This fact can be explained by the practice of physical activities, of which according to Pavão, Werneck and Campos (2013), more active people tend to have a positive self-perception of health when compared to sedentary people.

Physical exercise is an important form of preventing several diseases and also promoting a healthier lifestyle. The practice of physical exercise promotes the elderly's autonomy, offers improvement in functionality, besides benefiting the psychological status and increasing social relations (SOUZA; VENDRUSCULO, 2010). This way, physical inactivity negatively affects the subject's functionality, increasing the chances of creating a fast physiological decline (BORGES *et al.*, 2014). The practice of physical exercise increases the positive health perception, reduces the incidence of chronic diseases and also premature death (Maciel, 2010).

According to Camboim *et al.* (2017) physical activity is essential in the third age, to reduce the physiological and psychological declines of aging, being important in reducing the risks of depression and loss of functional capacity. Among these benefits it is still possible to mention the control of blood pressure and body weight, improvement in balance and venous return, reinforcement of the immune system, promoting benefits in sleep quality, mood and self-esteem (Viana, 2017). Even knowing the significance of physical exercise in the prevention of chronic illnesses the indication in health units is yet weak, prioritizing treatment and neglecting prevention. This way, it is necessary to invest more in projects that promote a qualified service in the prevention of chronic illnesses and that show the importance of physical exercise in reducing these morbidities, sedentarism and of polypharmacy and improving the quality of life and self-perception of health. Among the limitations identified in this study, it is possible to quote the sample size that is somewhat small. It is implied that other researches are performed that have as goal to approach the health self-perception in the elderly people with the purpose of identifying other factors that may change the population's self-perception of health.

### Conclusion

There are various factors that impact the elderly self-perception of health, however according to this study there wasn't a link between chronic illness and health self-perception. Health Self-perception is a subjective factor that depends on the particularity of each person in which the

subject can be affected by a chronic illness and even so report a positive perception, while another subject may have no comorbidity and have a negative perception. Recognizing the variables that influence the self-perception of health is important, since it affects the elderly and it is linked to general health conditions, reflecting the functionality, social and cultural values of the subject. This way the self-perception of health does not just examine the physical health, but the subject life quality.

## REFERENCES

- Almeida NA, Reiners AAO, Azevedo RCS, Silva AMC, Cardoso JDC, Souza LC 2017. Prevalência e fatores associados à polifarmácia entre os idosos residentes na comunidade. *Rev. Bras. Geriatr. Gerontol.* 20(1): 143-53.
- Barros MBA, César CLG, Carandina L, Torre GD (2006). Desigualdades sociais na prevalência de doenças crônicas no Brasil, PNAD-2003. *Ciência & Saúde Coletiva.* 11(4): 911-26.
- Bertolucci PHF, Brucki SMD, Campacci SR, Juliano Y 1994. O mini-exame do estado mental em uma população geral: impacto da escolaridade. *Arq Neuropsiquiatr.* 52(1): 1-7.
- Borges AM, Santos G, Kummer JA, Fior L, Molin VD, Wibelinger LM (2014). Autopercepção de saúde em idosos residentes em um município do interior do Rio Grande do Sul. *Rev. Bras. Geriatr. Gerontol.* 17(1): 79-86.
- Carvalho FF, Santos JN, Souza LM, Souza NRM 2012. Análise da percepção do estado de saúde dos idosos da região metropolitana de Belo Horizonte. *Rev. Bras. Geriatr. Gerontol.* 15(2): 285-93.
- Camboim FEF., Nóbrega MO., Davim RMB., Camboim JCA, Nunes RMV., Oliveira SX. 2017. Benefícios da atividade física na terceira idade para a qualidade de vida. *Rev Enferm Ufpe Online.* 11(6): 2415-22. Disponível online em: <https://periodicos.ufpe.br/revistas/revistaenfermagem/article/viewFile/23405/19070>.
- Confortin SC, Giehl MWC, Antes DL, Schneider IJC, d'Orsi E 2015. Autopercepção positiva de saúde em idosos: estudo populacional no Sul do Brasil. *Cad. Saúde Pública.* 31(5):1049-60.
- Cruz MF, Ramires VV, Wendt A, Mielke GI, Martinez MJ, Wehrmeister FC. 2017. Simultaneidade de fatores de risco para doenças crônicas não transmissíveis entre idosos da zona urbana de Pelotas, Rio Grande do Sul, Brasil. *Cad. Saúde Pública.* 33(2).
- Dresch FK., Barcelos ARG., Cunha GL., Santos GA., 2012. Condição de saúde auto percebida e prevalência de doenças crônicas não transmissíveis em idosos atendidos pela estratégia da saúde da família. *Conhecimento Online.* 2(9): 118-27. Disponível online em: <http://periodicos.feevale.br/seer/index.php/revistaconhecimentoonline/article/view/1183>.
- Folstein M., Folstein S., Mchugh P 1975. "Mini-mental state". A practical method for grading the cognitive state of patients for the clinician. *J Psychiatr Res.* 12(3): 189-98.
- Instituto brasileiro de geografia e estatística – ibge [Internet]. Pesquisa Nacional por Amostra de Domicílios. Acesso e utilização dos Serviços de Saúde – 2003. Disponível online em: <http://www.ibge.gov.br/home/estatistica/populacao/trabalhoerendimento/pnad2003/saude/default.shtm>
- Instituto brasileiro de geografia e estatística – ibge [Internet]. Pesquisa nacional de saúde: 2013: percepção do estado de saúde, estilos de vida e doenças crônicas : Brasil, grandes regiões e unidades da federação. Disponível online em: <https://www.ibge.gov.br/estatisticas-novoportal/sociais/saude/9160-pesquisa-nacional-de-saude.html?edicao=9161&t=publicacoes>.
- Maciel MG 2010. Atividade física e funcionalidade do idoso. *Motriz. Revista de Educação Física.* 16(4): 1024-32.
- Meira SS, Vilela ABA, Casotti CA, Anjos ACF, Silva DM 2014. Considerações acerca das condições de vida de idosos no Vale do Jequitinhonha, Minas Gerais - Brasil. *Serv. Soc. Rev.* 17(1): 159-77.
- Melo DM, Barbosa AJG 2015. O uso do Mini-Exame do Estado Mental em pesquisas com idosos no Brasil: uma revisão sistemática. *Ciência & Saúde Coletiva.* 20(12): 3865-76.
- Nunes APN, Barreto SM, Gonçalves LG 2012. Relações sociais e autopercepção da saúde: Projeto Envelhecimento e Saúde. *Rev Bras Epidemiol.* 15(2): p.415-28.
- OPAS - Organização Pan-Americana da Saúde. Disponível online em: [https://www.paho.org/bra/index.php?option=com\\_content&view=article&id=4766:doencas-cronicas-nao-transmissiveis-causam-16-milhoes-de-mortes-prematuras-todos-os-anos&Itemid=839](https://www.paho.org/bra/index.php?option=com_content&view=article&id=4766:doencas-cronicas-nao-transmissiveis-causam-16-milhoes-de-mortes-prematuras-todos-os-anos&Itemid=839).
- Pavão ALB, Werneck GL, Campos MR 2013. Autoavaliação do estado de saúde e a associação com fatores sociodemográficos, hábitos de vida e morbidade na população: um inquérito nacional. *Cad. Saúde Pública.* 29(4): 723-34.
- Pilger C, Menon MH, Mathias TAF 2011. Características sociodemográficas e de saúde de idosos: contribuições para os serviços de saúde. *Rev. Latino-Am. Enfermagem [internet].* [acesso 2018 abr 27] 19(5): [09 telas]. Disponível em: [http://www.scielo.br/pdf/rlae/v19n5/pt\\_22.pdf](http://www.scielo.br/pdf/rlae/v19n5/pt_22.pdf).
- Ribeiro ED, Matozinhos FP, Guimarães GL, Couto AM, Azevedo RS, Mendoza IYQ 2018. Autopercepção de saúde e vulnerabilidade clínico-funcional de idosos de Belo Horizonte/Minas Gerais. *Rev Bras Enferm.* 71(suppl2): 914-21. Disponível online em: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S0034-71672018000800860&lng=en&tlng=en](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-71672018000800860&lng=en&tlng=en).
- Silva RJS., Menezes AS., Tribess S., Perez VR., Júnior JSV. 2012. Prevalência e fatores associados à percepção negativa da saúde em pessoas idosas no Brasil. *Rev Bras Epidemiol.* 15(1): 49-62.
- Souza DL., Vendrusculo R. 2010. Fatores determinantes para a continuidade da participação de idosos em programas de atividade física: a experiência dos participantes do projeto "Sem Fronteiras". *Rev. bras. Educ. Fís. Esporte.* 24(1): 95-105.
- Veras R, Dutra S 2008. Perfil do idoso brasileiro: questionário boas. Rio de Janeiro: UERJ, UnATI, 100 p.
- Viana, AM., Junior, GA. 2017. Qualidade de vida em idosos praticantes de atividades físicas. *Rev. psicol Saúde e Debate.* 3(1): 87-98.