115 - PREVALENCE OF SEDENTARY PEOPLE AND NUTRITIONAL STATUS IN SCHOOL EDUCATION NETWORK EAST COUNTY PUBLIC STATE EDUCATION OF PIRIPIRI-PI

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doi:10.16887/86.a1.115

INTRODUCTION

During the twentieth and twenty-first because of increasing technological revolution, urbanization, automation and mechanization of human labor have been observed increased prevalence of sedentary world and Brazil. Also has contributed to this increase the lack of open spaces and the increase in urban violence. All these factors cause an increase in chronic degenerative processes such as heart disease, diabetes and cancer (NAHAS, 2010).

According to Nahas (2010) is sedentary "an individual who has a lifestyle with minimal physical activity, equivalent to an energy expenditure (work + leisure + domestic + locomotion) less than 500 kcal per week."

In Brazil, data from the National Health Survey show that 46.0% of adults are classified as insufficiently active. Among women were found prevalence rates ranging between 50.3% in the South to 56.4% in the Northern Region already in men ranged from 37.3% in the Northeast to 41.0% in the Southeast (IBGE, 2013).

Data presented by the Ministry of Health reveal the frequency of physical inactivity among Brazilian adults, higher frequencies were found in Joao Pessoa (20.8%), Aracaju (19.7%) and Natal (19.5%). In Teresina, capital of Piauí, the prevalence was 16.9% for both sex, 18.7% for males and 15.5% for females (VIGITEL, 2011).

In school is the problem of sedentary lifestyle even more worrying and its causes, since sedentary behavior in children and adolescents is carried into adulthood. Several studies report results that show high levels of sedentary lifestyle among schoolchildren. As the study by Christofaro et al. (2011), among adolescent students of Londrina - PR, where 62.5% of students were classified as sedentary.

Teens have been researched in numerous fashion in recent years, several studies even in northeast level have been reported sedentary behaviors in adolescents of school age. Souza et al. (2010) found in his research percentage of physical inactivity 50% female and 28% male schoolchildren in Salvador / BA. Another study was done by Brito et al. (2012), in students from Teresina / PI, which found that nearly half (43.5%) of schoolchildren were physically inactive.

Once the preoccupation with physical inactivity in children and adolescents has increased worldwide, and few population-based studies have been found in Brazil including the Northeast, this study becomes relevant for public health. Therefore the data collected can be used as parameters to draw public policy strategies for intervention projects in prevention of sedentary lifestyle, directed toward adolescents of school age.

Thus, the objective of this research was to determine the prevalence of physical inactivity and relate the level of sedentary lifestyle and nutritional status of schoolchildren from the High School of State Public Network municipality of Piripiri-PI.

MATERIALS AND METHODS

This research it is a cross-sectional, descriptive study. The population involved in the study was 4,280 students aged 14-18 years of both sexes enrolled in the academic year 2015, in the Middle of Piaui State Public Education Network Education in the municipality of Piripiri-PI. These data were provided by 3rd GRE (Regional Management of Education - SEDUC / PI).

To calculate the sample we used specific software taking into account confidence level of 99% and sampling error 3% reaching a representative sample of 210 schoolchildren. The sampling technique used was probabilistic conglomerate, which in the first stage were randomly selected six schools a total of 12, then picked at random subjects of the selected schools.

Inclusion criteria were: to present themselves voluntarily for data collection and fit in with the age proposed for the study. The exclusion criteria were: to present If pregnant or nursing mother and not presenting the free and informed consent form signed by their parents.

Anthropometric assessment was carried out: body weight and height, according to Lohman Protocol (1988). The body mass was measured in digital anthropometric scale, the brand Incoterm®, accurate to 100g, with maximum load of 150 kg, with the estimated wearing little clothing as possible, standing on the scales. Height was measured with flexible stadiometer, accurate to 1 mm, with the individual in orthostatic position, arms along the body, barefoot, feet parallel, with the regions of the calcaneus, gluteal, scapular and occipital waist touching the measuring instrument, looking in the Frankfurt plane.

To calculate BMI (nutritional status) was used body mass (kg) divided by height (m) squared (kg / m²) according to BMI classification for children and adolescents 02-20 years of age (CDC, 2007).

Analysis regular physical activity level was assessed by questionnaire of physical activity for children and adolescents (PAQ-C) proposed by Crocker et al. (1997), it has been modified and translated to exclude physical and sporting activity not practiced in Brazil. The questionnaire consists of nine questions about playing sports and games; physical activity at school and during leisure time, including the weekend. Each question has value 1-5 and the final score is obtained by averaging the issues, representing the very sedentary interval (1) to very active (5). Scores 2, 3 and 4 indicate the categories sedentary, moderately active, and active, respectively. Thus, from the score can classify individuals as active or sedentary. Assets are those with a score ≥ 3 are as sedentary individuals with scores <3.

For the statistical analysis descriptive analysis was carried out initially applying the tests to verify the normal distribution of data, then it was applied to descriptive statistical averaging procedures ± standard deviation, to characterize the sample. And Chi - square test for association between sex and all variables and level of physical activity and nutritional status ($p < 0.05$). Data were analyzed using the statistical package for Windows PASW Statistics 18.

This research was submitted for consideration and was approved by the Research Ethics Committee of the Federal University of Piauí (CEP / UFPI) on 04.17.2015, with the number of CAAE 43175715.2.0000.5214. And those responsible for smaller participants in this study signed the Informed Consent (IC), as required by Resolution 196/96 of the National Health Council.

RESULTS

210 schools where 103 were males and 107 females were studied. The sample characteristics are shown in Table 1. The mean age, body weight, height and BMI in both genders were similar, there was no significant difference between the sexes.

Table 1. Characteristics of the sample of schoolchildren aged 14-18 years in the city of Piripiri-PI (2015).

Sexo	Idade	Massa	Estatura	IMC
Masculino (n=103)	15,54±0,11	58,3±1,17	1,68±0,06	22,24±7,6
Feminino (n=107)	15,39±0,10	50,92±0,85	1,57±0,05	20,8±4,75

Regarding nutritional status (BMI), most school 73.80% was classified in ideal weight. For both sexes, also presented themselves in the most ideal weight rating. There was no statistical difference in the mean values of BMI by sex. Also, there was no significant association between gender and nutritional status (Figure 1).

Figure 1. Nutritional status of school adolescente of Piripiri-PI.

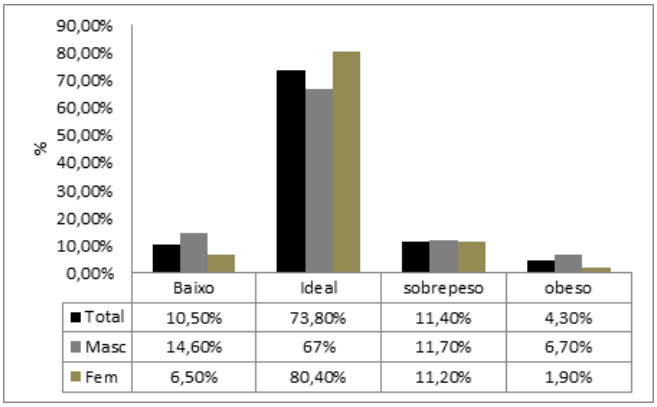
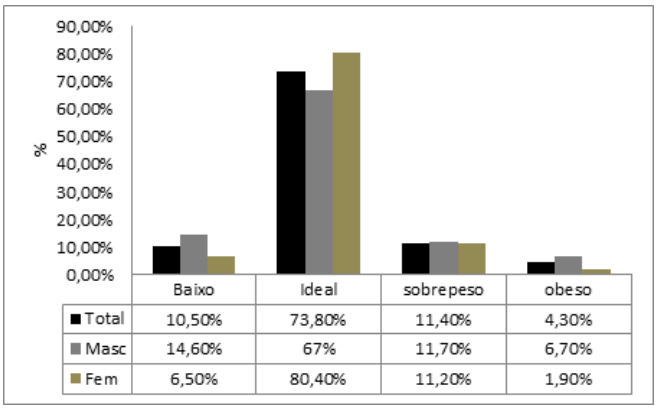


Figure 2 shows the level of physical activity. The prevalence of individuals classified as sedentary (sedentary and very sedentary) was 78.5% for both sexes. Boys had become more active (31.0%), compared with girls (12.1%). Consequently, females had a higher prevalence of 87.8% inactivity. There was a significant association, in very sedentary category, between sex and level of physical activity ($p < 0.05$).

Figure 2. Level of physical activity for school teenager of Piripiri-PI.



* $p < 0.05$ association between gender and level of physical activity

DISCUSSION

This study found a prevalence of 78.5% inactivity for both sexes, which was similar to the studies of Silva et al. (2009), who used the same measurement instrument of this research. A similar result also was found in the study Brown et al. (2011), even using different assessment instrument inactivity.

Also, in the present study showed that females were more sedentary (87.8%) than males (69.0%). These findings were similar to the work of Souza et al. (2010), among adolescent students in Salvador, found that the percentage of higher physical inactivity among girls. But these results should be compared with caution, as used in this study for evaluation of physical activity, a questionnaire proposed by Florindo et al (2006), whereas in our study was evaluated by the Physical Activity Questionnaire for children and adolescents (PAQ-C) proposed by Crocker et al. (1997).

In the present study, there was a significant association only in very sedentary category, between sex and level of physical activity ($p < 0.05$), with higher value for females 33.60% versus 12.0%. This data corroborates with the findings by Silva et al. (2009), but no significant association between all categories of physical activity and sex. These results can be justified because the girls engage in less active activities and of low intensity and the boys have more preferably of more vigorous intensity activities.

Several factors may contribute to the high prevalence of sedentary lifestyle, not reported in this study, but considered in other studies such as socioeconomic status, hours in sedentary activity (computer, video games and TV) and commuting to

school (Christófaro et al, 2011; COSTA &. ASSIS, 2011).

Regarding nutritional status (BMI) most school of this research were classified as ideal weight 73.80% for both sexes. This result reinforces the findings of Brito et al. (2012) which confirmed that 86.6% had normal BMI, in its survey of schoolchildren in Teresina-PI. These results should be viewed with caution since, in this work were not considered factors other than the level of physical activity that are associated with changes in this variable as: food intake and body fat percentage, this may be considered a limitation of this study .

Also, it was observed that overweight (11.70%) and obesity (6.70%) in boys were higher than girls (11.20%) and (1.9%), respectively, similar results to those Pardo et al. (2011) Chistofaro et al. (2011). Both studies used the same method for assessing the nutritional status of this research, BMI. There was no significant association between a sedentary lifestyle and nutritional status corroborating the results of Brown et al. (2011).

CONCLUSION

The prevalence of physical inactivity (78.5%) of school of Piripiri-PI was considered high, with higher prevalence in women. There was a significant association only in very sedentary category, between sex and level of physical activity ($p < 0.05$). There was no significant association between a sedentary lifestyle and nutritional status. Given this high level of inactivity suggest up public policies for intervention, especially in schools with projects aimed at encouraging and promoting physical activities in order to change this situation.

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QUADRA 32 LOTE 20 CASA "B" – PROMORAR – TERESINA – PI

PREVALENCE OF SEDENTARY PEOPLE AND NUTRITIONAL STATUS IN SCHOOL EDUCATION NETWORK EAST COUNTY PUBLIC STATE EDUCATION OF PIRIPIRI-PI

ABSTRACT

The increase in sedentary lifestyle worldwide and Brazil have contributed to the increase in chronic degenerative processes such as heart disease, diabetes and cancer. The aim of this research was to determine the prevalence of physical inactivity and relate the level of sedentary lifestyle and nutritional status of schoolchildren from the High School of State Public Network municipality of Piripiri-PI. The study was cross-sectional, descriptive, which were evaluated 210 schoolchildren of both sexes, with average age of 15.5 ± 1.1, enrolled in the public network State concoction-PI school. For data collection was carried out anthropometric measurements and questionnaires to identify the level of physical activity. The statistical analysis was applied to descriptive statistics with average procedures ± standard deviation for sample characterization and Chi - square test for association between sex and all variables and level of physical activity and nutritional status ($p < 0.05$) . The prevalence of physical inactivity was 78.5% for both sexes. Boys had become more active (31.0%), compared with girls (12.1%). Regarding nutritional status (BMI), most school 73.80% was classified in ideal weight. There was a significant association only in very sedentary category, between sex and level of physical activity ($p < 0.05$). The prevalence of physical inactivity (78.5%) of school of chilli-PI was considered high, with higher prevalence in women. There was a significant association only in very sedentary category, between sex and level of physical activity ($p < 0.05$). There was no significant association between a sedentary lifestyle and nutritional status.

KEYWORDS: Sedentary lifestyle; School; Nutritional status.

PRÉVALENCE DES PERSONNES SÉDENTAIRES ET ÉTAT NUTRITIONNEL EN MIDDLE SCHOOL RÉSEAU ÉDUCATION PUBLIQUE ETAT PIRIPIRI-PI COUNTY L'ÉDUCATION

RÉSUMÉ

L'augmentation de la sédentarité dans le monde entier et au Brésil ont contribué à l'augmentation des processus dégénératifs chroniques telles que les maladies cardiaques, le diabète et le cancer. L'objectif de cette recherche était de déterminer la prévalence de l'inactivité physique et concernent le niveau de vie sédentaire et l'état nutritionnel des écoliers de la

commune Lycée d'Etat réseau public de Piripiri-PI. L'étude était transversale, descriptive, qui ont été évalués 210 écoliers des deux sexes, avec l'âge moyen de 15,5 ± 1,1, inscrit à l'école concoction-PI de l'Etat du réseau public. Pour la collecte des données a été effectué des mesures anthropométriques et des questionnaires pour déterminer le niveau d'activité physique. L'analyse statistique a été appliquée aux statistiques descriptives des procédures moyenne ± écart-type pour la caractérisation de l'échantillon et test du chi - carré pour l'association entre le sexe et toutes les variables et le niveau d'activité physique et l'état nutritionnel (p <0,05) . La prévalence de l'inactivité physique était de 78,5% pour les deux sexes. Les garçons étaient devenus plus actifs (31,0%), contre les filles (12,1%). En ce qui concerne l'état nutritionnel (IMC), la plupart des écoles 73,80% a été classée en poids idéal. Il y avait une association significative que dans la catégorie très sédentaire, entre le sexe et le niveau d'activité physique (p <0,05). La prévalence de l'inactivité physique (78,5%) de l'école de piment-PI a été considéré comme élevé, avec une prévalence plus élevée chez les femmes. Il y avait une association significative que dans la catégorie très sédentaire, entre le sexe et le niveau d'activité physique (p <0,05). Il n'y avait pas d'association significative entre un mode de vie sédentaire et l'état nutritionnel.

MOTS-CLÉS: Mode de vie sédentaire; École; L'état nutritionnel.

PREVALENCIA DE LAS PERSONA SEDENTARIAS Y ESTADO NUTRICIONAL EN LA ESCUELA SECUNDARIA EDUCACIÓN PÚBLICA DEL ESTADO LA CONDADO PIRIPIRI-PI.

RESUMEN

El aumento de sedentarismo en todo el mundo y Brasil han contribuido al aumento de los procesos degenerativos crónicos, como enfermedades cardíacas, diabetes y cáncer. El objetivo de esta investigación fue determinar la prevalencia de la inactividad física y relacionar el nivel de sedentarismo y el estado nutricional de los escolares del municipio Escuela Superior de Estado Red Pública de Piripiri-PI. El estudio fue transversal, descriptivo, que se evaluaron 210 escolares de ambos sexos, con edad promedio de 15.5 ± 1.1, inscrito en la escuela brebaje-PI Estado red pública. Para la recolección de datos se llevó a cabo mediciones antropométricas y cuestionarios para identificar el nivel de actividad física. El análisis estadístico se aplicó la estadística descriptiva con los procedimientos de la media ± desviación estándar para la caracterización de la muestra y prueba de Chi - cuadrado para la asociación entre el sexo y todas las variables y el nivel de actividad física y el estado nutricional (p <0,05) . La prevalencia de inactividad física fue 78.5% para ambos sexos. Niños se habían vuelto más activa (31,0%), en comparación con las niñas (12,1%). En cuanto a la situación nutricional (IMC), la mayor escuela de 73,80% fue clasificado en el peso ideal. Hubo una asociación significativa sólo en categoría muy sedentaria, entre el sexo y el nivel de actividad física (p <0,05). La prevalencia de la inactividad física (78,5%) de la escuela de chile-PI se considera alta, con mayor prevalencia en las mujeres. Hubo una asociación significativa sólo en categoría muy sedentaria, entre el sexo y el nivel de actividad física (p <0,05). No se encontró asociación significativa entre el sedentarismo y el estado nutricional.

PALABRAS CLAVE: Estilo de vida sedentario; Escuela; El estado nutricional.

PREVALÊNCIA DO SEDENTARISMO E ESTADO NUTRICIONAL EM ESCOLARES DO ENSINO MÉDIO DA REDE PÚBLICA ESTADUAL DE ENSINO DO MUNICÍPIO DE PIRIPIRI-PI

RESUMO

O aumento do sedentarismo em nível mundial e Brasil têm contribuído no aumento dos processos crônico-degenerativos, como as doenças do coração, o diabetes e o câncer. O objetivo da presente pesquisa foi determinar a prevalência do sedentarismo e relacionar o nível de sedentarismo e estado nutricional em escolares do Ensino Médio da Rede Pública Estadual do município de PIRIPIRI-PI. O estudo foi do tipo transversal, descritivo, onde foram avaliados 210 escolares, de ambos os sexos, com média de idade 15,5±1,1, matriculados na Rede Pública Estadual de Ensino de PIRIPIRI-PI. Para a coleta de dados foi realizada avaliação antropométrica e aplicação de questionários para identificar o nível de Atividade Física. Para o tratamento estatístico foi aplicado a estatística descritiva com os procedimentos de média ± desvio padrão, para caracterização da amostra e teste de Qui – quadrado, para associação entre sexo e todas as variáveis e nível de atividade física e estado nutricional (p<0.05). A prevalência do sedentarismo foi de 78,5%, para ambos os sexos. Os meninos apresentaram-se mais ativo (31,0%), com relação as meninas (12,1%). Quanto ao estado nutricional (IMC), a maioria dos escolares 73,80 % foi classificada no peso ideal. Houve associação significativa, somente, na categoria muito sedentário, entre sexo e nível de atividade física (p<0.05). A prevalência do sedentarismo (78,5%) dos escolares de PIRIPIRI-PI foi considerada alta, com maior prevalência para o sexo feminino. Houve associação significativa, somente, na categoria muito sedentário, entre sexo e nível de atividade física (p<0.05). Não houve associação significativa entre sedentarismo e estado nutricional.

PALAVRAS-CHAVE: Sedentarismo; Escolares; Estado Nutricional.