

A worldwide problem:

asthma

How big is the problem?

Due to its frequency, cost and the high demand for care, asthma is a worldwide public health problem.

Asthma is a common illness

- The number of asthmatics is estimated to be near 200 million, with more than 200,000 deaths per year due to asthma. Asthma is an illness that affects all ages but especially children and young adults.
- Asthma is to be found in all countries but it is more prevalent in industrialised countries than in low income countries. A recent survey estimates that in New Zealand, 25% of children from 13 to 14 years of age have asthma symptoms, 16% in the USA, 13% in Europe and Latin America and 10% in African cities.
- The total number of people with asthma, however, is already higher in the developing world than in the industrialised countries. There are approximately 3 million asthmatics in Japan and in France, compared to an estimated more than 15 million in India and over 30 million in Africa.
- There has been an alarmingly constant increase in asthma in most industrialised countries in the last two decades.

Asthma involves great expense for families and governments

- For example, the cost of asthma in the USA has been estimated at approximately US\$12.7 billion per year (twice as high as in 1990).

The already enormous health costs have increased due to inadequate patient management



What is asthma?

Asthma is an inflammatory illness of the bronchi

It usually manifests itself through attacks of breathlessness accompanied by wheezing in the chest, most often during the night.

- The frequency of asthma attacks varies according to the severity of the disease.
- Many asthma sufferers have attacks that awaken them in their sleep. Sitting up in bed allows them to breathe more freely.
- Asthma attacks are usually harmless but certain severe attacks may put the life of an asthma sufferer at risk.
- In children, asthma sometimes only manifests itself through coughing fits (especially at bedtime) and/or by difficulty in breathing after exercise.

There are many risk factors that influence the development of asthma and/or that provoke attacks

Apart from the frequent family history of asthma among patients, factors are most often linked to the environment and lifestyle.

- Family history: asthma sufferers often have one or more relatives who also suffer from asthma, allergic rhinitis or eczema.
- There are a number of common risk factors:
 - Environmental substances, particularly inside the home, such as dust mites (small insects, millions of which can be found in bedding, rugs and carpets), moulds, animals and tobacco smoke.
 - Environmental substances outside the home: pollens, job-related irritants, pollution.
- Certain risk factors are more rare, such as taking aspirin or other non-steroid anti-inflammatories which provoke serious attacks in certain patients, cold air, and exercise.

In every patient, asthma attacks are generally set off by several of these factors; they can be identified through careful investigation.

Other risk factors are linked to the western lifestyle: a diet lacking in adequate amounts of fresh fish, vegetables and fresh fruit is also thought to lead to the development of asthma and is currently being studied.

Changes in the environment due to increasing urbanisation and the western lifestyle are also incriminating factors in the increase in asthma frequency.



How should asthma treatment be organised?

Treatment of asthma patients consists of regular management that can last several years. This allows asthma sufferers to lead a normal social and professional life.

It comprises not only effective treatment of asthma attacks but also long-term treatment for chronic inflammatory disease and prevention of attacks.

Asthma attacks are treated using rapid action bronchodilator inhalers, with or without systemic corticosteroids depending on the severity of the attack.

- Asthma attacks are stressful not only for the patient, but also for their families, and severe attacks can endanger the life of the patient.
- Treatment for attacks is well codified and requires rapid action aerosol bronchodilators which, once inhaled, dilate the bronchial tubes in a matter of seconds. More severe attacks may be treated with corticosteroids in tablet or injection form.

Prescribe daily inhaled corticosteroids for patients with persistent asthma.

- Classify the patients according to the severity of their disease by questioning and breath measurement with a small, sturdy, inexpensive device known as a peak-flow meter.
- Identify those who have intermittent asthma, i.e., occasional attacks (less than once a month) and normal breathing, and those with persistent asthma, i.e., with more frequent attacks and difficult breathing.

Provide health education and talk with the asthma patients and their families.

Communication and education are key in the successful treatment of asthma. The goal is to help asthma sufferers take their treatment regularly and to play an active role in their own health care.

- Explain the illness and the objective of the treatment, i.e., the elimination of symptoms through regular treatment.
- Explain that lack of adequate care increases the need for emergency treatment which in turn can lead to permanent respiratory problems.
- Identify the trigger factors that provoke the asthma attacks and find ways to avoid exposure to these elements.
- Explain the role of each drug.
- Teach the inhalation techniques.
- Encourage physical exercise.

Monitor asthma sufferers regularly and adapt treatment to suit their changing needs.

- Patients with persistent asthma must be monitored regularly, at least once every 3 months.
- Treatment is adapted according to the results obtained.



Improve access to treatment

Inhaled corticosteroids are extremely expensive, and the majority of sufferers in developing countries do not have access to treatment.

- In certain African countries, an asthmatic nurse must spend 3 to 5 months of her salary to pay for one year of treatment.
- Sufferers with no insurance coverage have almost no access to medication.

Generic corticosteroids are more easily accessible for sufferers, but countries must be willing to purchase them in large quantities.

National and international action is necessary to improve patient access to good quality generic drugs.

Government commitment is vital to improve patients' access to adequate treatment and to reduce health costs for both patients and governments.

The role of the IUATLD in asthma management

One of the missions of the IUATLD is to provide technical assistance in establishing priority health programmes in low or middle income countries. The main activities of the IUATLD in the field of asthma are:

Publication of a Guide for the Management of Asthma in Adults in low income countries.

- The Guide recommends the most effective and least costly diagnostic methods and essential drugs to manage asthma.
- It proposes a method of organising the management of asthma patients within the general health services.
- It recommends an information management system to evaluate patient treatment.

Implementation of pilot studies for the treatment of asthma patients in several developing countries.

Studies are currently being conducted in more than ten low and middle income countries.

Actions to improve patient access to drugs.

- Studies on pricing have been conducted in different countries.
- More accessible generics of satisfactory quality have been identified.
- The possibility of group purchase of generic drugs through the IUATLD is being studied.

Creation of an asthma research group made up of IUATLD members working in low and middle income countries.

This group is made up of over 20 researchers who have participated in epidemiological surveys and asthma management pilot studies and who will participate in other surveys in collaboration with various other international organisations involved in asthma research.

Encouragement of government commitment to manage asthma.

