

LYMPHATIC FILARIASIS

Causative agent

Lymphatic filariasis (LF), commonly known as elephantiasis, is caused by threadlike parasitic worms *Wuchereria bancrofti*, *Brugia malayi* and *Brugia timori*. The worms lodge in the lymphatic system, which is a network of lymph nodes and vessels maintaining fluid balance between the tissues and the blood, and an essential component of the body's immune defence system. The worms live for 4 – 6 years, producing millions of minute larvae (microfilariae) which circulate in the blood. The parasites are transmitted by mosquito bites from an infected person to another after undergoing development in the mosquito.

Signs and symptoms

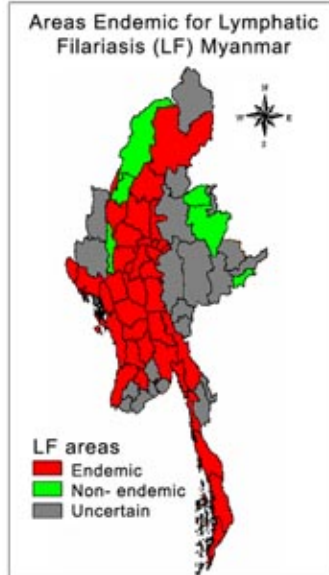
The majority of people infected with the parasites have no outward symptoms, but virtually all of them suffer sub-clinical lymphatic damage. The infection can lead to a variety of clinical manifestations. The most obvious manifestations of lymphatic filariasis are enlargement of the entire leg or arm, the genitals, vulva or breasts. In endemic communities, 10 – 50% of men and up to 10% of women can be affected. The infection can also lead to acute, recurrent secondary bacterial infections, known as "acute attacks".



Disease Burden

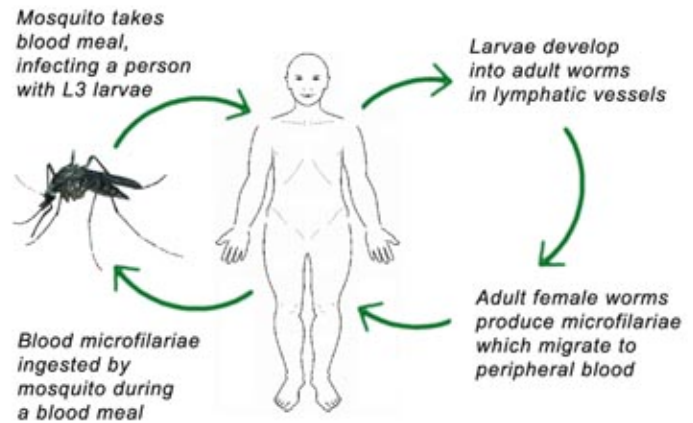
In Myanmar the distribution of lymphatic filariasis is widespread. It is endemic in over 200 townships with approximately 40 million population at risk. Microfilariaemia rates are above 10% in Magway, Mandalay and Sagaing Divisions and in Rakhine State, and 5-10% in Mon State and in Bago and Tanintharyi Divisions. In Yangon and Ayawaddy Divisions and in Kayin State the microfilariaemia rates are 1 – 5%.

Globally, lymphatic filariasis is thought to be the second leading cause of permanent and long term disability. The disease is endemic in more than 80 countries and territories, and some 120 million are infected. It affects mainly the poor in remote rural areas as well as in marginalised urban and peri-urban areas.



Interventions

In 1997 the World Health Assembly passed a resolution calling for elimination of lymphatic filariasis (please see back page). The key interventions are: (1) mass drug administration (MDA) once a year for at least five years using albendazole and diethylcarbamazine (DEC), and (2) prevention and alleviation of disability. In response to the call by the World Health Assembly to eliminate Lymphatic Filariasis many partners such as Ministries of Health, UN agencies, private foundations, academia, etc, established the Global Alliance to Eliminate Lymphatic Filariasis. One of



Lymphatic Filariasis Life Cycle

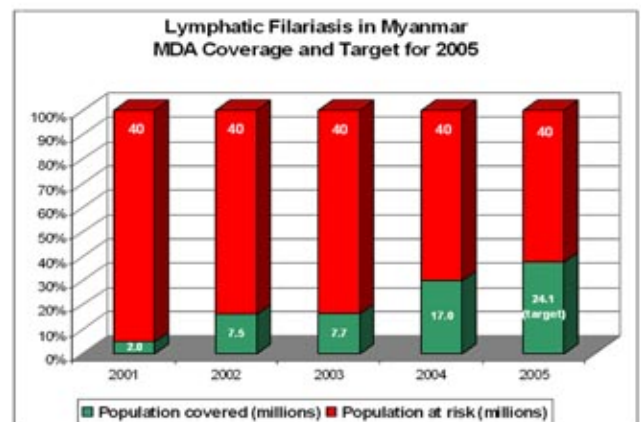
the partners is GlaxoSmithSkline that committed to donate all the albendazole tablets required to achieve the goal.

Mass treatment with albendazole will also result to a marked reduction of anemia and malnutrition associated with soil transmitted helminths.

Progress and challenges

In consonance with the global target, the Ministry of Health in Myanmar aims to eliminate lymphatic filariasis by 2020. With support from Global Alliance for Elimination of Lymphatic Filariasis, notably WHO, GlaxoSmithSkline, Liverpool Lymphatic Filariasis Support Center, Sasakawa Memorial Health Foundation, as well as from local authorities and the communities affected, the Vector Borne Diseases Control (VBDC), Department of Health (DOH), Ministry of Health (MOH) is conducting annual mass drug administration (MDA), usually during the month of December. MDA started in 2001, and targets 40.7 million people in year 2008. In 2001, 1.8 million people ingested the drugs. The coverage increased to 7.5 million in 2002, 8.0 million in 2003 and 17.0 million in 2004. In 2005, 24.0 million people are expected to take DEC and albendazole. So far the townships covered are in Magway Division, Sagaing Division, Mandalay Division, Rakhine State, and Chin State.

The programme to eliminate lymphatic filariasis in Myanmar is constraint by limited financial resources. Although the albendazole tablets required are available through a donation programme by GlaxoSmithSkline, funds are needed to procure DEC tablets and to support field operations for mass drug administration, alleviation of morbidity, monitoring and evaluation. In this regard, financial support for the programme is most welcome.



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FIFTIETH WORLD HEALTH ASSEMBLY
Agenda item 20

WHA50.29
13 May 1997

**Elimination of lymphatic filariasis
As a public health problem**

The fiftieth World Health Assembly,

Deeply concerned at the widening spread and increased distribution of lymphatic filariasis throughout the world in both urban and rural areas and concerned that it effects all ages and both sexes;

Appreciating with grave concern the human suffering, social stigma and costs to society associated with lymphatic filariasis morbidity;

Recognizing that there is a general lack of awareness concerning this disease and its impact on health status, and that there are insufficient data on its prevalence and distribution;

Welcoming the recent studies which have defined new, simplified, highly effective strategies;

Acknowledging that an international task force on disease eradication has recently identified lymphatic filariasis as one of only six "potentially eradicable" infectious diseases,

1. URGES Member States:

- 1) To take advantage of recent advances in the understanding of lymphatic filariasis and the new opportunities for its elimination by developing national plans leading to its elimination, as well as for the monitoring and evaluation of programme activities;
- 2) To strengthen local programmes and their integration with the control of other diseases, particularly at the community level, in order to implement simple, affordable, acceptable and sustainable activities based on community-wide treatment strategies, but supplemented where feasible by vector control and improved sanitation;
- 3) To strengthen training, research, diagnostic laboratory, disease and data management capabilities in order to improve clinical, epidemiological and operational activities directed toward eliminating lymphatic filariasis as a public health problem;
- 4) To mobilize support of all relevant sectors, affected communities and non-governmental organizations for the elimination of the disease.

2. INVITES other specialized agencies of the United Nations system, bilateral development agencies, non-governmental organizations and other groups concerned to increase cooperation in the elimination of Lymphatic filariasis through support of national and international programmes relevant to the prevention and elimination of lymphatic filariasis;

3. REQUESTS the Director-General:

- 1) to bring to the attention of the other specialized agencies and organizations of the United Nations system, bilateral development agencies, nongovernmental organizations and other groups concerned the need for closer collaboration in the elimination of lymphatic filariasis as a public health problem;
- 2) to mobilize support for global and national elimination activities;
- 3) to keep the Executive Board and Health Assembly informed as necessary of progress in the implementation of this resolution.

Ninth plenary meeting, 13 May 1997
A50/VR/9