

Prevalence trends and risk factors for allergic rhinoconjunctivitis, asthma and eczema in the UK

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January 25, 2023

Abstract

Background: Allergic rhinoconjunctivitis (ARC), asthma and eczema carry a substantial morbidity. These conditions often co-exist within the same individual and prevalence can differ based on age, ethnicity and gender. **Objectives:** Using a UK primary care database, we estimated the trends in prevalence over the last decade for ARC, asthma and eczema and associated risk factors. **Methods:** Longitudinal cohort analysis of the health improvement (THIN) database between 1st Jan 2010 and 1st Jan 2019. Logistic regression analysis was used to explore risk factors for diagnosis of these conditions. **Results:** An average of 4.17 million records per year were analysed, 19.4% were children and 49.75% were male. There was an increase in prevalence of ARC, asthma and eczema amongst adults during the study period, whereas ARC and asthma prevalence amongst children has fallen. By 2018, 1:8 adults and 1:14 children had ARC; asthma was diagnosed in 1:7 adults and 1:10 children whereas eczema was diagnosed in 1:6 adults and 1:4 children respectively. Ethnicity and gender modify the risk of being diagnosed with these conditions. Having other allergies substantially increases the odds of having asthma, eczema and ARC. **Conclusion:** The population burden of ARC, asthma and eczema in the UK is substantial. These conditions are often associated with other allergies and can, therefore, be complex to manage. These data support calls for improvement of pathways of care for allergy patients in the UK.

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