

# REVISTA PAULISTA DE PEDIATRIA



www.rpped.com.br

#### REVIEW ARTICLE

# Sleep in adolescents of different socioeconomic status: a systematic review



Érico Pereira Gomes Felden\*, Carina Raffs Leite, Cleber Fernando Rebelatto, Rubian Diego Andrade, Thais Silva Beltrame

Universidade do Estado de Santa Catarina (UDESC), Florianópolis, SC, Brazil

Received 17 September 2014; accepted 18 January 2015 Available online 28 August 2015

#### **KEYWORDS**

Sleep; Adolescent; Social class

#### **Abstract**

*Objective*: To analyze the sleep characteristics in adolescents from different socioeconomic levels.

Data source: Original studies found in the MEDLINE/PubMed and SciELO databases without language and period restrictions that analyzed associations between sleep variables and socioeconomic indicators. The initial search resulted in 99 articles. After reading the titles and abstracts and following inclusion and exclusion criteria, 12 articles with outcomes that included associations between sleep variables (disorders, duration, quality) and socioeconomic status (ethnicity, family income, and social status) were analyzed.

Data synthesis: The studies associating sleep with socioeconomic variables are recent, published mainly after the year 2000. Half of the selected studies were performed with young Americans, and only one with Brazilian adolescents. Regarding ethnic differences, the studies do not have uniform conclusions. The main associations found were between sleep variables and family income or parental educational level, showing a trend among poor, low social status adolescents to manifest low duration, poor quality of sleeping patterns.

Conclusions: The study found an association between socioeconomic indicators and quality of sleep in adolescents. Low socioeconomic status reflects a worse subjective perception of sleep quality, shorter duration, and greater daytime sleepiness. Considering the influence of sleep on physical and cognitive development and on the learning capacity of young individuals, the literature on the subject is scarce. There is a need for further research on sleep in different realities of the Brazilian population.

© 2015 Sociedade de Pediatria de São Paulo. Published by Elsevier Editora Ltda. This is an open access article under the CC BY- license (https://creativecommons.org/licenses/by/4.0/).

E-mail: ericofelden@gmail.com (E.P.G. Felden).

DOI of original article: http://dx.doi.org/10.1016/j.rpped.2015.01.011

<sup>\*</sup> Corresponding author.

468 Felden EPG et al.

#### **PALAVRAS-CHAVE**

Sono; Adolescentes; Nível socioeconômico

#### Sono em adolescentes de diferentes níveis socioeconômicos: revisão sistemática

#### Resumo

Objetivo: Analisar as características do sono em adolescentes de diferentes níveis socioe-conômicos.

Fontes de dados: Foram analisados estudos encontrados nas bases de dados MEDLINE/PubMed e SciELO que apresentassem resultados originais, sem restrições de idioma e de período, com associações entre variáveis de sono e indicadores socioeconômicos. A busca inicial teve como resultado 99 estudos. Diante dos critérios de inclusão e exclusão e após a leitura dos textos completos, 12 artigos apresentaram em seus desfechos associações entre as variáveis de sono (distúrbios, duração e qualidade) e os parâmetros socioeconômicos (etnia, renda e classe social).

Síntese dos dados: Os estudos relacionando o sono com variáveis socioeconômicas são recentes e datados a partir do ano 2000. Metade das pesquisas selecionadas foi realizada com jovens norte-americanos, e apenas uma com adolescentes brasileiros. Com relação às diferenças étnicas, os estudos não apresentam conclusões uniformes. As principais associações foram com a renda familiar e nível de escolaridade dos pais, evidenciando-se uma tendência entre jovens pobres e com status social mais baixo de manifestarem baixa duração e má qualidade do sono. Conclusões: Constatou-se associação entre os indicadores socioeconômicos e o sono dos adolescentes. O baixo status socioeconômico refletiu-se numa pior percepção subjetiva da qualidade do sono, menor duração e maior sonolência diurna. Considerando a importância do sono para o desenvolvimento físico e cognitivo e para a aprendizagem dos jovens, o número de pesquisas ainda é escasso. Sugere-se mais investigações sobre o sono em diferentes realidades da população brasileira.

© 2015 Sociedade de Pediatria de São Paulo. Publicado por Elsevier Editora Ltda. Este é um artigo Open Access sob a licença CC BY (https://creativecommons.org/licenses/by/4.0/deed.pt).

### Introduction

People go through important changes during the course of their lives, both in terms of physical shape and behavior. In adolescence, in particular, one can observe important changes in the sleep/wake cycle, including a delay in the sleep phase, characterized by later bed- and wake-up times. This biological tendency of adolescents can be accentuated by behaviors such as the use of computers, games and TV at night. Additionally, environmental issues, such as social commitments early in the morning, increase the prevalence of short sleep duration in this population.

The study by Bernardo et al.<sup>4</sup> identified a prevalence of 39% of adolescents with short sleep duration in São Paulo. Perez-Chada et al.<sup>5</sup> observed that 49% of the assessed Argentinean adolescents had short sleep duration. Sleep disorders have been associated with several health outcomes, such as cognitive development disorders,<sup>6</sup> psychiatric disorders,<sup>7</sup> metabolic and excess weight disorders,<sup>8,9</sup> as well as a higher degree of stress.<sup>10</sup>

In addition to the biological issues, the environment seems to have a decisive influence on the sleep/wake cycle. In this context, the literature indicates that socioeconomic status is one of the most relevant social variables for the understanding of health issues. 11-13 As for sleep, the studies are scarce and this association is little explored, especially regarding studies with adolescents. However, it is known that acknowledging the associations and causal links between sleep and socioeconomic status is fundamental

for the understanding of adolescent sleep and to mediate a proposal for health education.

Considering the abovementioned facts and taking into account the importance of studies that investigate the association between sleep and socioeconomic status for the planning of public health actions and the scarcity of studies that summarize the literature on this topic, this study aimed to make a systematic review to evaluate the association between sleep characteristics in adolescents from different socioeconomic levels.

#### Method

A systematic literature review was performed using the SciELO and MEDLINE/PubMed databases, with no period limitations or language exclusion. The search used the terms "sleep" and "socioeconomic status" together with the term "adolescents," as well as the equivalent terms in Portuguese. Additionally, the search was expanded by analyzing the relevant studies found in the references of articles selected in the initial search. The first search resulted in a total of 99 studies, as described in Fig. 1.

Based on the initial search, the articles selected for analysis had to meet the following inclusion criteria: (a) original articles with sleep variable results (duration and quality of sleep, sleep efficiency and mild sleep disorders, such as insomnia); (b) studies with adolescent samples; and (c) articles that showed measures of association and/or differences between the sleep variables and socioeconomic indicators.

### Download English Version:

## https://daneshyari.com/en/article/4176201

Download Persian Version:

https://daneshyari.com/article/4176201

<u>Daneshyari.com</u>