The WHO White Book on Allergy 2011-2012

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ABSTRACT
The World Allergy Organization (WAO) White Book on Allergy presents an up-to-date review of the specialty of allergology from a global perspective. This book is of great importance and relevance for the practice of allergology in South Africa. It is of particular interest at this momentous time in the history of allergology in this country. Allergology has just been recognised as a subspecialty of internal medicine, paediatrics and general practice.

The World Allergy Organization (WAO) recently published a White Book on Allergy. This is not a paper but is indeed a book running to over 160 pages. The White Book presents an up-to-date review of the situation regarding the specialty of allergology from a global perspective. This book has great relevance for the practice of allergology in South Africa and is particularly welcome at this momentous time when allergology has just been recognised as a subspecialty of internal medicine, paediatrics and general practice in this country.

This article concentrates on two of the chapters in the WAO White Book.

ALLERGIC DISEASES AS A GLOBAL PUBLIC HEALTH ISSUE
As is well known, the prevalence of allergic diseases is increasing worldwide. This applies to both developed and developing countries. These diseases include asthma, rhinitis, eczema, food allergy, drug allergy, insect allergy, urticaria, anaphylaxis and angio-oedema.

Of concern is that this increase especially affects children who are carrying the greatest burden of the rising trend which has occurred over the past two decades. Despite this increase, even in the developed world, services for patients with allergic diseases are often inadequate. Few countries have comprehensive services in this field of medicine.

In many countries, no specialist services exist for patients with allergic diseases. Care is often fragmented and may be delivered by respiratory physicians, ear, nose and throat (ENT) specialists and dermatologists. While this care is often quite adequate, such specialists view allergy mainly through their particular specialty, whereas most patients have allergies affecting several areas of the body. For example, asthma, allergic rhinitis and conjunctivitis commonly occur together in the same patient and affect three different organs.

Allergy should be regarded as a major health-care problem. According to the World Health Organization (WHO) hundreds of people all over the world suffer from allergic rhinitis and about 300 million people have asthma. These patients often have a poor quality of life and their illness has an impact on the socioeconomic welfare of society.

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The WHO is of the opinion that the provision of allergy care must be led by allergy specialists so that an adequate standard of care can be achieved for all patients with these diseases. The lack of such care can lead to avoidable morbidity and mortality and to significant costs to health-care systems. The WHO estimates that globally there are 250 000 avoidable asthma deaths every year.

Owing to the fact that there is little effort to promote clinical services for patients who suffer from allergies, patients often turn to unscientific diagnostic and therapeutic remedies for their allergies.

It is important for well-trained clinicians to identify the allergens which cause an allergic disease and to provide patients with the chance to avoid them. In addition, the clinician will prescribe appropriate treatment or allergen immunotherapy, a highly effective treatment currently only available at relatively few centres throughout the world, despite its proven efficacy. The foundation of good allergy practice is the identification of the cause and the prevention of symptoms and their progression, rather than reliance on medication to suppress symptoms.

The mission of the WAO is to be a global resource and advocate in the field of allergy, asthma and clinical immunology, advancing excellence in clinical care through education, research and training as a world-wide alliance of allergy societies. The WAO is concerned about the increasing global burden of allergic diseases. A major focus of the WAO is to create global awareness of allergy and asthma as a major public health problem.

The WAO conducts a wide range of activities to support the global allergy community. This includes the provision of resources and the promotion of World Allergy Week to assist member societies to lobby for the provision of service for allergy diagnosis and treatment.

The WAO has published position papers on specialist training in allergy and has identified the requirements for all clinicians who treat patients with allergic diseases. The WAO position paper on undergraduate training in allergy proposes that all medical students receive the basic knowledge and training required to diagnose and treat common allergic disorders at the primary-care level. The WAO is in a unique position to promote education regarding the clinical practice of allergy, disseminating best-practice guidelines from its member societies with well-developed services to benefit those in underserved countries.

Why should allergic diseases be recognised as a global health issue?
- There has been a steady increase in the prevalence of allergic diseases globally with about 30-40% of the world’s population now affected by one or more allergic conditions.
- A large proportion of the increase is occurring in young children.
- Complex allergies involving multiple sensitisation and organ systems are increasing with a high morbidity placing a burden on health-care systems.
- It is predicted that allergic problems will increase fur-
ther with increasing air pollution and global warming. These environmental changes affect pollen counts, stinging insect populations and allergenic fungal spores.

• Many countries are unprepared to handle these problems, resulting in increased morbidity and mortality and cost to patients.

**WAO WHITE BOOK RECOMMENDATIONS**

• An integrated approach is needed for the diagnosis and treatment of allergic diseases.

• Increased public awareness of allergic diseases and their prevention is required.

• Education should be provided at primary health-care level and to non-allergy-trained secondary-care specialists.

• Training of medical students and other health-care professionals to an appropriate level is required.

• Provide information on environmental control measures for the lowering of indoor and outdoor air pollution, cigarette smoking and allergen exposure.

• Encourage a preventative approach to allergic diseases including research in both disease causation and management.

• Use established international projects to disseminate good practice, promote prevention and increase tolerance while decreasing the allergy burden in the future.

**MEDICAL EDUCATION IN ALLERGY**

The lead author for this section of the WAO White Book is Professor Paul Potter who has played a major role in promoting allergy training for undergraduate and postgraduate students in South Africa and internationally.

**Key statements.** The intended outcomes for clinicians training in allergy are to:

• Produce graduates equipped to further their careers in health care and in particular to increase the number of individuals trained in the mechanisms and management of allergic diseases.

• Develop an understanding of the processes involved in improving the management of patients with allergic diseases.

• Develop new areas of teaching in response to the advance of scholarship and the needs of vocational training.

• Provide training in research skills.

• Develop skills in and understanding of the more complex components of allergic disease encountered in specific cases in practice.

**Recommendations for undergraduate training in allergy in medical schools**

Teaching in allergy tends to be fragmented or may be entirely absent in many medical schools in this country. Since the majority of patients with allergic diseases are treated by primary-care physicians, the training of undergraduates in allergy is essential in line with the Level 1 care competencies recommended by the WAO. Medical students require a basic knowledge of cellular and molecular pathways of immune response and how these lead to allergic disease. Undergraduate training must provide a good working knowledge of the common allergic disorders. Undergraduate medical students should be aware of the global and regional epidemiology of allergic disorders, the occurrence, pattern and seasonality of local aeroallergens and their role in allergic diseases. This should include knowledge about skin-prick tests and in vitro IgE measurement to detect specific allergen sensitivities. Students should be familiar with local and international evidence-based treatment guidelines. Age-specific use of medications such as those delivered by inhalers and the monitoring of response to treatment should be included in the programme.

The WAO position statement on the training of medical students recommends that allergy should be a defined part of the medical curriculum with formal lectures, practical sessions, a problem-based learning approach and web-based learning, or combinations of these teaching methods.

**Postgraduate medical education**

The main component of postgraduate medical education should offer a sound theoretical background to the principles of the mechanisms and management of allergic disease and a practical course in diagnosis and treatment. An introduction to appropriate research methods and practice in order to equip the student to generate research output is important. By the end of their training programme students should have enhanced their understanding of the immunological mechanisms involved in allergic diseases, their diagnostic skills, the interpretation of test results and their management of diseases using the most up-to-date and appropriate methods.

**Wider education**

The occurrence of asthma and allergies according to socioeconomic status is influenced by the inequalities found in most societies. The prevalence appears to be high in urban and minority populations in many countries. More emphasis is required to educate patients, taking into account their diversity. It is important that all educational material is adapted to suit the specific socioeconomic class and ethnic background of patients. Information must be provided in a language that can be understood and in a user-friendly fashion. Special attention must be directed towards instruction about the correct use of medication. Information about environmental control and food allergies must be provided in easily understood ways.

It is hoped that with this comprehensive approach to the diagnosis and management of allergic disorders by well-trained clinicians and other health-care professionals, the cost-effectiveness of an allergist consultation will be demonstrated by improved patient outcomes and a reduction in medical costs.

The WAO White Book on Allergy is highly recommended as a comprehensive resource for improving the knowledge of every aspect of the modern practice of allergology. The White Book and the Executive Summary can be found on the WAO website: www.worldallergy.org

**REFERENCES**


