

65 - PRACTICE OF PHYSICAL ACTIVITY AND PERCEPTION OF HEALTH IN THE ELDERLY FROM CANINDÉ-CE

DÉBORAH SANTANA PEREIRA;
RÚBENS CÉSAR LUCENA DA CUNHA;
IALUSKA GUERRA;
NARCÉLIO PINHEIRO VICTOR;
CARLOS ANTÔNIO BRUNO DA SILVA

Instituto Federal de Educação Ciência e Tecnologia do Ceará – IFCE, Campus Juazeiro do Norte.
Juazeiro do Norte, Ceará, Brasil.

deborahsan@gmail.com

doi: 10.16887/85.a2.65

INTRODUCTION

The aging world population is increasingly evident by the increase in longevity caused by numerous factors in health care. The Brazilian Institute of Geography and Statistics (IBGE, 2008) says Brazil has aged quickly and intense way, and this population will reach 30.9 million in 2020.

The old age is therefore characterized by a decreased functional capacity of tissues and organs, increasing the chances of the emergence of several chronic degenerative and metabolic diseases, which leads, inevitably, to death (VITORELLI; PESSINI; SILVA, 2005). If there is a concern about these issues in advance from certain actions, we can control the risk factors through prevention / promotion, reducing the chances of illness and death.

The chronic non-communicable diseases now represent a global health problem and is the leading cause of death in Brazil, and among the shared risk factors, is found the physical inactivity (SCHMIDT et al., 2011).

The sedentarism of modern man is at odds with the ancestral genome. This fact causes dysfunctions in gene expression, thereby predisposing to chronic noncommunicable diseases, prompting the inactive person is not considered a healthy person (GUALANO; TINUCCI, 2011).

The physical activity is defined as any bodily movement produced by skeletal muscles resulting in energy expenditure higher than resting levels. Included in this concept the occupational activities, basic and instrumental activities of daily living, leisure activities and displacements (MATSUDO, 2010; NAHAS, 2010). But the physical exercise, which is structured, planned, repetitive, and aiming to increase / maintain health. In this case, includes the activities of moderate and intense levels, dynamic or static (NAHAS, 2010).

In this context, the physical exercise is regarded as one of the solutions for prevention and health promotion of the elderly. It becomes crucial as the individual ages, as well as act in the preservation and maintenance of functional capacity (BELLONI, 2008;) favor high self-esteem and low occurrence of depressive symptoms (MEURER et al, 2012), in addition to providing leisure activities and interaction (DEPONTI; ACOSTA, 2010).

In this way, the aim of this study is to analyze the level and physical activity, and health perception of elderly residents in the Canindé city, central backwoods of Ceará State.

MATERIALS AND METHODS**Design and study site**

It is about a quantitative study, transversal, domiciliary based, using primary and objective data. The place defined as an area of study was the urban area of Canindé city, located in the region called central backwoods of Ceará.

Population and sample

The population of the study consisted of elderly residing in the urban area of the city of Canindé- CE, namely, 5,214 seniors. The sampling characterized as proportional stratified, reached a sample of 372 individuals (7.13% of the population). The calculation of sample size was done using the formula indicated for finite populations (less than 100,000 units).

All persons were included in the survey, regardless of sex, with age or older than 60 (sixty) years in the period of data collection, non institutionalized and living in the Canindé city for at least six months. Seniors who don't reside at least six months in the city, unable to communicate, having serious neurological condition, wheelchair, morbidly obese, with disability for physical activity by disease or recent surgery and that refuse to participate were excluded.

Instruments

The sample was identified through a characterization questionnaire, which addressed sociodemographic, physical activity and health perception. I was used the International Physical Activity Questionnaire - IPAQ, long version (MATSUDO, 2010), to evaluate the level of physical activity.

Procedures

The data collection was conducted through home survey. The elderly were drawn from the streets / avenues and numbers of residences, in proper proportion to each district.

Data analysis

After registration of the data was made a database using SPSS (Statistical Package for Social Science), version 16.00, to descriptive statistics (mean, median, mode, standard deviation and percentages) and inferential (Kolmogorov-Smirnov^a, Chi square), according to the the variables studied, adopting a significance level of 5% (p < 0.05). The results were presented in tables and graphs.

Ethical aspects

The proposed project was submitted to the Ethics Committee in research involving human beings from University of Fortaleza - UNIFOR (approval number 244 796), and proceeded in accordance with Resolution 466 of 12/12/2012 of the National Health Council (CNS), with regard to respect for the person, beneficence and justice, among others (BRAZIL - MS, 2013). The sample were asked about the voluntariness participate in the study, through the free informed consent form (ICF).

RESULTS

In this study, 372 elderly were achieved, with an average age of 71.01 (+ 9.23 SD), and minimum age of 60 years and maximum 96 years old. The mode found was 60.00 and variance of 85.364. The normality test ($p < 0.01$) showed that the sample is not considered normal.

Table 1 shows that the elderly studied, most are female (64.0%), aged between 60 to 69 years (51.9%) and married (53.5%).

Table 1: Sample characterization. Canindé - CE, Brazil, 2013.

VARIABLES	N	%
GENDER		
Male	134	36,6
Female	238	64,0
AGE		
60-69 years	193	51,9
70-79 years	103	27,7
80 years above	76	20,4
MARITAL STATUS		
Single	25	6,7
Married	199	53,5
Divorced	06	1,6
Widower	115	30,9
Separated	27	7,3
TOTAL	372	100,0

In a study by Silva et al. (2012), with 384 elderly residents in urban Quixadá-CE, city also located in the central region of the state of Ceará, observed several nearby with this study, including the percentages found. Also there was a predominance of females (64.3%), aged 60-69 years (41.0%) and married marital status (56.0%). This fact indicates the uniformity of this region of the state, allowing inferences on various aspects as the other cities that make up the entire central region of Ceará.

In the study by Salvador et al. (2009), in which attended 385 elderly from Ermelino Matarazzo district, located in the East Zone of São Paulo, the majority of females (60.5%), aged 60-74 years (57.1%), and single, divorced or widowed marital status (54.2%).

Questioned whether elderly practice or no any type of physical activity - PA (Table 2), the majority (64.0%) answered no. Making an analysis between intervals of age, statistically significant differences ($p < 0.01$) were found, proving, in the sample, an association between intervals of age and the practice of PA, highlighting a much lower frequency of practice (11.8%) in people from 80 years old.

As for physical exercise, have long known the benefits provided by this regular practice in old age, however, note a marked rate of physical inactivity in the elderly Brazilian population. Domingues and Neri (2012) argue that much of the population remains in the sedentary lifestyle, does not adhere to exercise programs, thus ignoring the possibility of compromising the health and quality of life.

Table 2: Frequency and percentage of physical activity

AGE	PRACTICE OF PHYSICAL ACTIVITY				Total	χ^2
	Yes		No			
	N	%	N	%		
60-69 years	77	39,9	116	60,1	193	<0,01
70-79 years	48	46,6	55	53,4	103	
80 years +	09	11,8	67	88,2	76	
TOTAL	134	36,0	238	64,0	372	

χ^2 : Chi-square test

From the seniors who reported engaging in physical activity, 02 of them (1.5%) began recently, with less than a month of practice, ie, without the necessary time to realize the physiological changes. Also with little practice time (up to 03 months) are 19 elderly (14.2%), with the majority of them, that corresponds to 78 elderly (58,2%), said to practice for at least more than one year (Table 3).

It was asked to the elderly practitioners if they noticed any change in your health after the practice of PA, and a total of 126 (94.0%) affirmed positively. Among the changes highlighted, a greater willingness for daily activities and greater joint mobility were the most frequent. Also noteworthy is the decrease in muscle and bone pain, weight loss, welfare, strength, decrease in medication use, improved sleep, and improvement in the treatment of specific diseases.

Table 3: Frequency and percentage of time for physical activity

TIME	N	%
≤1 month	02	1,5
Up 3 months	19	14,2
4-6 months	25	18,7
7 months - 1 year	10	7,5
≥ 1 year	78	58,2
Total	134	100,0

Rondon and Brum (2003) observe that the practice of physical exercise for at least one year, we can already see some effects, such as changes that affect the cardiovascular system; however, should be also considered the frequency, intensity and duration of sessions in the training.

Engaging in physical activity, being irregularly, does not ensure that the elderly is sufficiently active. To do so, should be considered the type of activity, frequency and duration. The level of Physical Activity can present the following classification: sedentary and active enough, ie those who attain or not the World Health Organization (WHO) recommendation of > 05 weekdays and >150 minutes.

This way, the table 04 reveals that the majority of the elderly (58.9%) is sedentary, 41.1% of them being sufficiently

active. Statistically significant differences between Level and Physical Activity and age ($p < 0.01$) were found, revealing that the higher the age, lower were the frequencies of the sufficiently active seniors.

Table 04: Frequency and percentage of Level of Physical Activity

AGE	LEVEL OF PHYSICAL ACTIVITY				Total	χ^2
	Sedentary		Active enough			
	N	%	N	%		
60-69 years	92	47,7	101	52,3	193	<0,01
70-79 years	64	62,1	39	37,9	103	
80 years +	63	82,9	13	17,1	76	
TOTAL	219	58,9	153	41,1	372	

χ^2 : Chi-square test

The study by Nascimento et al. (2008) detected a low level of physical activity in the elderly from Rio Claro-SP, being most prominent in male gender, possibly due to the greater involvement of women in domestic activities.

There are several studies (MINGHELLI et al, 2013; RONDON; BRUM, 2003) that emphasize a positive relationship between high level of physical activity and better health status, in relation to diseases such as hypertension and type 2 diabetes.

Individually or collectively, a healthy lifestyle should be encouraged, both for prevention and for aid in treating certain diseases. Negative behaviors can cause, and still tend to aggravate some situations, causing losses to the health and quality of life.

FINAL CONSIDERATIONS

Based on the sample, the study concludes that the majority of the elderly in Canindé city is female gender, aged 60-69 years, married. Observes a profile of elderly that can be found not only in cities of Ceará, but in other parts of Brazil, which enables the construction of comparisons and inferences on populations.

The sedentarism, outside the indicated frequency was considered an unhealthy behavior. It is evident that further guidance must be given to the elderly in these aspects, having also an awareness of the healthy practices, leading, in fact, an empowerment of the population.

It is noticed that most of the elderly of the research has a good perception of health, independent the concept they have.

This study was limited to just the Canindé city, which fits the suggestion of the development of new research covering the elderly from other cities and regions of Brazil, also involving other health-related behaviors and quality of life.

REFERENCES

- BELLONI, D., et al. Estudo comparativo entre a autonomia funcional de mulheres idosas praticantes e não praticantes de hidroginástica. *Revista de Educação Física*, São Paulo, v.140, p. 20-26. 2008.
- BENEDETTI, T. R. B.; MAZO, G. Z.; BORGES, L. J. Condições de saúde e nível de atividade física em idosos participantes e não participantes de grupos de convivência de Florianópolis. *Ciência & Saúde Coletiva*, Rio de Janeiro, v. 17, n. 8, p. 2087-2093, 2012.
- BRASIL. Conselho Nacional de Saúde. Diretrizes e normas regulamentadoras de pesquisas envolvendo seres humanos. Resolução nº 466/2012, (13, junho 2013). Disponível em: <http://conselho.saude.gov.br/resolucoes/2012/Reso466.pdf>. Acesso em: 18 nov. 2013.
- DEPONTI, R. N.; ACOSTA, M. A. F. Compreensão dos idosos sobre os fatores que influenciam no envelhecimento saudável. *Estudos Interdisciplinares sobre o Envelhecimento*, v. 15, n. 1, 2010.
- DOMINGUES, P. C.; NERI, A. L. Atividade física habitual, sintomas depressivos e doenças auto-relatadas em idosos da comunidade. *Revista Brasileira de Atividade Física & Saúde*, v. 14, n. 3, p. 164-173, 2012.
- GOMES, K. V.; ZAZÁ, D. C. Motivos de adesão a prática de atividade física em idosas. *Revista Brasileira de Atividade Física & Saúde*, v. 14, n. 2, p. 132-138, 2009.
- GUALANO, B.; TINUCCI, T. Sedentarismo, exercício físico e doenças crônicas. *Rev. Bras. Educ. Fís. Esporte* [online], v. 25, p. 37-43, 2011.
- INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA - IBGE. Projeção da população do Brasil por sexo e idade para o período 1980-2050 – Revisão 2008. Rio de Janeiro: Instituto Brasileiro de Geografia e Estatística, 2008, v.24.
- MATSUDO, S.M.M. Avaliação o idoso: Física e funcional. 3.ed. Londrina: CELAFISCS, 2010.
- MEURER, S. T. et al. Associação entre sintomas depressivos, motivação e autoestima de idosos praticantes de exercícios físicos. *Revista Brasileira de Ciências do Esporte*, v. 34, n. 3, 2012.
- MINGHELLI, B. et al. Comparação dos níveis de ansiedade e depressão entre idosos ativos e sedentários. *Rev. psiquiatr. clín.*(São Paulo), v. 40, n. 2, p. 71-76, 2013.
- NAHAS, M.V. Atividade física, Saúde e Qualidade de vida – Conceitos e sugestões para um estilo de vida ativo. 5.ed. 2010
- NASCIMENTO, C. M. C. et al. Nível de Atividade Física e as Principais Barreiras Percebidas por Idosos de Rio Claro. *Revista da Educação Física/UEM*, v. 19, n. 1, p. 109-118, 2008.
- RONDON, M.; BRUM, P. C. Exercício físico como tratamento não farmacológico da hipertensão arterial. *RevBrasHipertens*, v. 10, n. 2, p. 134-9, 2003.
- SALVADOR, E.P.; FLORINDO, A.A.; REIS, R.S.; COSTA, E. F. Percepção do ambiente e prática de atividade física no lazer entre idosos. *Rev Saúde Pública*, v. 43, n. 6, p. 972-80, 2009.
- SCHMIDT, M.I., et al. Doenças crônicas não transmissíveis no Brasil: carga e desafios atuais. *Lancet*. 2011; 4:6174. doi: 10.1016/S01406736 (11)601359.
- SILVA, L. J. et al. Association between levels of physical activity and use of medication among older women. *Cadernos de Saúde Pública*, v. 28, n. 3, p. 463-471, 2012.
- VITORELI, E.; PESSINI, S.; SILVA, M. J. P. A auto-estima de idosos e as doenças crônico-degenerativas. *Revista Brasileira de Ciências do Envelhecimento humano*, São Paulo, p.102-114, jan./jun., 2005.

PRACTICE OF PHYSICAL ACTIVITY AND PERCEPTION OF HEALTH IN THE ELDERLY FROM CANINDÉ-CE**ABSTRACT**

The old age phase can increase the chances of the emergence of several noncommunicable diseases, having as a shared risk factors, among others, the physical inactivity. The aim of the study is to analyze the practice and level of physical activity of elderly residents in the Canindé city, central backwoods of Ceará State. It is a quantitative study, transversal, domiciliary based, using primary and objective data. The proportional stratified sampling reached a sample of 372 individuals, of a population of 5214 elderly. We used a characterization questionnaire, covering sociodemographic aspects, health perception and practice of physical activities, the International Physical Activity Questionnaire - IPAQ. It was made a database in the SPSS software, version 16.00, to descriptive and inferential statistics, adopting a significance level of 5%. It was found that most seniors is female, aged between 60-69 years old, married and does not practice physical activity. Concerning the level of physical activity, the most are sedentary (58.9%). Regarding the perception of health the majority (76.3%) considers it as "good". Statistically significant differences were found between the ranges of age and physical activity level ($p < 0.01$) and physical activity ($p < 0.01$). Note the necessity of health strategies aimed at orientation and awareness of healthy behaviors such as physical activities.

KEYWORDS: Physical Activity; health; Elderly.

LA PRATIQUE D'ACTIVITÉ PHYSIQUE ET LA PERCEPTION DE SANTÉ CHEZ LES PERSONNES ÂGÉES DE CANINDÉ-CE**RESUMÉ**

La phase du vieillissement peut augmenter les chances de l'apparition de plusieurs maladies non transmissibles qui ont comme les facteurs de risque partagés, entre autres, l'absence d'activité physique. Le but de l'étude est d'analyser la pratique et le niveau d'activité physique de personnes âgées résidentes dans la ville de Canindé, arrière-pays central du Ceará. Il s'agit ici d'une étude quantitative, transversale, de base domiciliaire, avec l'utilisation de données primaires et objectives. L'échantillonnage stratifié proportionnel a atteint un échantillon de 372 individus, d'une population de 5.214 personnes âgées. Nous avons utilisé un questionnaire de caractérisation, en abordant les aspects sociodémographique, la perception de santé et la pratique d'activités physiques, l'International Physical Activity Questionnaire – IPAQ. Une base de données a été faite en utilisant SPSS, version 16.00, pour les statistiques descriptives et déductives, en adoptant un niveau de signification de 5%. Il a été constaté que la plupart des personnes âgées sont des femmes, âgées de 60 à 69 ans, mariées et ne pratiquent pas d'activité physique. En ce qui concerne le niveau d'activité physique, la plupart sont sédentaires (58,9%). Quant à la perception de santé la majorité (76,3%) la considère comme "bonne". Des différences statistiquement significatives ont été trouvées entre les intervalles d'âge et le niveau d'activité physique ($p < 0,01$). Remarquez le besoin de stratégies de santé qui visent l'orientation et la conscientisation de comportements sains, comme la pratique d'activités physiques.

MOTS-CLÉS: Activité Physique; Santé; Personne Âgée;

PRÁCTICA DE ACTIVIDAD FÍSICA Y PERCEPCIÓN DE SALUD EN ANCIANOS DE CANINDÉ-CE**RESUMEN**

La fase de la vejez puede aumentar las oportunidades del surgimiento de variadas enfermedades no contagiosas, que poseen como factores de riesgo compartidos, entre otros, la inactividad física. El objetivo del estudio es analizar la práctica y nivel de actividad física de ancianos residentes en la ciudad de Canindé, Interior Central del Ceará. Se trata de un estudio cuantitativo, transversal, de base domiciliar, con la utilización de datos primarios y objetivos. La muestra estratificada proporcional alcanza una muestra de 372 individuos, de una población de 5.214 ancianos. Se utilizó un cuestionario de caracterización, abordando aspectos sociodemográficos, percepción de salud y práctica de actividades físicas, el International Physical Activity Questionnaire – IPAQ. Fue confeccionado un banco de datos en el programa SPSS, versión 16.00, para estadísticas descriptivas y inferenciales, se adaptando el nivel de significancia de 5%. Constatándose que la mayoría de los ancianos es del sexo femenino, casada y no práctica actividad física. En cuanto al nivel de actividad física, la mayoría es sedentaria con edad entre 60 a 69 años, entraría (58,9%). En cuanto la percepción de salud la mayoría (76,3%) la considera como "buena". Fueron encontradas diferencias estadísticamente significantes entre los intervalos de edad y el nivel de actividad física ($p < 0,01$) y la práctica de actividad física ($p < 0,01$). Se nota la necesidad de estrategias de salud que visen la orientación y concientización de comportamientos saludables, como la práctica de actividades físicas.

PALABRAS CLAVE: Actividad Física; Salud; Anciano.

PRÁTICA DE ATIVIDADE FÍSICA E PERCEPÇÃO DE SAÚDE EM IDOSOS DE CANINDÉ-CE**RESUMO**

A fase da velhice pode aumentar as chances do surgimento de várias doenças não transmissíveis, que possuem como fatores de risco compartilhados, entre outros, a inatividade física. O objetivo do estudo é analisar a prática e nível de atividade física de idosos residentes na cidade de Canindé, Sertão Central do Ceará. Trata-se de um estudo quantitativo, transversal, de base domiciliar, com a utilização de dados primários e objetivos. A amostragem estratificada proporcional alcançou uma amostra de 372 indivíduos, de uma população de 5.214 idosos. Utilizou-se um questionário de caracterização, abordando aspectos sociodemográficos, percepção de saúde e prática de atividades físicas, o International Physical Activity Questionnaire – IPAQ. Foi confeccionado um banco de dados no programa SPSS, versão 16.00, para estatísticas descritivas e inferenciais, adotando-se o nível de significância de 5%. Constatou-se que a maioria dos idosos é do sexo feminino, com idade entre 60 a 69 anos, casada e não pratica atividade física. Quanto ao nível de atividade física, a maioria é sedentária (58,9%). Quanto à percepção de saúde a maioria (76,3%) a considera como "boa". Foram encontradas diferenças estatisticamente significantes entre os intervalos de idade e o nível de atividade física ($p < 0,01$) e a prática de atividade física ($p < 0,01$). Nota-se a necessidade de estratégias de saúde que visem a orientação e conscientização de comportamentos saudáveis, como a prática de atividades físicas.

PALAVRAS-CHAVE: Atividade Física; Saúde; Idoso.