The Relationship between sleep habits and BMI among children 6 to 11 years old in Qazvin city, Qazvin, Iran, 2014

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Abstract: Introduction and objectives: sleep habits are formed in childhood and it affects quality and quantity of sleep lifetime. Some studies suggest that sleep deprivation is associated with weight and sleep deprivation is an effective factor in obesity and diabetes. The aim of this study was to evaluate the relation between sleep habits and body mass index among the children within the range of 6 to 11 years old in the city of Qazvin in 2014

Methods: the descriptive- cross sectional study was performed by participating 287 6 to 11 years old children (in private or public primary schools) in Qazvin through a random and cluster sampling. Data was collected using children sleep habits measurement tool and anthropometric questionnaire and was analyzed by using Pearson correlation coefficient.

Result: Maximum average of sleep problems in children were related to the sleep behavior and the least of children sleep problems were related to awakening at nights. The average BMI of boys (19.33±4.09) and girls (18.11±0.56) didn’t have a significant difference (P>0.05). Also, a significant relationship between the body mass index and sleep habits and its subscales wasn’t seen (P<0.05).

Conclusion: Since the children had a good body mass index, relationship between sleep habits and body mass index wasn’t seen.

Keywords: sleep habits, body mass index, 6-11 years old Children.

1. INTRODUCTION

Sleep habits formed during childhood is unique and affects the quality and quantity of sleep throughout the life [1, 2].

Increase of body mass index is along with sleep deprivation in all ages, and sleep deprivation is an effective factor in obesity and diabetes [2, 3]. Sleep plays very important role in child growth. Sleep is effective not only on the physical, behavioral and emotional growth of child but is a lot linked to mental performance, learning and attention [2 and 4].

Sleeping habits also reflect cultural differences and there are significant differences in this regard between the countries. The cultural and familial fields causes the formation of sleep habits in children and will keep the acquired habits throughout life, [2 and 5] learning the improper sleep habits also affects process of adult life causes the health of individuals and of society at risk. Child’s inadequate sleep habits and behaviors will have complications such as: irritability, aggression, and headaches, digestive disorders... [2 and 6].