98 - SLEEP QUALITY AND LEVEL OF PHYSICAL ACTIVITY OF COLLEGE STUDENTS

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INTRODUCTION

The enrollment in higher education is an important period in the life of the people, because many behaviors that were acquired throughout life can be changed based on new friendships and new attitudes. (SILVA, 2011).

Students belong to a group with a high probability of presenting excessive daytime sleepiness and poor sleep quality, taking into account school schedules as students trying to meet theirs activities alternate day for the night, causing problems with the regularity of sleep and lack of physical activity practice. (AGUDELO et al. (2005), Araujo, ALMONDES, 2012)

Irregular sleep patterns and physical inactivity can lead to several implications for humans, as cognitive malfunction, a propensity to changes in metabolism and endocrine system and psychological disorders. People who sleep poorly tend to have more comorbidity, less life expectancy and premature aging. On the other hand, there is evidence that the practice of physical activity can contribute to the prevention and treatment of sleep-related problems. (PEREIRA, GORDIA, TABLES, 2011).

The physical activity is linked to the lifestyle chosen by the individual. Such habits depend on a number of environmental factors, social, demographic and cultural factors that can trigger individual behavior. (Mielke et al, 2010).

When practiced regularly, physical activity has many health benefits such as the improvement of the cardiovascular and respiratory capacity; the prevention of chronic diseases, and it also has psychological benefits, such as: improvement of general well-being, self-esteem and mood. (Miranda et al, 2013).

The concern over the sleep pattern and the practice of physical activity of college students has increased; a group of people that maintains inappropriate lifestyle, such as nocturnal habits, sedentary lifestyle, and drug use during higher education, may cause problems the sleep pattern. Therefore the aim of this descriptive study was to evaluate the quality of sleep and physical activity level of students of the Physical Education Course at the State University of Rio Grande do Norte in the town of Mossoró - RN .

MATERIAL AND METHOD

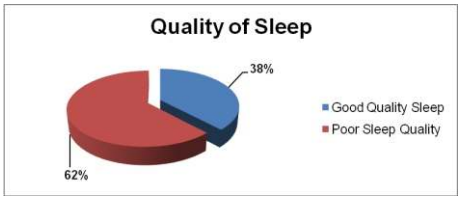
This descriptive study conducted with a sample group consisted of 66 students of both sexes, aged 17-40 years enrolled in the 1st, 3rd, 5th and 7th semesters the Physical Education Course at the State University of Rio Grande do Norte - RN. It was used as a measuring instrument, the questionnaire index of Pittsburgh sleep quality (PSQI), and International physical activity questionnaire short version (IPAQ). The statistic used to verify normality, Komolgorov Smirnov test for parametric variables was used Man- Whitney, now for nonparametric variables we used the Kruskal Wallis tests with significance level of $p < 0.05$, the software used for statistical analysis was SPSS 20.0 Portuguese version.

RESULTS AND DISCUSSION

The social demographic profile of the sample of 66 students is in Table 01.

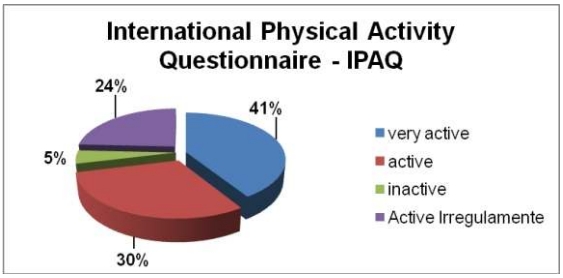
Gender	Nº	%
Male	30	45,45
Female	32	48,48
Unknown	4	6,06
Total	66	100
Age		
17 years	2	3,03
18 years	10	15,15
19 years	7	10,61
20 years	10	15,15
21 years	9	13,64
22 years	13	19,70
23 years	3	4,55
24 or more	12	18,18
Total	66	100
Period		
1º	26	39,39
3º	14	21,21
5º	12	18,18
7º	14	21,21
Total	66	100

With regard to the sociodemographic data, it was observed that the number of men and women was equivalent to the total sample, 30 (45.45%) male and 32 (48.48%) female the group had a greater number of people aged between 18-22 years. The distribution of the sample to the period studied, about 39.39% of the students are from the 1st, being the most representative in the research.



Graphic 01 - Subjective sleep quality during the last month of college students

By analyzing the subjective quality of sleep the last month of the university in Graphic 01, it was found that 62% of college students have a poor sleep quality, since 38% of the students have a good quality of sleep. In the study by Araújo et al (2013) on the subjective sleep quality of Fortaleza - CE college students show similar results , where the index showed 54% of students with poor sleep quality, then verifying that the sleep-related habits of college require changes, such as poor quality of sleep can lead to health problems for them. Cardoso et al (2009) when they analyzed the sleep quality of college students found that 56.5% (n =156) of the students rated the quality of their sleep during the last month as good and 22.8 % (n =63) classified it as bad, maintaining a difference in the results found here.



Graphic 02 - Physical activity levels of university

The graph 02 shows the percentage of the level of physical activity of college, where 41% of the students are very active, 30% active, 24% irregularly active and inactive 5%. In the study by Cieslak et al (2012), on the percentage of physical activity levels there were shown similar results where most of the students are classified indicators "active" and "very active", for both sexes, with the percentage of 71.1% for males and 53.7% for females. The proportion of inactive was 18.8% for the total of undergraduate students. These data show that students are adept at practicing physical activity, which play a significant role in health promotion and prevention of various diseases, being a healthy behavior which will regularly benefit health. However, on the studies of Pinho; Barbosa (2011), the data contradict our results where 50% of the sample was classified as very active; 31.82% classified as assets and 18.18% as insufficiently active, not having been found inactive.

Table 01 - Average Quality of Sleep and level of physical activity in both sexes.

VARIABLES	MALE	FEMALE
SLEEP QUALITY	6,94 ± 2,29*	7,06 ± 3,43*
AF WALK (freq. *)	4,16 ± 2,18*	3,31 ± 2,54*
AF WALK (dur. *)	121,13 ± 239,30*	38,57 ± 50,82*
AF MODERATE (freq. *)	3,97 ± 2,06*	3,69 ± 1,83*
AF MODERATE (dur. *)	72,26 ± 78,50*	114 ± 202,73*
AF VIGOROUS (freq. *)	2,71 ± 2,28*	2,54 ± 2,05*
AF VIGOROUS (dur. *)	79,03 ± 127,08*	76,86 ± 126,83*
TIME SAT (without *)	316,45 ± 169,52*	351,43 ± 186,86*
TIME SAT (Final (Final * s)	470,65 ± 643,17*	309,39 ± 52,30*

P > 0.05 * freq.* - Frequency dur.* - Duration Sem* - Week Final de s* - Weekend

In Table 01 we can see that compared sleep variables and activities such as walking, moderate and vigorous we can observe a significant difference in both sexes. In all activities men had a higher average than the female be it in practice and in duration rate, with a caveat only in the duration of moderate activities in which females had a higher average. However, for variable sleep quality both sexes had an average above the desirable level, and 6.94 ± 2.29 for males and 7.06 ± 3.43 for females, classifying it as poor quality of sleep. Similarly Miranda et al (2013) studied the level of physical activity and its relation with sex, finding that men were more physically active than women. As sleep quality of college students it is a major concern, emphasizing that poor sleep quality reflects the individual's health and can cause problems such as fatigue, loss of concentration, fatigue, increased sensitivity to pain, anxiety, nervousness, irrational ideas, hallucinations loss of appetite.

CONCLUSION

After analyzing the results it is concluded that college students of the Physical Education Course have a poor quality of sleep, while maintaining continuous physical activity practice. It is recommended that new habits are adapted by the students, for this poor quality of sleep will not cause the same health problems.

REFERENCES

ARAUJO , Danilo de Freitas ; ALMONDES , Katie Moraes . Sleep Quality and Its Relation to Academic Performance in College Students of Different Shifts . PSYCHO , v . 43, no. 3 , p. 350-359 , July / SET button. In 2012 .

AGUDELO , et al. Factors that culturales privan of sueño y estudiantes en causan somnolencia excesiva universitarios : un estudio pilot. Psychology y Salud , v.15 , n.1 , p . 57-68 .

Cardoso , higor Chagas et al . Evaluation of sleep quality in medical students . Brazilian Journal of Medical Education, v .33, n.3, p. 349-355, 2009.

Cieslak , Fabrizio , et al . Analysis of quality of life and level of physical activity in college students. Rev. Educ . Fis / EMU, v . 23 , n . 2 , p. 251-260 ; 2. trim . In 2012 .

Mielke et al. Physical activity and associated factors in the first year of college

Federal University of Pelotas . Brazilian Journal of Physical Activity & Health , v.15 , n . 1. 2010.

MIRANDA P N Vernon , et al. Level of physical activity and body satisfaction in physical education students . R. bras . Ci and Mov , v.21 , n.2 , p . 98-105 . In 2013 .

PEREIRA , Ellen Galvão ; GORDIA , Alex Pinheiro ; TABLES , Maria Teresa Bianchini . Sleep patterns in Brazilian university students and its relationship to physical activity : a literature review . Brazilian Journal of Health Sciences , vol . 9 , n . 30 , p.55 - 60 Oct / Dec 2011.

PINE , Silvia Teixeira ; BARBOSA , Júlio Gonçalves . Levels of physical activity of students of physical education Ulbra Port - old RO . Annals of the Week Education, v.1 , n.1 , 2010.

SILVA , Diego Augusto Santos . Physical activity and associated factors in academic physical education at a public university in northeastern Brazil . Brazilian Journal of Physical Activity & Health, v.16 , n.3 , 2011 .

SLEEP QUALITY AND LEVEL OF PHYSICAL ACTIVITY OF COLLEGE STUDENTS

ABSTRACT

College students belong to a group with a high probability of presenting excessive daytime sleepiness and poor sleep quality, taking into account school schedules, as they, in an attempt to fulfill their activities by alternating day and night, causing problems with regularity of sleep, which coupled with lack of physical activity practice, can bring harm to their health. The purpose of this descriptive study was to evaluate the quality of sleep and physical activity of 66 university students of both sexes, aged between 17 and 40 years enrolled in the 1st, 3rd, 5th and 7th semesters in the Physical Education Course at State University of Rio Grande do Norte in the town of Mossoró-RN, being used as tools to assess a questionnaire of Pittsburgh sleep quality index (PSQI), and International physical activity questionnaire short version (IPAQ). The statistic used to verify normality was the Komolgorov Smirnov test, for parametric variables we used Man-Whitney, for the nonparametric variables we used the Kruskal Wallis tests with significance level of p <0.05, the software used for statistical analysis was SPSS 20.0, Portuguese version. The analyzed data showed that the majority of students from the Physical Education Course present a poor quality of sleep, while maintaining continuous physical activity practice.

KEYWORDS: Quality of sleep, physical activity, college students.

RÉSUMÉ

Les étudiants du Collège appartiennent à un groupe avec une forte probabilité de présenter une somnolence diurne excessive et la mauvaise qualité du sommeil, en tenant compte des horaires scolaires , comme eux, dans une tentative pour s'acquitter de leurs activités par l'alternance jour nuit , provoquant des problèmes de régularité du sommeil, qui couplé avec le manque de pratique de l'activité physique, peut porter préjudice à votre santé . Le but de cette étude descriptive était d'évaluer la qualité du sommeil et l'activité physique de 66 étudiants des deux sexes , âgés entre 17 et 40 ans inscrits dans les 1er, 3e, 5e et 7e période de la Faculté d'éducation physique Université État de Rio Grande do Norte dans la ville de Mossley , RN, étant utilisés comme des outils permettant d'évaluer un indice de questionnaire de la qualité du sommeil de Pittsburgh (PSQI) , et de l'activité physique questionnaire version courte international (IPAQ) . La statistique utilisée pour vérifier la normalité, Komolgorov Smirnov pour les variables paramétriques a été utilisé Man- Whitney, maintenant pour les variables non paramétriques , nous avons utilisé les tests de Kruskal Wallis avec un niveau de signification de p <0,05 , l' logiciel utilisé pour l'analyse statistique était la version SPSS 20.0 en portugais. Les données analysées ont montré que la majorité des étudiants de l' École d'éducation physique , présente une mauvaise qualité de sommeil , tout en conservant une pratique de l'activité physique continue .

MOTS-CLÉS: la qualité du sommeil , l'activité physique , universitaires.

RESUMEN

Estudiantes universitarios que pertenecen a un grupo con una alta probabilidad de presentar somnolencia diurna excesiva y la mala calidad del sueño, teniendo en cuenta los horarios de las escuelas, ya que, en un intento de cumplir con sus actividades por la alternancia de la noche día, causando problemas con regularidad del sueño, lo que unido a la falta de práctica de actividad física, puede hacer daño a su salud. El propósito de este estudio descriptivo fue evaluar la calidad del sueño y la actividad física de 66 estudiantes universitarios de ambos sexos, con edades comprendidas entre 17 y 40 años matriculados en el primero, tercero, quinto y séptimo período de la Facultad de la Universidad de Educación Física Estado de Río Grande del Norte en la ciudad de Mossley, RN, ser utilizados como herramientas para evaluar el índice de cuestionario de calidad del sueño de Pittsburgh (ICSP), y la actividad física cuestionario versión corta Internacional (IPAQ). La estadística que se usa para verificar la normalidad, se utilizó Komolgorov Smirnov para las variables paramétricas Man-Whitney, ahora para variables no paramétricas se utilizaron las pruebas de Kruskal Wallis, con un nivel de significación de p <0,05, la software utilizado para el análisis estadístico fue el SPSS versión 20.0 en portugués. Los datos analizados muestran que la mayoría de los estudiantes de la Escuela de Educación Física, presenta una mala calidad de sueño, mientras que el mantenimiento de una práctica de la actividad física continua.

PALABRAS CLAVE: Calidad de sueño, actividad física, universitarios.

QUALIDADE DO SONO E NÍVEL DE ATIVIDADE FÍSICA DE UNIVERSITÁRIOS

RESUMO

Os estudantes universitários pertencem a um grupo com altas probabilidades de apresentar sonolência diurna excessiva e qualidade de sono ruim, levando em consideração os horários escolares, pois os mesmos, na tentativa cumprir suas atividades alterna o dia pela a noite, acarretando problemas com a regularidade do sono, qual somado com a falta da pratica de atividade física, pode trazer prejuízos à sua saúde. O objetivo do presente estudo descritivo foi avaliar a qualidade do sono e o nível de atividade física de 66 universitários de ambos os sexos, na faixa etária entre 17 a 40 anos matriculados no 1º,3º, 5º e 7º período na Faculdade de Educação Física da Universidade do Estado do Rio Grande do Norte na cidade de Mossoró–RN, sendo utilizados como instrumentos de medida um questionário Índice de qualidade do sono de Pittsburgh (IQSP), e o Questionário Internacional de atividade física versão curta (IPAQ). A estatística utilizada para verificar a normalidade foi o teste de Komolgorov Smirnov, para as variáveis paramétricas foi utilizado o Man-whitney, já para as variáveis não paramétricas utilizou-se o Kruskall Walis com o nível de significância de p<0,05, o software utilizado para analise estatística foi o SPSS 20.0 versão em português. Os dados analisados permitem concluir que a maioria dos estudantes universitários da Faculdade de Educação Física, apresenta uma má qualidade de sono, apesar de manter uma pratica de atividade física continua.

PALAVRAS-CHAVE: Qualidade do sono, atividade física, universitários.