Students who have allergic rhinitis symptoms on an exam day are 40% more likely to drop a grade in their GCSE exams, this figures rises to 70% if they are taking sedating anti-histamines. Despite current guidelines advocating the use of widely-available non-sedating medication, 28% of the students in a recent study who were taking medication for their symptoms were on a sedating anti-histamine. This study, which has been carried out by Education for Health, in collaboration with the University of Edinburgh and Imperial College London, is the first to look at the impact of hay fever on actual exam performance (as opposed to simulated conditions).

Hay fever has a peak age of onset in adolescence. Unfortunately, GCSE exams, which run from mid-May to the end of June, coincide with the height of the grass pollen season and of the prevalence of hay fever. Given the large numbers of young people affected, with as many as 63% of students in this study alone reporting hay fever symptoms, the findings are expected to prompt discussions on how to better manage hay fever symptoms in children before and during the exam season.

The British Society for Allergy and Clinical Immunology, President Dr Glenis Scadding has stressed, “Since the report was published hay fever has begun to be taken more seriously by patients and their doctors. The recent success of sublingual immunotherapy using grass tablets for grass pollen induced rhinitis means that there is now a way to alter the course of this condition which not only impairs work and school ability but can lead to and exacerbate asthma. The BSACI will be discussing this issue and many more during the EAACI 2010 conference as they are hosting this year’s largest European allergy meeting ever, at London ExCel from 5th-9th June, 2010.”

834 students aged 15-17 years participated in the study, and exam performances in mocks and final GCSE exams for the core subjects of Maths, English or Science were compared with responses to questionnaires on hay fever symptoms on the day of the exam. The normal expectation is that most children will either achieve their predicted grades or, with increased effort, improve on them when sitting the final exam. Any drop in grade is therefore unexpected.

The study found:
- Young people who had hayfever symptoms on an exam day were 40% more likely to drop a grade between their mock and their final exams
- This increased to 70% if they were on a sedating allergy medication at the time of their exams
- Teenagers with severe hayfever, and a history of symptoms in previous years, were twice as likely to drop a grade \(^1\)
- 28% of those on hayfever medication in the study were on a sedating anti-histamine
- This is despite the wide availability of non-sedating treatments and current treatment guidelines advocating their use over sedating medication.\(^2\)

It is hoped that the results of the study will once again highlight that hayfever is not a trivial condition, and that the symptoms of it should be taken seriously by both sufferers and healthcare professionals. With the wide availability of both over-the-counter and prescription-only non-sedating medications that can effectively control symptoms, there should no longer be any excuse for hay fever impacting on school, work or other activities.

“Hay fever affects 1 in 4 people in the UK and is a distressing condition that may compromise what for most of us is the best time of the year ’ commented Professor Stephen Durham, Professor of Allergy at the Royal Brompton Hospital and a past President of the British Society for Allergy and Clinical Immunology (BSACI). “Unfortunately the condition is often trivialised not only by doctors and relatives, but by the patients themselves. What this study tells us is that in addition to causing troublesome symptoms, hayfever may impair examination performance at a very important time for teenagers and young adults.”

Symptoms of hay fever, which include nasal congestion, sneezing, runny nose, itchy eyes and poor smell, can affect people 24 hours a day. The most troublesome symptom is nasal congestion, with 85% of people with hay fever suffering from it. \(^4\)This symptom in particular can have a major impact on the patient’s quality of life, notably, emotional function, productivity and the ability to perform daily activities. 40% of patients with hay fever report it has a moderate or severe impact on their sleep, correlating to an estimated 6 million people with hay fever in the UK experiencing sleep disturbance due to their symptoms.\(^5\)

As well as the symptoms themselves, this high prevalence of sleep disturbance can also have a knock-on effect the following day, with daytime drowsiness affecting performance at work and in children, at school.\(^5\)

Old-generation sedating anti-histamines can also lead to drowsiness, and have been found to have adverse effects on attention span, working memory, vigilance and speed, as well as higher levels of fatigue, lower levels of motivation, and lower levels of activity compared to placebo.\(^6\)
Students who are concerned about whether they are on a sedating hayfever medication, or who do not feel their hayfever symptoms are under control, should speak to their pharmacist or GP regarding medication. Intranasal corticosteroid sprays are the most effective form of routine treatment especially if used pre-seasonally and regularly throughout the season. Modern molecules are very safe with doses in the microgram (millionths of a gram) range and negligible absorption into the body. Sufferers who are severely affected despite regular use of these together with non sedating antihistamines should be considered for desensitization

Notes to Editors
The British Society for Allergy and Clinical Immunology are pleased to be hosting this year’s European allergy meeting in London. The European Academy of Allergy and Clinical Immunology (EAACI) will be holding their annual conference at ExCel London from 5th-9th June, 2010, and this year’s conference is set to be the largest allergy meeting ever to take place with around 8,000 delegates from all over Europe and the world attending. This conference will give the BSACI a platform by which to raise important issues on allergic diseases in UK which have reached epidemic proportions.

About the study
The study was carried out by Education for Health.

About The British Society for Allergy and Clinical Immunology
The British Society for Allergy & Clinical Immunology (BSACI) is the national, professional and academic society which represents the specialty of allergy at all levels. Its aim is to improve the management of allergies and related diseases of the immune system in the United Kingdom, through education, training and research.

The BSACI website hosts the only comprehensive list of the NHS allergy clinics in the UK which BSACI actively encourages GP’s to use when referring patients to an allergy specialist for treatment.

www.bsaci.org

Education for Health
Education for Health is the UK’s leading education charity for health professionals working with patients with long term conditions. It aims to provide a consistent, comprehensive and innovative approach to professional health training across the fields of cardiovascular, respiratory and allergic diseases, with the ultimate objective of transforming lives worldwide. Educational programmes are run nationally and internationally and are accredited by the Open University.
About EAACI

EAACI - The European Academy of Allergy and Clinical Immunology is a non-profit organisation active in the field of allergic and immunologic diseases such as asthma, rhinitis, eczema, occupational allergy, food and drug allergy and anaphylaxis. EAACI was founded in 1956 in Florence and has become the largest medical association in Europe in the field of allergy and clinical immunology. It includes 5'500 individual members from 107 countries, as well as 40 National Allergy Societies.

For further information please contact:

Contact:    Fiona Rayner
Telephone:   0207 808 7138
Mobile:   07814 876577
Email:    Fiona@bsaci.org

BSACI website:  www.bsaci.org

references