

## WAO White Book on Allergy

Ruby Pawankar, MD, Ph.D

Nippon Medical School,

Tokyo, Japan

The prevalence of allergic diseases and asthma are increasing worldwide, particularly in low and middle income countries. Moreover, the complexity and severity of allergic diseases, including asthma, continue to increase especially in children and young adults, who are bearing the greatest burden of these trends. Allergic diseases include life-threatening anaphylaxis, food allergies, certain forms of asthma, rhinitis, conjunctivitis, angioedema, urticaria, eczema, eosinophilic disorders, including eosinophilic esophagitis, and drug and insect allergies. Globally, 300 million people suffer from asthma and about 200 to 250 million people suffer from food allergies. One tenth of the population suffers from drug allergies and 400 million from rhinitis. Asthma prevalence is rising in several high as well as low and middle income countries and the prevalence and impact of allergic diseases continue to grow. According to the World Health Organization, the number of patients having asthma is 300 million and with the rising trends it is expected to increase to 400 million, by 2025.

The upsurge in the prevalence of allergies is observed as societies become more affluent and urbanized. An increase in environmental risk factors like outdoor and indoor pollution like tobacco smoke combined with reduced biodiversity also contributes to this rise in prevalence. Moreover climate change, change in ambient temperatures, changes in weather during pollen seasons can cause both biological and chemical changes to pollens and have direct adverse consequences on human health by inducing disease exacerbations especially in urban and polluted regions.

Patients with asthma and allergic diseases have a reduced quality of life. Moreover, allergic diseases commonly occur together in the same individual, one disease with the other. This requires an integrated approach to diagnosis and treatment and greater awareness of the underlying causes amongst family physicians, patients as well as specialists. There is a need to provide comprehensive education at all levels from undergraduate to postgraduate and through to continued professional development. The intended learning outcomes for clinician and healthcare professionals training in allergy are to enhance the number of individuals trained in the mechanisms and management of allergic diseases; develop understanding of the processes involved in improving the management of patients with allergic disease; develop new areas of teaching in response to the advance of scholarship and the needs of vocational training; provide a training in research skills; develop skills and understanding of the more complex components of allergic disease encountered in specific areas of practice.

The *WAO White Book on Allergy* outlines the data which indicate that allergy is a major global public health issue, and summarizes the burden of allergic diseases worldwide, the risk factors, impact on quality of life of patients, morbidity, mortality, their socio-economic consequences, recommended treatment strategies, future therapies, and the cost-benefit analyses of care services. The *WAO White Book on Allergy* has also put forward a set of high level recommendations the **“Declaration of Recommendations”** targeted towards governments and health care policy makers, 1) need for epidemiological studies to assess the true burden of allergic diseases globally; 2) need to implement appropriate environmental control measures to reduce triggers and risk factors like smoking and outdoor pollutants and develop adequate preventative

measures; 3) need to increase the availability of adequate trained personnel to diagnose and treat allergic diseases as well as make provisions for better availability and affordability of drugs; 4) need to bridge the knowledge gap in allergic diseases and asthma leading to increased capacity building; 5) need to increase the clinical expertise in treating allergic diseases and asthma; 6) need to make efforts to increase public awareness and work towards developing innovative preventative strategies.

