

Editorial

Today, one child in four has an ongoing allergic disease in Europe. What will the situation be tomorrow?

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Allergic diseases are some of the major causes of morbidity in the westernized world and its prevalence in some parts of Europe still seems to increase. In most of the countries within Europe – from the mid-1970s to mid-1990s – the prevalence of asthma symptoms have been reported to have increased by 200% in children, bringing the percentage of affected people to 5–20 depending on the age group, with the highest figures among children and teenagers (1, 2). Thus, in the EU countries allergic diseases are the most common chronic illnesses of childhood today, affecting more than one child in four in some countries. However, the variation between countries is substantial.

The increased prevalence in asthma and allergic disease does not seem to be the result of a change in genetic risk factors. A number of environmental factors – i.e. some infections, tobacco smoke, poor indoor climate and some allergens seem to coincide with the onset of allergic disease and when the disease is established, these factors may also act as triggers of symptoms (3, 4). Thus, there are not only more children with respiratory allergic disease today, but also more children are prone to react after exposure to allergens, indoor and outdoor pollutants and other irritants (4–6).

Protective factors, including certain lifestyles, have been suggested to balance the negative effect of risk factors for onset of allergic diseases. Such protective factors may be prevalent in certain environments such as farming with live stock, antroposophic lifestyle and with exposure to certain oro-faecal bacterial contaminants (7–12).

This increase in allergic diseases worldwide and mostly in affluent countries has been questioned by others. An article by Magnus and co-workers in 1997, reviewed

repeated cross-sectional studies with focus on prevalence of asthma (13). They concluded that the evidence of an increase of the asthma prevalence was rather meagre. In 2001, Wieringa et al. reviewed the supposed increase of occurrence of asthma and allergy in studies with objective measurements (14). Sixteen articles were found of which nine had used the same objective measurements twice (allergen specific IgE, skin prick test, bronchial hyperreactivity and lung function) and in six of these a significant increase was found.

In this issue of *Allergy*, Maziak and co-workers present new data on the change in prevalence of bronchial asthma and allergies among more than 14 000 children and adolescents in Munster in Germany (p. 572; 15). The results are based on two cross-sectional studies 5 years apart (1994/95 and 1999/2000) using the International Study of Asthma and Allergy in Children (ISAAC) core written and video questionnaires and applying the ISAAC protocol. During these 5 years, they observed a substantial increase in prevalence of asthma allergic rhinitis and atopic dermatitis. The increase in prevalence of allergic diseases, i.e. wheeze, atopic dermatitis and rhinitis was most pronounced in girls. Besides, there was an increase in asthma severity, i.e. number of wheeze attacks, speech limiting wheeze and sleep disturbances caused by wheeze, parallel to the increase in asthma prevalence. The increase in severity was also more pronounced among the girls compared with the boys in the study, which brings the authors to reflect on the possibility of previous under-diagnosis of asthma among girls. To us, this may as well be a parental perception of the health of their children and difference in report of symptoms if the child was a boy or a girl. However,

because of its design the paper cannot solve this interesting issue.

In studies from some other European countries, e.g. Italy and the UK the increase has recently been reported to come to an end (16, 17). If this holds true, it seems that Italy has a lower point prevalence of allergic diseases compared with UK. It can only be speculated if this is because of the presence of more protective factors in Italy compared with England. The question is however, will the prevalence of allergic diseases in childhood still continue to increase and where will it stop?

What does the future hold for us?

With one child in four being allergic today, and as we are facing a steady increase in the prevalence of allergic

diseases in Europe in the recent years, it is consequently crucial that more is invested in allergy research. Because of a so-called 'cohort effect', the number of allergic individuals is expected to further increase in Europe during the next decades, i.e. the number of individuals with a susceptibility to react to pollution. Thus, we need to increase our understanding of the allergic process and continue to investigate the factors causing allergies. We also need to have a better knowledge of the health care systems, in order to be in a position to meet the demands of the growing allergic population within Europe. The European Academy of Allergy and Clinical Immunology (EAACI) is committed to this fight against allergies. It is our responsibility to take up this challenge and to care for our children and their future, enabling them to enjoy a better health and a better quality of life.

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