15 - PREVALENCE OF OVERWEIGHT, OBESITY AND RISK OF HEART HIGH SCHOOL STUDENTS

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INTRODUCTION

Nowadays, proved the lack of physical activity and, in particular, lack of exercise leads man to an unhealthy sedentary lifestyle. With this, your perspective on life decreases, and live just lives in poor health. The chronic degenerative diseases or opportunistic diseases such as hypertension, obesity, coronary heart disease, in today's world, growing in alarming proportion. This is due to technological advancement that gives people more convenience, comfort often makes them less active and less in daily quality of life.

The school sets up an opportunity to approach and approach of children and adolescents to insert knowledge and habits that promote active lifestyle, especially through school curricular physical education (NUNES et al., 2007). Having seen the above, the purpose of the study was to analyze the prevalence of overweight, obesity and cardiac risk of high school students from Queimadas-PB.

It is understood by the whole lifestyle of habitual actions that reflect the attitudes, values and opportunities in people's lives. Physical activity, obesity, health and quality of life are concepts and suggestions for an active lifestyle (NAHAS, 2006).

These habitual actions are directly related to the health and quality of life of individuals. To have a proper lifestyle, it is important to be aware of the factors of our lifestyle that negatively affect our health and over which we have control, such as smoking, alcohol, drugs, stress, social isolation, physical inactivity and intense effort or repetitive (NAHAS, 2006).

As a result of an accelerated pace of life, accustomed to inadequate feeding, children, adolescents and adults, are accustomed to feeding on fast food, mostly industrialized that does not contain the nutrients necessary for a healthy life. Increased consumption of fatty foods with high energy density, and decreased physical exercise are two main factors related to the environment, that contribute to the increase in obesity (TERRES, 2006).

Overweight and obesity have increased greatly in recent years both in developed and in developing countries. Thus, it is a serious public health problem, since the consequences of obesity on health are many and range from increased risk of premature death to serious diseases not lethal but debilitating and that directly affect the quality of life of these individuals (SILVA et al., 2007).

According Cercato, et al. (2004), in the Brazilian population, in particular, obesity is most associated with increased prevalence of hypertension, diabetes mellitus and hypertriglyceridemia, as well as reduced concentrations of HDL (BERNARDI, 2005).

Overweight and obesity result from the interaction of several factors such as genetic, metabolic, behavioral and environmental factors. Data from the World Health Organization, acronym World Health Organization (WHO, 2010) argue that obesity represents a major public health problem affecting both developed and developing countries. Epidemiological studies indicate that approximately 65% of the U.S. population are overweight, with 35% of these individuals are classified as having risk of obesity (25 ≤ IMC ≤ 30 kg m-2) and 30% are considered obese (IMC ≥ 30 kg.m-2).

The prevention, treatment and control of obesity have been the biggest challenges for researchers and health professionals, since the accumulation of body fat is associated with various diseases. Because of the direct relationship of diet and physical activity in the prevention, treatment and control of obesity and associated diseases, nutrition professionals and physical education should necessarily be involved in multidisciplinary groups for prescribing and monitoring stages preventive and therapeutic (BARROS, 2004).

Scientific research and public awareness campaigns to have consumed many resources, but an obesity epidemic continues on an upward curve without better prospects in the short and medium term. Fact that the situation is worsening obesity has ceased to be common only in adults and the elderly, going to be very present among children and adolescents (RONQUE, 2007).

To Silva et al. (2007), the physical education teacher is a professional who has a privileged position in the possibility of avoiding a high concentration of fat in young people, because maybe physical education programs, are the only way for children and adolescents participate in physical exercises oriented, without requiring an athletic condition.

Nahas (1997) states that physical education is a profession that has a greater responsibility than other professions in relation to the provision of services related to physical activity and human development, including schools. Physical education is responsible for a contribution to educational practitioners in relation to their motor development and physical fitness for both a welfare and health.

According PCNs (PCN, 1997), there is a driving force that shows physical education as a field of knowledge that introduces the students in the culture of body movement and with various purposes, among them, the maintenance and improvement of health. The physical education has as one of its main objectives to make the student know your body, appreciating and adopting healthy habits as one of the basic aspects of quality of life and acting responsibly in relation to their health and to public health, which indicates that physical education has an educational responsibility to the health of their students.

There obese adolescents in schools, it is verified by the fact that several studies on the subject are done with school (ALBANO, 2001; ANJOS, 2003). Consequently there are obese students in physical education classes and school teacher has an educational responsibility in making this teen develop healthy lifestyle habits.

Lobstein (2004) argues that an intervention of health professionals should cover the field school, it is a performance that can be developed for several years, but involving the interests of the student, and the concern of affecting the family and the people who live daily with this obese adolescent out of school, with people who are not sedentary behaviors as encouraging them to exercise.

It is exactly what Nahas (1997) highlights when he says that physical education must have a vision that emphasizes activities that extend beyond the school and school years because the benefits of exercise do not remain without the practice

thereof. It is important for the physical education teacher school knowing how to identify the barriers to physical activity in order to make the content of their lessons more challenging, interesting, motivating, that make sense both for the school and for the school (TORAL, 2007) .

Facing the barriers encountered in day-to-day obese adolescent is necessary a revision that will satisfy the desires and needs of this population in schools and physical education classes, this discipline that has a tendency to privilege the sport, which excludes obese because they are less agile by excess body fat, for orthopedic problems, difficulties in walking, and ashamed (Kunkel, 2009).

Knowing the physical education teacher about the problems of obesity present in adolescence, it will be able to make changes / review the content of their classes, socializing with their students and make their lessons more interesting, which will contribute to a better relationship with the students' physical education, because you know about the problems that may be present in their students at this stage, for example, the shame of being exposed in front of the class, or even depression, anxiety, which can reflect during class (LOBSTEIN, 2004; KUNKEL, 2009).

METHODOLOGY

A descriptive, exploratory qualitative approach random field, (THOMAS, 2002) The research was conducted through observations of physical education classes, relating to sedentary lifestyle and lack of interest among high school students in the participating classes physical education, thus becoming physically inactive adolescents, may develop increased body mass and subsequently acquire diseases related to it.

The sample size was 50 students, 25 males and 25 females, aged 15 to 17 years, which were randomly selected. The inclusion criterion was being properly enrolled in school, and exclusion, by refusing was no parental consent, or debilitating physical problems.

Data were collected by the classification of body mass index (IMC), which was obtained from the ratio of body weight (kg) by the square of height (m2) of the students, which was conducted as proposed by Conde and Monteiro (2006), taking into account age, gender, weight and height of adolescents, to determine overweight and obesity. For waist circumference (CA) students, were held by the criteria of Taylor (2000), to determine cardiac risk.

It is for the perimeter of waist-hip ratio (R. C/Q), The mathematical expression is calculated by dividing the waist circumference in (cm) by the value of the hip circumference at (cm). we used the criteria of CSFT, (Canadian Standardized Test of Fitness, 1986), is investigating the metabolic complications exist. The gathering was held at the school through anthropometric measurements, which were performed only by the study investigator. The measurement of body weight (kg) was obtained only once, with pupils barefoot and wearing shorts and a shirt with as little clothing as possible, anthropometric scales (Fillizola Industries SA - Brazil) with capacity of 0-150 kg and accuracy 100g properly measured (INMETRO). To collect height was used a wooden stadiometer with scale metal capacity of 2 m to the nearest 0.1 cm. The height measurement was performed in triplicate, using the calculation of the average. The children were measured barefoot, erect, with heels together and toes apart with the tips, depending arms and hands flat on your thighs and in contact with the flat surface of the measuring instrument. Head adjusted the horizontal plane and in deep inspiration, and a flexible steel tape measure for waist and hip respectively. A descriptive analysis (absolute numbers and percentages for categorical variables, mean, variance and standard deviation [DP] for numerical variables).

RESULT

The body mass index of students of both genders, as shown in Table 1, and found that there was a higher incidence of this trait in men by 52%, while 24% in women. Something similar occurs in the index of low weight, and also the male incidence of 20% is greater than 4% female. Already in BMI overweight and obesity, the total number of students (50), women individually showed higher percentages than men, with 40% and 32% for women while men have 12% and 16% respectively, demonstrating that women with IMC levels are higher.

Table 1: IMC of students between 15 and 17 years of both genders

age	underweight			Normal			excess weight			obesity	
	male		female	male		female	male		female	male	female
	% (n)	%	(n)	% (n)	%	(n)	% (n)	%	(n)	% (n)	% (n)
	8			8			0			0	8
15	2	4	1	2	8	2	0	4	1	0	2
	8			20			12			0	16
16	2	0	0	5	4	1	3	16	4	0	4
	4			24			0			16	8
17	1	0	0	6	12	3	0	20	5	4	2
	20			52			12			16	32
TOTAL	5	4	1	13	24	6	3	40	10	4	8

In Table 2, results are presented separately by gender, which shows a higher incidence of men who have this feature (no risk). Of the total students surveyed 36% males showed no cardiac risk, while only 14% of women do not have that risk. Women show up in bands I and II heart failure with similar percentages 18%, and by the way, they are women, they are with these higher rates. In other cases compare the estimates generated indicate a greater chance of women having heart problems.

Table 2 - Sample distribution of CA, according to cardiac risk

SEX	RISK I		RISK II		RISK FREE	
	(n)	%	(n)	%	(n)	%
male	6	12	1	2	18	36
female	9	18	9	18	7	14
TOTAL	15	30	10	20	25	50

The waist-hip ratio, shows the total percentage of 50% with low risk, 36% in men and 14% in women with moderate level of 8% with total distributing to 2% in men and 6% in women, respectively a indicative of attention to health, but the prevalence of high-risk, shows an indicative 42% for both sexes showing a very significant value in women with 30%, and 12% for

men, presenting significant health problem and metabolic complications in the body, with an index of high-risk coronary disease prevalence, signaling centralized concentration of fat, and abdominal fat.

Table 3 - Distribution of the sample of RC / Q according to metabolic complications

SEX	LOW RISK		MODERATE		HIGH RISK	
	(n)	%	(n)	%	(n)	%
male	18	36	1	2	6	12
female	7	14	3	6	15	30
TOTAL	25	50	4	8	21	42

In this study it was found that in the overall sample of high school students in the city of Burned-PB, 50% (25) of the students have problems with balance, detected through the evaluations of overweight and obesity, and cardiac risk metabolic complications in both genders, all being at risk to health, which leads to the alarming number of adolescents who are overweight, where degenerative diseases may be settling or already installed. Therefore much risk is associated with increased cardiovascular and metabolic diseases (metabolic syndrome). The prevalence of overweight and obesity was lower in males with 14% (7) and higher in females with 36% (18), highly significant and expressive the number of women outside the standards of ideal weight.

At the opposite extreme, the position of Aracaju, with the lowest percentage of overweight and obesity research, which was 35.3% (BRAZIL, 2004). Similar results were described by other authors (COITINHO et al. 1991; GIGANTE, et al. 1997). A study involving 224 Xavante Indians of two communities in the state of Mato Grosso, showed equal distribution of overweight and obesity among men and women in a community where it was higher in females in another (GUGELMIN; SANTOS, 2006).

CONCLUSION

This study concludes that there is a relationship of considerable health risk to students who signaled overweight and obesity thus can be analyzed within the standards of certain Body Mass Index (BMI), abdominal circumference (CA) and Waist Hip Ratio (CR / Q), the results were quite impressive and significant.

Emphasizing the numbers of underweight with 12% (6 subjects), which was also an indicator of health risk. We suggest a more active life physically and valuing the importance of regular physical activity, combined with good eating habits, in addition to maintaining ideal weight throughout adulthood as a way to avoid more advanced degree of obesity and various risk factors associated with it.

However, it can be observed that there is, in schools, a high rise in obesity and overweight in children and adolescents, which can bring various diseases, even with extensive literature showing the benefits of physical activity for health in childhood and adolescence, levels of fitness and physical activity seem to fall at this stage (RIBEIRO et al., 2006).

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PREVALENCE OF OVERWEIGHT, OBESITY AND RISK OF HEART HIGH SCHOOL STUDENTS

ABSTRACT

For a significant portion of young people, school activities are the only opportunities to develop physical activity and significant schools show good results in its promotion interventions. To assess the prevalence of overweight, obesity and cardiac risk of high school students in the city of QUEIMADAS-PB. Methods: A descriptive, exploratory qualitative approach random field, school-based, was conducted between April and May 2012 in the State School for Elementary and High School Ernesto Francisco do Rego City QUEIMADAS-PB were evaluated in with anthropometric measurements, height, weight and waist and hip circumference, for testing the body mass index (IMC), waist circumference (CA) and waist-hip ratio (R.C/Q). The sample consisted of 50 subjects aged 15 to 17 years of both genders, from a universe of 200 students, drawn randomly. For Prevalence of Overweight and Obesity, Cardiac Risk I and II, and Metabolic Complications. The prevalence was higher among females with 36% (18 subjects). While the prevalence in males was lower with 14% (7 subjects). But there was an indication of malnutrition of 12% (6 subjects), and is considered a representative value of health risk. The school sets up an opportunity to approach and approach of children and adolescents to insert knowledge and habits that promote healthy lifestyle and active, especially through school physical education curriculum. For a significant proportion of young people, school activities are the only opportunities to develop physical activity significantly, contributing to the culture of body movement, decreased sedentary lifestyle and weight gain.

KEYWORDS: Students. Obesity. Cardiac Risk. Evaluation.

PREVALENCE DU SURPOIDS, OBESITE ET LE RISQUE COEUR DES ÉLÈVES DU SECONDAIRE

RÉSUMÉ

Pour une partie importante des jeunes, les activités scolaires sont les seules opportunités pour développer l'activité physique et les écoles importantes montrent de bons résultats dans ses interventions de promotion. Pour évaluer la prévalence de la surcharge pondérale, l'obésité et le risque cardiaque des élèves du secondaire dans la ville de QUEIMADAS-PB. Méthodes: Une étude descriptive, exploratoire sur le terrain approche qualitative aléatoire, en milieu scolaire, a été réalisée entre Avril et mai 2012 à l'Ecole Nationale d'élémentaire et secondaire Francisco School Ernesto do Rego Ville QUEIMADAS-PB ont été évalués dans avec les mesures anthropométriques, de hauteur, de poids et de taille et tour de hanches, pour tester l'indice de masse corporelle (IMC), le tour de taille (CA) et rapport taille-hanche (R.C/Q). L'échantillon était composé de 50 sujets âgés de 15 à 17 ans des deux sexes, à partir d'un univers de 200 étudiants, tirées au hasard. Pour prévalence du surpoids et de l'obésité, des risques cardiaques I et II, et de complications métaboliques. La prévalence était plus élevée chez les femmes avec 36% (18 sujets). Bien que la prévalence chez les hommes était inférieure à 14% (7 sujets). Mais il y avait une indication de la malnutrition de 12% (6 sujets), et est considéré comme une valeur représentative du risque pour la santé. L'école met en place la possibilité d'approche et de l'approche des enfants et des adolescents à insérer des connaissances et des habitudes qui favorisent mode de vie sain et actif, notamment à travers les programmes scolaires d'éducation physique. Pour une proportion importante des jeunes, les activités scolaires sont les seules opportunités pour développer l'activité physique de façon significative, contribuant ainsi à la culture du mouvement du corps, diminution de la sédentarité et le gain de poids.

MOTS - CLÉS: étudiants. L'obésité. Risques cardiaques. Évaluation.

PREVALENCIA DE OBESIDAD SOBREPESO Y RIESGO DE ESTUDIANTES DE SECUNDARIA DEL CORAZÓN

RESUMEN

Por una parte significativa de los jóvenes, las actividades escolares son las únicas oportunidades para el desarrollo de la actividad física y las escuelas significativas mostrar buenos resultados en sus intervenciones de promoción. Determinar la prevalencia de sobrepeso, obesidad y riesgo cardíaco de los estudiantes de secundaria en la ciudad de QUEIMADAS-PB. Métodos: Un campo descriptivo, exploratorio cualitativo al azar, basado en la escuela, se llevó a cabo entre abril y mayo de 2012 en la Escuela Estatal de Primaria y Secundaria Escuela Ernesto Francisco do Rego Ciudad Queimadas-PB fueron evaluados en con mediciones antropométricas, altura, peso y circunferencia de cintura y cadera, para comprobar el índice de masa corporal (IMC), la circunferencia de cintura (CA) y de la cintura-cadera (R.C/Q). La muestra estuvo constituida por 50 sujetos de 15 a 17 años de ambos sexos, de un universo de 200 estudiantes, procedentes azar. Para Prevalencia de Sobrepeso y Obesidad, Riesgo Cardiaco I y II, y las complicaciones metabólicas. La prevalencia fue mayor entre las mujeres con un 36% (18 sujetos). Si bien la prevalencia en los hombres fue menor al 14% (7 pacientes). Pero no era un indicador de malnutrición de 12% (6 sujetos), y se considera un valor representativo de riesgo para la salud. La escuela crea una oportunidad de acercamiento y aproximación de los niños, niñas y adolescentes para insertar conocimientos y hábitos que promuevan estilos de vida saludable y activo, especialmente a través de programas escolares de educación física. Por una parte significativa de los jóvenes, las actividades escolares son las únicas oportunidades para el desarrollo de la actividad física de manera significativa, lo que contribuye a la cultura del movimiento corporal, disminución del sedentarismo y el aumento de peso.

PALABRAS - CLAVE: Estudiantes. Obesidad. Riesgo cardiaco. evaluación

PREVALÊNCIA DE SOBREPESO, OBESIDADE E RISCO CARDÍACO DE ALUNOS DO ENSINO MÉDIO

RESUMO

Para uma parte expressiva dos jovens, as atividades escolares são as únicas oportunidades de desenvolvimento de atividade física significativa e as escolas mostram bons resultados em intervenções para sua promoção. Analisar a prevalência de sobrepeso, obesidade e risco cardíaco dos alunos do Ensino Médio da cidade de Queimadas-PB. Métodos: Estudo descritivo, exploratório aleatório de abordagem quantitativa de campo, de base escolar, foi realizado entre os meses de abril e maio de 2012 na Escola Estadual de Ensino Fundamental e Médio Francisco Ernesto do Rego da cidade de Queimadas-PB, onde foram avaliados com medições antropométricas, estatura, peso e circunferência da cintura e quadril, para os testes do índice de massa corporal (IMC), circunferência abdominal (C A) e relação cintura quadril (R.C/Q). A amostra foi constituída por 50 sujeitos na faixa etária de 15 a 17 anos de ambos os gêneros, de um universo de 200 alunos, sorteados de forma aleatória. Para a Prevalência de Sobrepeso e Obesidade, Risco Cardíaco I e II, e Complicações Metabólicas. A prevalência maior foi no gênero feminino com 36% (18 sujeitos). Enquanto no gênero masculino a prevalência foi menor com 14% (7 sujeitos). Porém existiu um indicativo de desnutrição de 12% (6 sujeitos), sendo considerado um valor representativo de risco de saúde. A escola configura-se como oportunidade para a aproximação e abordagem de crianças e adolescentes para inserção de conhecimentos e hábitos que promovam estilo de vida saudável e ativo, especialmente por meio das aulas curriculares de Educação Física. Para parte expressiva dos jovens, as atividades escolares são as únicas oportunidades de desenvolvimento de atividade física significativa, contribuindo para a cultura corporal de movimento, a diminuição do sedentarismo e o aumento do peso.

PALAVRAS - CHAVE: Alunos. Obesidade. Risco Cardíaco. Avaliação.