76 - EVALUATION IN BODY COMPOSITION OF PRACTITIONERS OF SYSTEMATIC WALK DURING THE AGING PROCESS

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INTRODUCTION

The elderly population has been increasing in recent years due to improving conditions and quality of life, which implies increasing the likelihood of human life.

The expectancy and quality of life go together. If there is an improvement, the other tends to follow this progress. But this change is more prevalent in developed countries, where we take into account that the living conditions and medical advances allow designing preventive and curative longer survival in these nations (SILVA, 1995).

Aging is a phenomenon that we all spend a day. Therefore, it is extremely important to have a knowledge of its causes, consequences and possible changes in the habits of your life that might reduce its manifestations. It is understood that this process is a decrease of functional capacities, the main predisposed to acquire or diseases, since the system becomes vulnerable as compared to the organism a younger individual.

"Aging is a process that converts healthy adults into frail adults with diminished reserves in many physiological systems and exponentially increasing vulnerability to many diseases and to death" (MATSUDO, 2004).

According Okuma (1998), aging is undoubtedly a biological process whose changes determine structural changes in the body, and, consequently, modify their functions. These changes may be even more striking when coupled with a sedentary lifestyle and bad habits of life. Lack of physical activity is a major cause of poor quality of life in the elderly. Physiological changes, psychological and social factors that occur with the aging process, can exercise decisive influence over the behavior in old age.

Among the factors that may promote self-esteem stand out, especially physical health, which favors independence, psychological health, it can react with coping and defense mechanisms, which allow people living and not isolation, and economic security to meet their basic needs. In bankruptcy these factors the individual does not maintain their self-esteem and tend to get depressed. The mental health of the elderly is also supported in the perception of being productive and useful for your family and society. Individuals get the aging benefits of physical activity causes changes in your body, improving self-esteem, self-confidence, increasing socialization and affection.

The wear caused by old age, coupled with a lack of physical activity can cause reduction: physical performance, basic driving skills, driving skills in coordination and balance, physical abilities when associated with bone changes occurred by changes in posture and gait.

According to Souza (2004), seeking to recover the independent health, and they have a successful aging, many seniors have sought to perform a physical activity.

Turn walking is a physical activity considers simple to perform and requires very little. Being aerobic exercise and ideal for easy access to any individual and can be done individually or collectively.

According Delacio (2004), one of the physical activities of greater acceptance of the elderly population in general is a walk, which can be developed without many resources and diverse environments.

The elderly see the walk as a safe way to strengthen the muscles in general, because the risk of injury in this activity is very low.

With the realization of the benefits of walking the present study is to evaluate anthropometric aspects of individuals hikers systematic during the aging process in Campo Grande-MS.

METHODS

This study was a characteristically descriptive research being observed and analyzed the results with cross design with the subjects observed on a single occasion, with levels and developmental characteristics inferred from the analysis of the differences and similarities in each age group (THOMAS; NELSON, 1996).

To participate in the research individuals of both sexes should be aged above 30 years and to volunteer for the study. And as a method of exclusion criteria were refusal to participate as a volunteer, non-compliance with the terms of the commitments made to the researchers, not being in the appropriate age group to study and if the state of health did not permit data collection.

The study population was comprehensively individuals (60) of both sexes, aged equal or above 30 years hiker systematic Fildago Belmar Park, located in Campo Grande.

The study was initiated by contacting the institution and authorization for the selection of the sample, who signed the consent form in accordance with the Ministry of Health no196/96 for human research.

Data collection was carried out in the park Belmar Fidalgo, in Campo Grande - MS, during the September 27 of 2006, in the morning, by presenting the issue of letter of introduction and request for authorization to the individual.

Through data collection began the process of assessments of body composition by body mass, height, waist circumference and hip for posterior analysis of BMI and WHR.

This paper addresses the "guidelines and rules for research involving humans" no196 Resolution of 10 October 1996, the National Health Council.

From the data collection and serving our proposed objectives of this study, we used - whether for data tabulation Program Excell 2003 version. In the analysis of quantitative variables was used descriptive statistics (mean and standard deviation).

RESULTS AND DISCUSSION

The results of this research shows that the majority of respondents hikers were retired at the time, being about 37 (61.67%), working 17 (28.33%) and only 6 (10%) of practitioners is subdivided as in other household chores and students.

As for the weekly practice of walking is exercised, we have these percentages: (3.33% - 2) twice a week, (33.33% - 20)

and three times a week (63.33% - 38) four times per week or more.

It is recommended three to five times a week, with time back there 30 minutes a day is ideal for those who are starting switch a rest day with a day of exercise (SILVA, 1995).

On the duration of the practice activity was analyzed than half of practitioners 50% (30) usually walk 60 minutes and 40% (24) walk 30 minutes, 8.33% (5) has the duration of your activity around 120 minutes, and finally 1.66% (1) performs its activity in 90 minutes.

Entities linked to the Physical Education and Sports Science as the World Health Organization (WHO), the International Council of Sport Science and Physical Education (ICSSPE), the Center for Disease Control and Prevention - USA (CDC) recommend that sessions of thirty minutes of physical activity a day on most days of the week and developed continuously or even in periods cumulative 10-15 minutes at moderate intensity, are sufficient to promote health (MATSUDO, 2004).

Regarding the reasons that induced the practice of walking, we found that the main reason why most hikers prefer the activity was health (48.3% - 29), after medical advice with (28.3% - 17), others have opined that relaxation (15% - 9) was the main reason, and finally, (8.3% - 5) emphasized that aesthetics is the main factor.

According to Guedes (1998), the walk is notable for being one of the most common physical activities, used in exercise programs aimed at weight control as well as in maintaining health.

The benefits from the practice of walking, it was found that the main benefit reached by most practitioners was the improvement of the physical and mental well-being (53.33% - 32). The improvement of postural tensions had (25% - 15) percentage, while option improves self-esteem had (13.33% - 8), since the improvement of aesthetics had (8.33% - 5), the less opinionated.

Table 1 - Mean values and derivatives related to anthropometric variables of males and female hikers systematic.

Variables	Male (26)	Females (34)
Age	± 10,35	58,41 ± 11,90
BMI (kg / m²)	27,74 ± 3,08	26,35 ± 9,77
WHR (cm)	0,90 ± 0,06	0,82 ± 0,09

According to the data found in Table 1, with reference to the studies of the Ministry of Health (2004) for the classification of BMI found the following results; Suitable eutrophic or to both sexes. By observing the classification of WHR second AppleID Assess Body Composition, (1999), we have to point out a difference between the results. In males the rating is low, ie, harmless to health, since the female is the opposite of being classified as high and being harmful to health.

Table 2 - Mean and Standard Deviation of the anthropometric variables by age group, for males and females, practitioners Systematic Walk in Park Campo Grande-MS.

MEN AND WOMEN 30 TO 40 YEARS (n = 3)			
	Age (years)	BMI (kg / m²)	WHR (cm)
X (DP)	32,66 (± 4,61)	23,18 (± 2,00)	0,69 (± 0,03)
MEN AND WOMEN 40 TO 50 YEARS (n = 6)			
	Age (years)	BMI (kg / m²)	WHR (cm)
X (DP)	44,33 (± 3,26)	28,43 (± 5,03)	0,84 (± 0,08)
MEN AND WOMEN 50 TO 60 YEARS (n = 15)			
	Age (years)	BMI (kg / m²)	WHR (cm)
X (DP)	54,53 (± 3,15)	29,48 (± 3,78)	0,84 (± 0,09)
MEN AND WOMEN 60 TO 70 YEARS (n = 23)			
	Age (years)	BMI (kg / m²)	WHR (cm)
X (DP)	64,17 (± 2,74)	25,69 (± 3,51)	0,86 (± 0,09)
MEN AND WOMEN 70 TO 80 YEARS (n = 13)			
	Age (years)	BMI (kg / m²)	WHR (cm)
X (DP)	74,07 (± 3,14)	26,44 (± 3,62)	0,90 (± 0,05)

According to the results seen in Table 2, and with reference to the values described by MINISTRY OF HEALTH (2004), the mean BMI in the group of individuals hikers were systematically classified as eutrophic or Appropriate, in the age groups 30 40 years old (23.18 + 2.00), from 60 to 70 years old (25.69 + 3.51) and 70 to 80 years old (26.44 + 3.62); overweight at ages 40 to 50 years old (28.43 + 5.03) and 50 60 (29.48 + 3.78). can be seen that there was a gradual increase in BMI between the ranges age 30-40 years old, 40-50 years and 50-60 years and subsequently a reduction in the age group 60-70, with a slight increase in the age group 70-80 years old.

The observed behavior in relation to BMI groups divided by age confirms the scientific evidence reported by Shephard (2003), Nieman (1999) and Okuma (1998), because according to these authors, from the age of 25 there is a BMI increase, mainly due to a higher amount of body fat, because, among many other factors, poor lifestyle habits. However after 60 years of age there is a tendency to reduce BMI, especially the loss steeper lean mass, these facts presented in Table 2.

As for the WHR, the average results obtained were for individuals aged 30-40 years of age (0.69 + 0.03) for individuals aged 40-50 years old (0.84 + 0.08), for individuals aged 50-60 years of age (0.84 + 0.09), for individuals aged 60-70 years of age (0.86 + 0.09), and finally for individuals aged 70-80 years of age (0.90 + .05).

Based on the results, we can see that the individuals in the age group 30-40 years of age had the lowest WHR for individuals aged 70-80 years old.

These results demonstrate that individuals with lower ages presented in this study, body fat distribution markedly lower in the abdomen, and is therefore less harmful to health in relation to individuals of other age groups, which had a higher concentration of fat body in the abdominal region.

When body fat is more deposited in the abdominal area is a greater risk to health in relation to accumulation elsewhere in the body, as in the hips. According to Sharkey (1997), people with higher fat accumulation around the visceral organs increase the risk of heart disease due to fat cells that hinder the proper functioning of the organs.

This author also highlights that visceral fat can be a risk for the fact that fat stored around the organs and circulatory

system has a path to the liver, and, in this region, the fat cells are able to send free fatty acid directly to the liver and can be used to synthesize additional cholesterol and increase the risk of heart disease.

It is worth mentioning that the ACSM (2003) considers the WHR index that best represents the relationship between the distribution of body fat and predisposition to chronic degenerative diseases.

CONCLUSION

The present study aimed to evaluate the anthropometric aspects of individuals in the aging process, practitioners systematically walk in Campo Grande - MS. According to the results we can conclude that factors related to health maintenance (48.3%) or medical advice (28.3%) had the highest importance, and the main benefit was achieved through walking and physical well being mental (53.3%).

Also considering that the majority of respondents were retired at the time (61.6%), with a small portion with other chores (39.3%) work as effected, students or home. We emphasize that most practicing the activity four or more times a week for 60 minutes, and some prefer to walk three times a week for 30 minutes, remembering that this option is related to the elderly.

The assessment of body composition is an important factor in any weight loss program, fitness or in the prevention and treatment of various diseases.

The results obtained by BMI showed that the majority of respondents are evaluated in the range of Suitable or Eutrophic (65%) in the age groups 30-40 years and 60-80 years of age. Individuals 40 to 60 years (35%) were classified as overweight.

Relative to WHR, concluded that individuals with lower age (33.6 ± 4.6) have a better distribution of fat that the elderly, and the fat in the abdominal region is more harmful to health. Therefore, older individuals (74.0 ± 3.1) have increased risk of heart disease, because the fat cells hinder the natural functioning of the organs.

The Physical Education professional should guide the exercise aimed at improving health in general. The walk without guidance may not result in any benefit, or even harm a person's health, but if done regularly, and appropriate intensity and duration, provides excellent improvement in the quality of life of participants. Furthermore, it is necessary to perform more studies about the topic involving the health of the subjects, aiming to build strategic improvement of quality of life for ourselves.

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EVALUATION IN BODY COMPOSITION OF PRACTITIONERS OF SYSTEMATIC WALK DURING THE AGING PROCESS

ABSTRACT

The aging is characterized by a decline of the functional capacities of the organism and it is associated to a slower celular division, to a mechanical consuming, to the continuous loss of the cerebral cells, to anxiety and depression caused by the abandonment of an active social life. The best way to alleviate those symptoms is to keep physical activity suitable and with certainty the walk is the ideal activity for people who are in aging process, because it results in important benefical effects to health. This study had as purpose to evaluate the anthropometrics aspects of individuals in aging process, practitioners of systematic walk in Campo Grande-MS. The sample had participation of 60 ageds of both sex, from 30 to 80 years old(60,3 + 11,3). The avaliation protocols were based in BMI (Body Mass Index) and the results were classified according to Brazilian Ministry of Health (2004), and the WHM (waist and hip measurement) was evaluated according to Appleid Body Composition Assess, (1999). The results relative to BMI shows that 65% of the individuals presents an adjusted classification inside the recommended zone and 35% of the interviewed are at the risk zone and they are classified as overweight. Relative to WHM, it was verified that the youngers individuals have lower indexes, that means less accented corporal fat in the abdominal area, different from the others ages. It is important to stand out that the majority interviewed are retired and they walk four times a week or more, for 60 minutes, and they have as basic reason to have a better health and they got as the main benefit the physic and mental welfare.

KEY-WORDS: Aging, systematic walk and quality of Life.

ÉVALUATION DANS LA COMPOSITION DU CORPS DES PRATICIENS DE WALK SYSTEMATIQUE AU COURS DU VIEILLISSEMENT

RÉSUMÉ

Le vieillissement est caractérisé par un déclin des capacités fonctionnelles du corps et est associée à une division cellulaire plus lent, l'usure mécanique, la perte continue des cellules du cerveau, l'anxiété et la dépression causée par l'abandon d'une vie sociale active. Une façon de soulager ces symptômes est de maintenir une activité physique adéquate, et la marche est certainement l'activité idéale pour les personnes qui sont dans le processus de vieillissement, car elle se traduit par des effets bénéfiques pour la santé. La présente étude visait à évaluer les aspects anthropométriques des individus dans le processus de vieillissement des praticiens de marche systématique à Campo Grande. L'échantillon a été suivi par 60 individus des deux sexes, âgés de 30-80 ans (60,3 + 11,3). Les protocoles d'évaluation étaient basés sur l'IMC (Indice de Masse Corporelle) et les résultats ont été classés selon MINISTÈRE DE LA SANTÉ (2004) et WHR (rapport taille-hanche) et évaluées selon AppleID évaluer la composition corporelle, (1999). Les résultats concernant l'IMC, indiquent que 65% des individus ont une classification appropriée et dans les limites recommandées et 35% des répondants sont de l'ordre de risquer d'être classés comme étant en surpoids. Par rapport à WHR trouvé que les groupes d'âge plus jeunes ont des taux inférieurs, montrant une distribution de la graisse corporelle dans la région abdominale moins prononcée, différent des autres groupes d'âge. Il convient de noter que la majorité des individus est à la retraite et la pratique de la marche quatre fois ou plus par semaine pour une période de 60 minutes, avec la raison fondamentale pour l'amélioration de la santé et d'obtenir le principal avantage que la meilleure qualité de vie.

MOTS CLÉS: vieillissement, la marche régulière et la qualité de vie.

EVALUACIÓN EN LA COMPOSICIÓN CORPORAL DE PROFESIONALES DE PASEO SISTEMÁTICO DURANTE EL PROCESO DE ENVEJECIMIENTO

RESUMEN

El envejecimiento se caracteriza por un deterioro de las capacidades funcionales del cuerpo y se asocia con una división celular más lento, desgaste mecánico, la continua pérdida de las células del cerebro, la ansiedad y la depresión causada por el abandono de una vida social activa. Una forma de aliviar estos síntomas es mantener una actividad física adecuada, y caminar es sin duda la actividad ideal para las personas que están en el proceso de envejecimiento, ya que da lugar a efectos beneficiosos para la salud. El presente estudio tuvo como objetivo evaluar los aspectos antropométricos de individuos en el proceso de envejecimiento de los profesionales de la caminata sistemática en Campo Grande. La muestra contó con la participación de 60 personas de ambos sexos, con edades de 30 a 80 años de edad (60,3 + 11,3). Los protocolos de evaluación se basaron en el IMC (Índice de Masa Corporal) y los resultados se clasificaron según Ministerio de Salud (2004) y la CCC (cintura a cadera) y evaluados según ID de Apple evaluar la composición corporal, (1999). Los resultados en cuanto a índice de masa corporal, indican que el 65% de los individuos tiene una clasificación apropiada y está dentro del rango recomendado y el 35% de los encuestados están en el rango de riesgo de ser clasificado como sobrepeso. Relativa a RHO ha comprobado que los grupos de edad más jóvenes tienen tasas más bajas, que muestra una distribución de la grasa corporal en la región abdominal menos pronunciada, diferente de otros grupos de edad. Cabe señalar que la mayoría de los individuos se retiró y la práctica de caminar cuatro o más veces por semana durante un período de 60 minutos, con la razón fundamental de la mejora de la salud y conseguir el beneficio principal como la mejor calidad de vida.

PALABRAS CLAVE: Envejecimiento, caminar de forma regular y la calidad de vida.

AVALIAÇÃO NA COMPOSIÇÃO CORPORAL DE PRATICANTES DE CAMINHADA SISTEMÁTICA DURANTE O PROCESSO DE ENVELHECIMENTO

RESUMO

O envelhecimento é caracterizado por um declínio das capacidades funcionais do organismo e está associado a uma divisão celular mais lenta, ao desgaste mecânico, à perda contínua das células cerebrais, à ansiedade e à depressão causada por abandono de uma vida social ativa. Uma forma de amenizar esses sintomas é manter atividade física adequada, e a caminhada é com certeza a atividade ideal para os indivíduos que estão em processo de envelhecimento, pois resulta em efeitos benéficos para a saúde. O presente estudo teve como objetivo avaliar os aspectos antropométricos de indivíduos em processo de envelhecimento praticantes da caminhada sistemática em Campo Grande-MS. A amostra teve participação de 60 indivíduos de ambos os sexos, com a faixa etária de 30 a 80 anos de idade (60,3 + 11,3). Os protocolos da avaliação foram baseados no IMC (Índice de Massa Corporal) e os resultados foram classificados de acordo com MINISTÉRIO DA SAÚDE, (2004) e a RCQ (Razão Cintura Quadril) sendo avaliada de acordo Appleid Body Composition Assess, (1999). Os resultados referentes ao IMC, indicam que 65% dos indivíduos apresentam uma classificação adequada, estando dentro da faixa recomendada e que 35% dos entrevistados estão na faixa de risco, sendo classificados como sobrepeso. Relativo ao RCQ verificou-se que as faixas etárias mais novas possuem os índices mais baixos, demonstrando uma distribuição de gordura corporal menos acentuada na região abdominal, diferentes das demais faixas etárias. Ressalte-se que a maioria dos indivíduos encontra-se aposentados e praticam a caminhada quatro vezes ou mais por semana, durante um período de 60 minutos, tendo como fundamental motivo a melhora da saúde e obtendo como o principal benefício a melhor qualidade de vida.

PALAVRAS CHAVES: Envelhecimento, caminhada regular e qualidade de vida.