

The prevalence of sensitisation and relevant symptoms of allergic rhinitis in an unselected Belgium population

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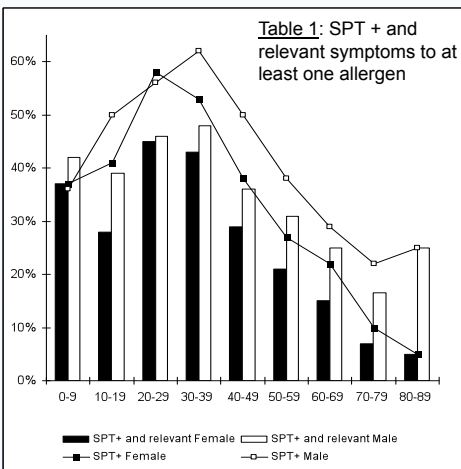
Background

Allergic rhinitis (AR) is the most common allergic disorder and its prevalence has significantly increased worldwide. However, the condition is frequently trivialised (by the patient), unrecognised and/or under-diagnosed (by the physician). The aim of this study was to evaluate the prevalence of sensitisation (positive skin prick test: SPT) and clinical relevant symptoms of allergic rhinitis in the Belgian population.

Material and Methods

2320 visitors of a public fair in Ghent, Belgium, (845 males and 1475 females), aged 3-89 years (median age 44,7 years), underwent a SPT to 3 aeroallergens: mix of trees (hasel, alder, birch), grass pollen and house dust mite (HDM). The clinical relevance of sensitisation was assessed by relating relevant symptoms of AR to the corresponding SPT. All the subjects gave oral permission to use the data anonymously.

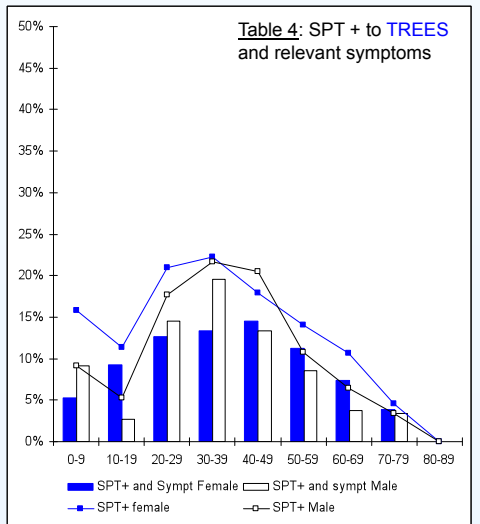
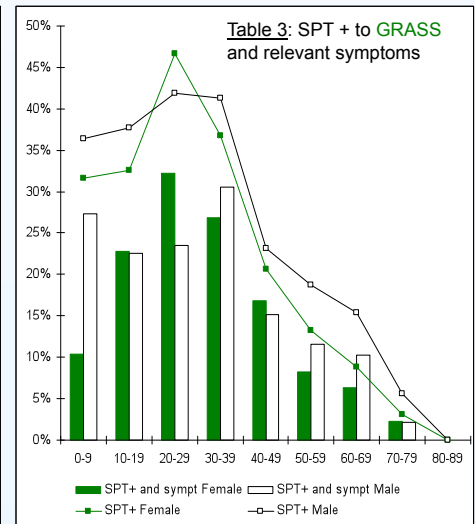
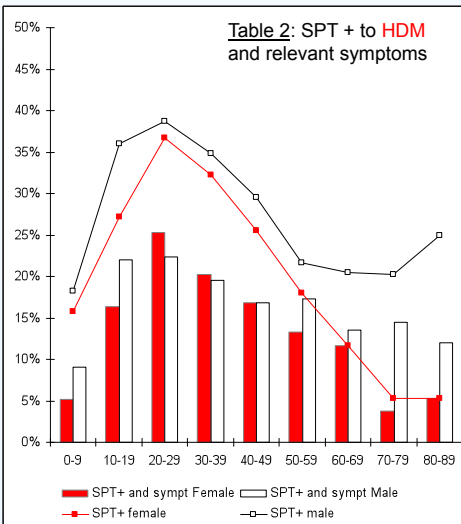
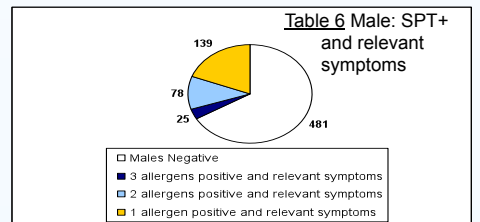
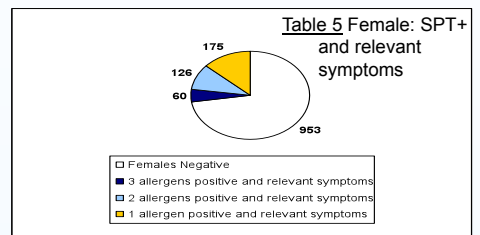
Results



The prevalence **sensitisation** to at least one of the 3 aeroallergens was **38,2%** whereof 70% reported a relevant clinical history for allergy with corresponding symptoms.

The prevalence of **Allergic Rhinitis** based on SPT and relevant symptoms was **29,8%**.

The highest prevalence of AR was found in the age group of **20 to 39 years** and reached up to **45,5%**, whereas the lowest prevalence was found between 70 and 89 years (13,4%).



Sensitization to HDM and grass pollen was the most prevalent, respectively **24,3%** and **23,9%**. Sensitization to trees allergy reached **13,6%**. However, the diagnosis of **Allergic Rhinitis** based on SPT for HDM and relevant symptoms could be confirmed in **16,3%** of the general population. Allergic rhinitis to grass pollen was diagnosed in **16%** and to trees in **9,8%** of the general population.

Conclusion

In this study allergic rhinitis was diagnosed in 29,8% randomly assigned visitors to a public fair in Ghent, Belgium. The highest prevalence of allergic rhinitis (SPT + symptoms) was found in young adults (20 to 39 years) reaching 45,5%. Given the high prevalence of allergic rhinitis in this group, an increase in allergy and allergic rhinitis the next decades is expected.

