Abstract

Original Article

The Prevalence of Asthma and Allergic Diseases in Middle School Students and Related Environmental Factors

Hatice Simsek, RN, PhD (c)

Research Assistant, Department of Public Health Nursing, Ege University Nursing Faculty, Izmir, Turkey

Bennur Koca, RN, PhD (c)

Lecturer, Vocational School of Health Services, Dokuz Eylul University, Izmir, Turkey

Ayla Bayik Temel, RN PhD

Lecturer, Department of Public Health Nursing, Ege University Nursing Faculty, Izmir, Turkey

Correspondence: Hatice Simsek Research Assistant, Department of Public Health Nursing, Ege University Nursing Faculty, Bornova, Izmir, 35100, Turkey E-mail: hatice.simsek@ege.edu.tr hatice 2709@hotmail.com

Abstract

Objectives: As the prevalence of allergic diseases increases proportionately in Turkey, they retain their importance as diseases of childhood. The aim of this study was to determine the prevalence of asthma, allergic rhinitis and eczema in middle school students, and the related environmental factors.

Methods: The sample of this cross-sectional study consisted of 1083 students in the 13-15 age group in Izmir province, Turkey in 2015. In the study, the International Study of Asthma and Allergies in Childhood (ISAAC) form that tested for validity and reliability in Turkish by Bulduk and Esin (2009) was used.

Results: The mean age of the students (n: 1083) was 13.4±0.73 (min: 11, max: 16) years, and 48.9% were female. The rate of asthma diagnosed by a doctor among the students was 3.8%; for allergic rhinitis the rate was 32.4% and for the diagnosis of eczema it was 4.1%. The risk factor for doctor-diagnosed asthma, allergic rhinitis and eczema in the students was smoking in the house, gender, a history of asthma or allergy in the family and the existence of damp in the house.

Conclusions: The frequencies of symptoms of asthma, allergic rhinitis and eczema found in this study were higher than those reported in other epidemiological studies in Turkey. It is recommended that asthmatic and allergic children should be identified by screening tests included in school health services that students should be given information, and referred to health institutions, and that necessary preventive measures should be taken in the school environment.

Keywords: Asthma, eczema, rhinitis, ISAAC, childhood, prevalence.