18 - LEVEL OF PHYSICAL ACTIVITY IN OLDER ADULTS IN GUARAPUAVA- PR

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Introduction

The world population is aging and this is due to several factors such as technological advances made in the quality of medicines, antibiotics, vaccines and equipment that offer better support to the treatment of diseases that had not existed. Thus, there is a dramatic reduction in deaths during the first year of life and during childhood (PAPALIA et al., 2006).

The World Health Organization considers older adults people with 60 of age or more. This limit applies to developing countries, being 65 years of age in developed countries. The elderly today, represent almost 15 million people in the world. Estimates for the next 20 years show that the elderly population will reach 30 million people, representing almost 13% of the population (IBGE, 2000).

The dramatic growth of the elderly population can generate a large impact on the economy of the country and worsening socio-economic and health problems. In addition, aging is often accompanied by a sedentary life style, which favors the surge of chronic degenerative diseases, increasing the level of disability and dependence (MAZO; MOTA; GONÇALVES; MATOS, 2005).

Most elderly presents one or more chronic health problems. According to Brasil (2002, apud Baretto, 2005), lack of physical activity is a risk factor for chronic diseases, which represent 60% of deaths worldwide. For 2020, it is estimated that 73% of deaths are attributed to these diseases. The current trend is having a growing number of older adults who, in spite of having a greater longevity (length of an individual's life), have higher rates of chronic diseases. And the increase in the number of these diseases is directly related to greater functional disability (ALVES et. al., 2007).

According to the American College of Sports Medicine (1994 apud Gonçalves, 2004) there must be a program of physical activities that include: development of cardiovascular fitness (such as walking, running and swimming), improvements in strength and postural stability through exercises of balance, resistance exercises, transferring weight, dancing, flexibility and stretching that require joint mobility, as well as recreation activities that promote social interaction. The improvement of the older adults' self-esteem, therefore, brings benefits to their physical health, as they will do physical activities more frequently.

The recommended time of physical activity in the elderly population is the same for the adults and varies from 30 to 90 minutes daily, making an inverse relationship with intensity. Elderly at a greater physical weakness or beginners of the program of exercises may hold sessions in less time (five to ten minutes), held two or more times a day. The ideal is the practice of physical activity every day of the week. Thus, the benefits to health are greater (SBME / SBGG, 1999).

The assessment of the physical activity level of older people becomes an important procedure in terms of public health. The procedure used to evaluate the level of activities practiced is to assess the type, the weekly frequency, duration and intensity of physical activity performed and compared with the recommended for this population. The most known and used for this assessment is the International Physical Activity Questionnaire IPAQ. The IPAQ is a tool to estimate the weekly time spent on carrying out physical activities of moderate to vigorous intensity and in different areas of life (work, household chores, transportation and entertainment). There is the possibility of estimating the time spent in more passive activities (performed in a sitting position) (BENEDETTI; Mazo; BARROS, 2004).

The long version of the IPAQ has 27 questions related to physical activities, performed in a normal week, with vigorous intensity, moderate and mild, with a minimum duration of 10 continuous minutes, divided into four dimensions of physical activity (work, transportation, household activities and leisure) and the time spent per week in a sitting position. (BENEDETTI et al, 2007).

In a study by Salin (2006) 116 elderly participants of both genders were studied, from São Jose SC. The majority (85.9%) of the selected sample consisted of the female gender. Analyzing the physical activity level of older groups in São Jose / SC, it was observed that (92.4%) are more active and only (7.6%) are less active.

Recent research was conducted with 265 women aged above 60 years, in the urban area of Jequitié in Salvador BA. Using IPAQ questionnaire, the level of physical activity of the elderly were classified as: physically active (64.3%) and less active (35.5%). In the percentage of less active (7.5%) are included sedentary old women, who do not achieve the minimum recommended level of physical activity for this population. The socio-demographic characteristics showed that more than half of the sample is in the age group of 60-70 years (51.5%), and (48.5%) are widows. Most had low levels of schooling (89%) and (88.8%) were of low economic class (ROCHA, 2008).

In Guarapuava, no study has evaluated the physical activity level of older people. Therefore, the purpose of this study was to evaluate the level of physical activity of older people in the city of Guarapuava -Pr.

Methodology

The study is characterized as descriptive and cross (THOMAS, NELSON, 2002). The sample consisted of 120 subjects, 36 men and 84 women, living in the urban zone of Guarapuava in the period from July to September 2008. A sample of the population of elderly was obtained, through non-probability sampling technique and for convenience.

IPAQ questionnaire was used, long version, usual week, Version 8. The long version of the IPAQ has questions related to physical activities, performed in a normal week, with vigorous intensity, moderate and mild, with a minimum duration of 10 continuous minutes, divided into four dimensions of physical activity (work, transportation, household activities and leisure) and the time spent per week in a sitting position. The following classification for the level of physical activity was used: *sedentary* did not perform any physical activity for at least 10 continuous minutes during the week; *insufficiently active* is to classify individuals who practice physical activities for at least 10 continuous minutes per week, but in a insufficient way to be classified as active; a*ctive* individuals who were sufficiently active; and *very active*. To classify individuals in *active*, the length and frequency of different types of activity are added (walking + moderate + vigorous). This category meets the following recommendations: a) vigorous physical activity - $\geq$ 3 days / week and $\geq$ 20 minutes / session b) moderate or walk - $\geq$ 5 days / week and $\geq$ 30 minutes / session c) any activity added: $\geq$ 5 days / week and $\geq$ 150 min / week. The *very active* meets the following recommendations: a)

vigorous - ≥ 5 days / week and ≥ 30 min / session b) vigorous - ≥ 3 days / week and ≥ 20 min / session + Moderate and walk or 5 days / week and ≥ 30 min / session. The subjects of the study were approached in groups and received collective guidance on the record of the information in the questionnaire.

The distribution of the questionnaires was done in places where meetings happen with groups of elderly and in health clinics in several neighborhoods of the city: Santana, Vila Primavera, Santa Cruz, Batel, Bairro dos Estados and Cristo Rei. The questionnaire answering was voluntary and according to the understanding of the individual. All participants signed a Statement of Free and Informed Consent explaining the objectives and procedures of the study, authorizing their participation in the survey. It also ensured the anonymity of all research subjects.

The descriptive statistics was used to observe the distribution of the sample in relation to the categories proposed by instrument, the distribution of these categories by the difference between socioeconomic status, age groups and between different levels of physical activity. The data were presented on average and percentage.

Results and Discussion

The study population consisted of 120 individuals, aged 60 years or more, with an average age of 68.27 years, of both genders. The other socio-demographic characteristics are described in the table below.

Table - Socio-demographic characteristics and physical activity level of older people in Guarapuava-Pr

Variable	Categories	n	%
Age (yrs)	60-70	73	60.83
	71-80	39	32.5
	80 or more	8	6.6
Gender	Men	36	30.0
	Women	84	70.0
Marrital status	Single	8	6.6
	Married	59	40.16
	Widow / Widower	44	33.66
	Divorced / Separated	9	7.5
Education degree	Elementary school	98	81.66
	Incomplete high school	9	7.5
	High school	6	5.0
	Undergraduation	5	4.16
	Graduation	2	1.6
Ethnicity	Brazilian	107	89.16
	Mixed	5	4.16
	European	5	4.16
	Others	3	2.5
Own House	Yes	105	87.5
	No	15	12.5
Living alone	Yes	28	23.33
	No	92	76.66
Family Income	Up to one minimum wage	14	11.66
	One minimum wage	41	34.16
	From two to four wage	52	43.33
	More than four wage	13	10.83
Physical Avtivity Level	Sedentary	20	16.66
	Insufficiently active	16	13.33
	Active	40	33.33
	Very Active	44	36.66

In the socio-demographic characteristics identified in the table it is found that people aged 60 to 70 years represent more than half of the sample, which corresponds to 60.83% (n = 73), being 70% (n = 84) women. Salin (2006) found a similar percentage, noting that 85.9% of the sample was female. This information can be analyzed as a result of increased life expectancy of females at birth (GORDILHO, 2000).

The vast majority showed a low level of schooling. 81.66% (n = 98) has only the first degree, 89.16% (n = 98) is Brazilian, 40.16% (n = 59) are married, 87.5% (n = 105) have their own homes, 76.66% (n = 92) live with the family and 43.33% (n = 52) presents a monthly income between two and four minimum wages.

In relation to the level of physical activity. it is noticeable that most of the people interviewed 36.66% (n = 44) are classified as physically active, 33.33% (n = 40) very active, 16.66% (n = 20) sedentary and 13.33% (n = 16) insufficiently active. The results can be understood as Guarapuava is a city in development that shows rural habits, such as household chores, small plantations and crops without a lot of technology, which enables retired older people to be involved in small activities and consequently keeping a recommended level of physical activity.

According to Rocha (2008), a study with aged women above 60 years of age, in the urban area of Jequitié in Salvador BA, classified their level of physical activity in: most of the sample (64.3%) - physically active, and (35.5%) - less active. In the percentage of the less active, 7.5% are considered sedentary, as they do not achieve the minimum of physical activity recommended for this population. The socio-demographic characteristics showed that more than half of the sample is in the age group of 60-70 years (51.5%), and (48.5%) are widows. Most had low levels of schooling (89%) and (88.8%) were of low economic class. These results are different from our study only in relation to marital status and economic class.

The study by Salin (2006), which evaluated 116 elderly participants of both sexes from San Jose SC, confirms our study, analyzing the majority (85.9%) the sample was selected composed of older women. Analyzing the physical activity level of older groups of Living in San Jose / SC, it was observed that 92.4% are more active and only 7.6% are less active.

Conclusion

The purpose of this study was to identify the level of physical activity of the elderly in Guarapuava-PR. It was found that most of the population investigated can be considered physically active and very active, while a smaller part can be considered sedentary or insufficiently active. Thus, the sample falls within the parameters recommended for this population. It is suggested to carry out further studies with a larger sample to evaluate other variables, such as components of physical fitness and their relation to the level of physical activity among the elderly.

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LEVEL OF PHYSICAL ACTIVITY IN OLDER PERSON AT GUARAPUAVA CITY

ABSTRACT

With the technological advance, we have a significant increase in the life expectancy of the world-wide population. In all Brazilian states, a growth of the population segment of 75 years of age or more is the result of advances in modern medicine. The Brazilian aged population presents a total of 10.2% of the general population, being 50% between 60 andl 69 years, 36% between 70 and 79 years and 14% above 80 years of age, and the life expectancy for the Brazilian is 72,3 years. Like in any other life stage, some “bio-psycho-social” changes occur, and to keep these systems in balance, the involvement in regular physical exercises can add some benefits to this specific population. The objective of this study is to evaluate the physical activity level of older adults in Guarapuava-PR. It consisted on a transversal and descriptive study, having as references other studies in the area, with people over 60 years both genders, who live in the urban zone of the city. The sample will be composed by 120 individuals. The International Physical Activity Questionnaire (IPAQ) will be used, in the long form version 8. The Questionnaire aims to evaluate the level of physical activity during one normal week, at work, at home and in leisure time, classifying them in very active, active, insufficiently active and sedentary. Results showed that 36,66% (n=44) of the elderly were classified in the active level of physical activity, 33,33% (n=40) were very active, 16,66% (n=20) were sedentary and13,33% (n=16) insufficient active.

Keys words: older person, level of physical activity, sedentary lifestyle

NIVEAU D'ACTIVITÉ PHYSIQUE POUR LES PERSONNES ÂGÉES DANS GUARAPUAVA-PR

RESUMÉ

Avec les progrès technologiques, nous avons une augmentation significative de l'espérance de vie de la population mondiale. Dans tous les états du Brésil, il est plus forte La croissance de la population de 75 ans ou plus, en raison des progrès de la médecine moderne. La population des personnes âgées au Brésil présente son plein 10,2% de la population en général, et 50% ont entre 60 à 69 ans, 36% de 70 à 79 ans et 14% plus de 80 ans, et les estimations actuelles de la vie pour le Brésil est 72,3 ans. Comme dans toutes les autres étapes de la vie, il y a plusieurs changements bio-psycho-social, et maintenir ces systèmes dans l'équilibre de la pratique de l'activité physique régulière peut ajouter plusieurs avantages à cette population. Le but de cette étude est d'évaluer le niveau de l'activité physique du vieillissement de la population de la ville de Guarapuava. C'est un étude transversale et descriptive, avec les références à d'autres études sur les personnes de plus de 60 ans des deux sexes, vivant dans la zone urbaine de la municipalité. L'échantillon se composait de 120 personnes âgées. Nous avons utilisé l'activité physique Questionnaire (IPAQ), tant la version 8. Le questionnaire est conçu pour évaluer le niveau d'activité physique durant une semaine normale de travail, à la maison et les loisirs, en les classant en sédentaires, insuffisamment active et très actif. Il a été constaté que la majorité des personnes interrogées 36,66% (n = 44) peuvent être considérés comme physiquement actifs, 33,33% (n = 40) très active, 16,66% (n = 20) et d'être sédentaires 13,33% (n = 16) insuffisamment active.

Mots clés: personnes âgées, le niveau d'activité physique et de sédentaire.

NIVEL DE ACTIVIDAD FÍSICA PARA LAS PERSONAS DE EDAD AVANZADA GUARAPUAVA-PR
RESUMEN

Con el avance tecnológico, tenemos un aumento significativo en la esperanza de vida de la población del mundo. En todos los estados brasileños, existe un mayor crecimiento del segmento de la población de 75 o más años de edad, como consecuencia de los avances en la medicina moderna. La población de edad avanzada en el Brasil presenta su pleno 10,2% de la población en general, y el 50% tienen entre 60 a 69 años, el 36% de 70 a 79 años y un 14% más de 80 años, y las estimaciones de la actual vida de los brasileños es 72,3 años. Como en cualquier otra etapa de la vida se producen varios cambios bio-psico-social, y mantener estos sistemas en equilibrio la práctica de actividad física regular puede añadir varios beneficios a esta población. El objetivo de este estudio es evaluar el nivel de actividad física del envejecimiento de la población de la ciudad de Guarapuava. Si se lleva a cabo un estudio descriptivo transversal, con las referencias a otros estudios en personas mayores de 60 años de ambos sexos, que viven en la zona urbana del municipio. La muestra consistió de 120 ancianos. Usamos la International cuestionario de actividad física (IPAQ), en la versión 8. El cuestionario está diseñado para evaluar el nivel de actividad física durante una semana normal en el trabajo, en casa y en el ocio, la clasificación en el sedentarismo, insuficientemente activa y muy activa. Se constató que la mayoría de los entrevistados 36,66% (n = 44) puede ser considerada como actividad física, 33,33% (n = 40) muy activa, 16,66% (n = 20) y ser sedentario 13,33% (n = 16) lo suficientemente activa.

Palabras clave: ancianos, el nivel de actividad física y el sedentarismo.

NIVEL DE ATIVIDADE FÍSICA DE IDOSOS DE GUARAPUAVA-Pr
RESUMO

Com o avanço tecnológico, temos um aumento significativo na expectativa de vida da população mundial. Em todos os estados brasileiros, constata-se um crescimento mais acentuado do segmento populacional de 75 anos ou mais de idade, em decorrência dos avanços da medicina moderna. A população idosa brasileira apresenta em seu total 10,2% da população geral, sendo que 50% estão entre 60 a 69 anos, 36% entre 70 a 79 anos e 14% acima de 80 anos, e a estimativa de vida atual para o brasileiro é de 72,3 anos. Como em qualquer outra etapa da vida ocorrem várias mudanças bio-psico-sociais, e para manter esses sistemas em equilíbrio a prática de atividades físicas regular pode acrescentar vários benefícios a esta população específica. O objetivo deste estudo é avaliar o nível de atividade física da população de idosos da cidade de Guarapuava. Realizou-se um estudo transversal e descritivo, tendo como referências outros estudos na área com indivíduos acima de 60 anos de ambos os sexos, residentes na zona urbana do município. A amostra foi composta por 120 idosos. Foi utilizado o Questionário Internacional de Atividade Física (IPAQ), na forma longa versão 8. O Questionário tem por objetivo avaliar o nível de atividade física durante uma semana normal, no trabalho, em casa e no lazer, classificando-as em sedentárias, insuficientemente ativas e muito ativas. Verificou-se que a maior parte da população entrevistada 36,66% (n=44) pode ser considerada como fisicamente ativa, 33,33% (n=40) muito ativa, 16,66% (n=20) sendo sedentárias e 13,33% (n=16) insuficientemente ativas.

Palavras chaves: idosos, nível de atividade física, sedentarismo.