Sedentary the children's lifestyles and childhood asthma between 2-8 years of age in urmia district, Iran

Authors: 1, Shaker Salarilak2, Hamid Reza Khalkhali3 , Mohammadhossein Rahimi Rad4, Sima Oshnouei Mohammad Karamyar5 , mahin safaralizadeh6

Address: Reproductive Health Research Center, Urmia University of Medical Sciences, Urmia, Iran

2. Department of Public Health, Faculty of Medicine, Tabriz Branch, Islamic Azad University, Tabriz, Iran

Department of Biostatistics and Epidemiology, Faculty of Medicine, Urmia University of Medical Sciences, Urmia, Iran

Department of Respiratory Medicine, Faculty of Medicine, Urmia University of Medical Sciences, Urmia, Iran

Department of Pediatrics, Motahari Hospital, Faculty of Medicine, Urmia University of Medical Sciences, Urmia, Iran

Bs of public health, research deputy, Urmia University of Medical Sciences, Urmia, Iran

oshnoyi.sima@gmail.com

Background: During the last decades, many lifestyle behaviors including, dietary patterns, and health behaviors related with life style have changed the pattern of asthma and other respiratory disorders across the world, particularly in developing countries. The present study aimed to investigate the association between antibiotic exposure and the risk of developing childhood asthma at 2-8 years of age.

Methods: A cross- sectional study was undertaken among children aged 2-8 years old between March and September 2010 in the Urmia district in the northwest of Iran. The patients were new case doctor-diagnosed asthmatic children based on Global Initiative for Asthma criteria (n=207), and the controls were children without respiratory symptoms (n=400) selected by frequency matching by age and gender. Data including hours of watching television and hours of computer or video game playing during a normal day (24 hours) was collected by a validated and reliable questionnaire (phase three environmental ISSAC questionnaire), which was completed by interviewing parents/guardians .

Results: According to our results , children who watched more than 3 hours of TV a day were significantly higher odds of having asthma as children who watched less than 1 hours(adjusted OR $_{1\text{-}3\ hours}$, 1.13; 95% CI, 0.57-2.24; p=0.71, OR $_{3\text{-}5\ hours}$,2.71 ; 95%CI 1.31 -5.6 ;p =0.007 , OR $_{5\ hours\ or\ more}$ 3.57 ;95%CI 1.65-7.7;p=0.001). Children who spend 2 hours or more of computer or video games a day were significantly higher odds of having asthma as children who had less adjusted OR $_{less\ than\ 1\ hours}$,1.4; 95% CI, 0.8-2.40; p=0.24, OR $_{1\text{-}2\ hours}$,0.78 ; 95%CI 0.4 -1.64 ;p =0.0.51, OR $_{2\ hours\ or\ more}$ 2.42; 95% CI, 1.2-4.95; p=0.01).

Conclusions: Our study suggests that sedentary the children's lifestyles were at greater odds of developing asthma than those who are more active however an additional confirmative study is needed.

Key words: sedentary’s lifestyles, watching television, computer game, childhood asthma, urmia, Iran