Association of sleep habits with dietary pattern; a schools-based cross-sectional study

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Abstract

Background: There is a relationship between nutrition pattern and sleep status. The role of demographic and dietary factors on the sleep quality in Iranian children are unclear.

Objective: To determine the sleep pattern in children aged 7-12 years and its relationship with demographic factors and dietary pattern.

Methods: In this cross-sectional study, 264 students aged 7-12 years old were invited using multistage random sampling from schools of Qazvin in 2015-2016. The Children's Sleep Habits Questionnaire (CSHQ) and 24-hour diet-recalls questionnaire were used to determine the sleep pattern and dietary pattern, respectively.

Findings: The mean age of the subjects was 9.5±1.53 years. The prevalence of sleep disturbances (CSHQ score >41) was 77.5%. There was no significant relationship between 4 macro-nutritious types (fat, protein, carbohydrates and energy) with sleep pattern and its subscales. There was a significant relationship between bedtime resistances with mother education; sleep onset delay with weight and school grade; sleep anxiety with father education, weight and sex; frequent night waking, parasomnia, and sleep disordered breathing with sex and father education.

Conclusion: The prevalence of sleep disturbances was high in our study. Although there was no relationship between dietary pattern and sleep pattern, but sleep pattern was significantly associated with demographic factors. Therefore, it is recommended that programs should be developed to raise awareness in communities, focusing towards parents.

Keywords: Sleep, Feeding pattern, Children, Demographic factors