Prevalence of respiratory allergens in asthma and allergic rhinitis patients referred to asthma and allergy clinic of the Ardabil University of Medical Sciences in the years 2016 and 2017.

Background & objective*: Susceptibility to respiratory allergens is one of the causes of the development and exacerbation in patients with asthma and allergic rhinitis. Due to the variety of respiratory allergens and the geographical impacts in the type of allergens it is recommended that allergists in each area determined common allergens. This study carried out to assessment prevalence of respiratory allergens in asthma and allergic rhinitis patients.*

Methods*: The data for this study was collected from the patient's check lists that referred to the asthma and allergy clinic of Ardabil during 2016 and 2017. These patients, at the time of referral to the clinic, interviewed using a questionnaires containing demographic information such as age, sex, place of birth and life, past medical history, family history of allergic diseases, occupation, habits and current symptoms. These patients if discretion of allergist has been tested by skin prick test. The inclusion criteria were the history or current symptoms of asthma or allergic rhinitis and the age from 5 to 55 years old. The exclusion criteria were the history of dermographism.*

Results*: A total of 661 patients were included in this study of whom, about 70% was positive for at least one allergen and the most common materials causing allergic reaction were in the category of grasses and weeds. In the categories of animal danders, molds and grasses, susceptibility to prick test was higher in males and patients with a positive family history were more sensitive to weeds and trees. According to age, patients were divided to four groups (younger than 7 years, 7-18 years, 19-25 years, and 25-55 years), that the group of younger than 7 years weren't more sensitive to allergens than other groups, the age group of 7-18 years were more sensitive to molds, grasses, and trees, and the groups of 19-25 years and 25-55 years were same and compare to weeds, grasses and trees were more susceptible. Patients with allergic rhinitis had more positive skin prick test in the categories of weeds, grasses and animal danders in compare to asthma patients. The frequency of allergens in terms of place of patient's birth, place of patient's life and history of tonsillectomy had no difference. Susceptibility to the skin prick test has no difference in the patients who had agricultural or related occupations with domesticated animals or their sleeping furniture was animal's product with others.*

Conclusion*: In this study, about 70% of patients with asthma or allergic rhinitis had positive skin prick test and the most common respiratory allergens in these patients were grasses and weeds which are recommended that in the future, the frequency of respiratory allergens will conduct more precise and will be in more detail with focus on these two categories of allergens.*

Keywords*: respiratory allergens, asthma, allergic rhinitis*