

the numbers are unlikely to prove prohibitive. It is also important that these cohort studies have sufficiently long follow-up to assess the impact of developing all diseases of interest – including allergic rhinitis and asthma. This is likely to prove more challenging, both in terms of maintaining follow-up and in terms of cost implications. One novel solution to this is to link study records with a range of routine healthcare datasets; this has the potential significantly to reduce costs and thus make the mounting of such long-term follow-up feasible in the near future.<sup>4</sup>

Notwithstanding the need for this additional work, these studies have offered an extremely important new line of enquiry into the aetiology and pathogenesis of atopic conditions. This work has therefore quite appropriately attracted the attention of both the academic community and the international media.

#### Conflict of interest declaration

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#### References

1. Sheikh A. Itch, sneeze and wheeze: the genetics of atopic allergy. *J Soc Med* 2002;**95**:14-17.
2. Smith FJ, Irvine AD, Terron-Kwiatkowski A, *et al*. Loss-of-function mutations in the gene encoding filaggrin cause ichthyosis vulgaris. *Nat Genet* 2006;**38**:337-42.
3. Khoury MJ, Little J, Higgins J, Ioannidis JP, Gwinn ML. Reporting of systematic reviews: the challenge of genetic association studies. *PLoS Med* 2007;**4**(6): e211. doi:10.1371/journal.pmed.0040211
4. Anandan C, Simpson CR, Fischbacher C, Sheikh A. Exploiting the potential of routine data to better understand the disease burden posed by allergic disorders. *Clin Exp Allergy* 2006;**36**:866-71.

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## The need for a biopsychosocial “gendered” perspective on food allergy

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**DunnGalvin A, Hourihane JO, Frewer L, Knibb RC, Oude Elberink JN, Klinge I. Incorporating a gender dimension in food allergy research: a review. *Allergy* 2006;**61**: 1336-43.**

National hospital discharge data suggest that the prevalence of food allergy in the UK is increasing.<sup>1</sup> There is, however, a large and possibly increasing discrepancy between self-reported prevalence rates and medically confirmed levels of food allergy in the general population, with self-reported rates exceeding confirmed rates by a factor of almost ten-fold.<sup>2,3</sup> This discrepancy has been shown to be particularly pronounced in females, for reasons that remain as yet poorly understood.<sup>4</sup> DunnGalvin and colleagues' quasi-systematic review is one of the few attempts to gather evidence surrounding this important issue and is therefore a welcome contribution to the literature.

In trying to disentangle the biological and psychosocial influences that might contribute to the disparate expression of medically-confirmed and perceived food allergy in males and females, the authors helpfully differentiate between studies that have investigated sex and those that have investigated gender. 'Sex' in this respect is conceptualised as being related to biological differences between males and females, whereas 'gender' is understood as being related to psychological, social and cultural factors. The methodology was a literature search from 1990 to 2006 using the terms sex, gender and food allergy.

The authors argue that, in order to get a suitably rounded understanding of the issues surrounding food allergy – whether perceived or real – there is a pressing need for integration of both biological and psychosocial factors.<sup>5</sup> With regards to biological factors, the review discusses the potential role of prenatal factors, sex hormones and sex steroids on mediating the risk of developing allergic conditions. With regards to gender considerations – which have in comparison received far less attention – the authors highlight the need for more work on food allergy and gender in relation to perceived (health-related) quality of life, information processing, risk perception, self-efficacy, and parental influences.

Whilst the focus of the paper is clearly on food allergy, in order to compensate for the paucity of psychosocial research in this area the authors have drawn appropriately on relevant research from wider long-term conditions – and specifically, literature on allergy – to support their arguments. Their paper represents a thoughtful and timely contribution to the subject. Its key strength lies in attempting to move beyond traditional explanations focusing on biological mechanisms in order to develop more credible explanations of sex differences in self-reported levels of food allergies.

What now needs to be done is to build on this work, investigating exactly which psychosocial factors play a role in

perceptions of food allergy, and how they are influencing constructions of models of health and illness. In line with the authors' suggestions, this will probably be achieved most meaningfully through a combination of quantitative and qualitative approaches. Only then can effective interventions targeting psychosocial factors be devised in order to try and alleviate the significant burden of perceived food allergy in sufferers.

#### Conflict of interest declaration

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## References

1. Gupta R, Sheikh A, Strachan D, Anderson HR. Increasing hospital admissions for systemic allergic disorders in England: analysis of national admissions data. *BMJ* 2003;**327**(7424):1142-3.
2. Metcalfe DD, Sampson HA, Simon RA. Food Allergy: Adverse Reactions to Foods and Food Additives. Boston: Blackwell Scientific Publications, 1997.
3. Young E, Stoneham MD, Petruckevitch A, Barton J, Rona R. A population study of food intolerance. *Lancet* 1994;**343**(8906):1127-30.
4. Marklund B, Ahlstedt S, Nordstrom G. Health-related quality of life among adolescents with allergy-like conditions – with emphasis on food hypersensitivity. *Health Qual Life Outcomes* 2004;**2**(1):65.
5. Engel GL. The need for a new medical model: a challenge for biomedicine. *Science* 1977;**196**(4286):129-36.

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