Effective family factors on body mass index in high school students of Urmia city

Shahsanam gheibi, Zahra sahebazzamani*, Zahra kousehlou, leila zarei, Hamideh Mohaddesi, Mohammad Hassani,

1- Associate professor of Pediatric Gastroenterology, Maternal and Childhood Obesity Research Center, Urmia University of Medical Sciences, Shahid Motahari Hospital, Urmia, Iran.

2- Master of Midwifery Education, Maternal and Childhood Obesity Research Center, Shahid Motahari Hospital, Urmia University of Medical Sciences, Urmia, Iran.

3- Master of Biostatistics, Maternal and Childhood Obesity Research Center, Shahid Motahari Hospital, Urmia University of Medical Sciences, Urmia, Iran

4- PhD of Histology, Associate, Solid Tumor Research Center, Urmia University of Medical Science, Urmia, Iran

5- Assistant Professor, Master of Midwifery, Maternal and Childhood Obesity Research Center, Shahid Motahari Hospital, Urmia University of Medical Sciences, Urmia, Iran

6- Associate professor of Urmia University

Zs.zaman@yahoo.com

Background: Childhood obesity can be determined with BMI above the 95th percentile for children of the same age and sex. The prevalence of obesity has increased among children in recent decades. According to the researchers, obesity is associated with lifestyle factors such as physical activity patterns and some factors are involved in this issue, including age, gender, ethnicity, race, and socioeconomic status. Among the socio-economic factors, parental education and occupation are two important factors that in some studies have created most difference in food intakes. Nowadays, nearly a quarter of children in developing countries at the age of five are obese or overweight, and this fact shows that Prevention of obesity should begin early in life, while there is little evidence on preventing obesity in children. So, the identification of modifiable risk factors is essential for effective interventions. The aim of this study was to determine the relationship between family factors such as level of education, employment and parent's income and BMI in high school students in Urmia city.

Methods: This cross-sectional study was carried out in 2014 on 950 primary and secondary high school students in Urmia city. Data was collected through a multi-stage sampling, interviews and anthropometric measurements. The researcher prepared a questionnaire and licensed from Office of Education, then begins

the sampling. Data collected by completing questionnaires and measuring student height and weight. Data were analyzed by using independent t-test, one-way ANOVA and Pearson correlation.

Result: The sample of this research included high school girl students in Urmia city who were selected by multistage sampling. The results showed that students' BMI increased significantly with increasing parent's BMI, parent's age, and allowance. Private room had caused a significant increase in BMI. Students BMI did not have statistically significant association with maternal age, maternal employment (employed and unemployed), mothers hours of work, mothers education, mothers time of watching TV and having PC, income, Fathers car. The results of this study showed that there was a significant positive correlation between parents BMI.

Conclusion: In this study, parent's BMI, age of parents and allowance was determined as family risk factors of obesity in high school students in Urmia. Due to cultural differences in different parts of the country, studies in other cities in this area are necessary.

Key words: obesity, overweight, body mass index, family factors