## ETHNIC AND SOCIAL DIFFERENCES IN CHILDHOOD OBESITY – ROMA AND NON-ROMA GROUPS IN SLOVAKIA

Rimárová K1, Rimár V2

<sup>1</sup>Institute of Hygiene, Faculty of Medicine, Košice, Slovak Republic <sup>2</sup>University of Wales, Cardiff, United Kingdom

Key words: ethnic health, school children, obesity

**Background:** Childhood obesity is associated with significant morbidity and mortality and poses one of the major cardiovascular risk in adulthood. Prevalence of obesity has globally worldwide increasing trend among schoolchildren and youths. Central and Eastern European countries are dealing with social, political, cultural and health status difference of Roma (Gypsies) ethnic.

**Material and methods:** In the cross-sectional anthropometrical study subjects were 1,172 school children aged 6–11 years, 420 Roma and 752 non-Roma. Overall prevalence of overweight has been evaluated as >95th percentile BMI for age.

**Results:** Prevalence of overweight showed no difference between non-Roma (10.9%) and Roma (9.8%). Independent predictors for obesity was parents education and employment (p<0.01), single parent family (p<0.05). The research didn't confirm ethnic differences in obesity, however Roma children have very different socio-economic background. Roma children body height and weight comparison is showing shorter statue, lower body weight but approximately equal BMI in all age groups, more expressed in boys. Comparison of Roma weight and Roma height is showing large gaps when compared to National Slovak Anthropometric Survey. The results might be also influenced by hereditary factors confirming Roma people are shorter.

**Conclusions:** In conclusion Roma schoolchildren do not confer any more or less risk for overweight compared to non-Roma. As obesity in childhood is rising rapidly, early intervention from public health officials will be required to prevent excessive weight gain. Outputs are claiming lower anthropometrical parameters in the Roma children population, due to both: genetic-ethnic and socio-economic factors.