



Hayfever symptoms and medication use in UK teenagers

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Background

Hayfever is a common condition which reaches peak prevalence in adolescence. Symptoms are often trivialised by patients and health professionals, although symptoms and some treatments (sedating anti-histamines) have been shown to affect learning and concentration. The aim of this study was to investigate hayfever symptoms and use of allergy medication in UK secondary school children.

Participants and methods

- All students aged 15/16 (n=3286) in 14 schools in the West Midlands area of the UK were invited to participate in the study via parental letter and consent
- A questionnaire asking about respiratory health, smoking, and hayfever treatment was developed (using, where appropriate, validated questions from the ISAAC study) and piloted among a group of 15/16y olds to identify ambiguities and errors
- The resulting questionnaire was distributed to all student aged 15/16y in April 2004

Results

- 3189/3286 (97%) students agreed to participate in the study, and questionnaires were completed and returned by 2282 (72%)
- 51% (1153) students reported symptoms indicative of hayfever
- 21% (485) reported a diagnosis of hayfever by their nurse or doctor
- 25% (570) reported a diagnosis of asthma
- 20% (461) smoked cigarettes
- 22% (502) reported taking medication for their hayfever

- A total of 20 different hayfever medications were reported 849 times
- The most commonly used treatments were non-sedating anti-histamines (49%), followed by nasal steroids (23%) and sedating anti-histamines (22%) (see below).

Non-sedating anti-histamine tablets

Clarityn 10mg	145		
Neoclarityn 5mg	60		
Total	205	%	24

Boots loratidine 10mg	37		
Loratadine 10mg	12		
Total	49	%	6

Zirtek 10mg	37		
Zirtek 10mg Allergy Relief	42		
Total	79	%	9

Telfast 120mg	12		
Telfast 180mg	7		
Total	19	%	2

Benadryl 8mg	62		
Total	62	%	7

Sedating anti-histamines

Piriton allergy (4mg) tablets	138		
Piriton Syrup (2mg/100ml)	45		
Total	183	%	22

Nasal sprays

	#		
Flixonase	7		
Beconase Hayfever	52		
Flixonase	35		
Boots Hayfever Relief	19		
Beconase	56		
Nasacort	1		
Nasonex	20		
Rhinocort Aqua	3		
Total	193	%	23

Eye drops

Opticrom	59		
Total	59	%	7

Discussion

Of responders, 51% of UK 15/16y olds report symptoms indicative of hayfever, although only 21% reported having had a clinical diagnosis of hayfever. 22% reported taking medication for their hayfever, and 20% smoked cigarettes.

Sedating anti-histamines are commonly used despite the availability of effective non-sedating alternatives. The proportion of children taking nasal corticosteroids was relatively small considering that they are recommended as the first line treatment for allergic rhinitis. Given the likelihood of sedation, particularly during key exam periods held at the peak of the pollen season, patients and health professionals should avoid sedating anti-histamines and consider nasal steroids early in the season.

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