RHINITIS IN CHILDREN IN RELATION TO PARENTAL SMOKING

L.M. Seckova¹, E.G. Vlaski¹, R.D. Isjanovska², K.B. Stavric³, M.S. Kimovska¹

¹Department of Pulmonology, University Children's Hospital ²Institute of Epidemiology With Biostatistics and Medical Informatics ³Department of Immunology, University Children's Hospital, Skopje, Macedonia drseckova@yahoo.com

Aim: The aim of the study was to examine the relation between parental smoking and allergic rhinitis symptoms in schoolchildren.

Material and methods: The study is a part of ISAAC phase 3 in Macedonia, which consists of collection of self-reported data by written asthma, rhinitis, eczema and environmental questionnaires. 3026 children aged 13/14 years from 17 randomly selected schools in Skopje were included in the survey during 2002. Statistical analysis of the data was performed with odds ratios and Mantel-Haenszel test.

Results: We found rhinitis ever without a cold or a flu in 30%, rhinitis in last 12 months in 23%, rhinitis associated with ocular symptoms in last 12 months in 5.8%, no interference with daily activities because of severe rhinitis in last 12 months in 14.2%, mild interference with daily activities in 10.3%, moderate interference with daily activities in 2.2%, great interference with daily activities in 0.26% and hay fever ever in 6.7% of the children. Mother as a smoker was established in 50.7%, father as a smoker in 51.7% of the children. A significant association was determined only between rhinitis ever without a cold or a flu and maternal smoking, which increased the risk of rhinitis ever (OR=1.26 95%CI 1.08-1.48; MH=8.47 p=0.003). We did not find that other investigated parameters were significantly associated with parental smoking.

Conclusion: Our results suggest that paternal smoking has not an impact on allergic rhinitis in schoolchildren. Maternal smoking, probably as a non-specific irritant, increases the risk only of rhinitis symptoms ever.