

NATIONAL FILARIA CONTROL PROGRAMME

Introduction

Bancroftian filariasis caused by *Wuchereria bancrofti*, which is transmitted to man by the bites of infected mosquitoes – *Culex*, *Anopheles*, *Mansonia* and *Aedes*. Man is the definite host and mosquito is the intermediate host of Bancroftian and Brugian filariasis. The adult filarial worm lives in lymphatic vessels whereas microfilaria lives in peripheral blood and are able to infect mosquitoes when they come to feed. This infection causes lymphangitis, lymphadenitis, elephantiasis of genitals, legs and arms and cause tropical eosinophilia due to hypersensitivity. The disease may cause severe deformity, and disability.

Burden of Disease

Lymphatic filaria is prevalent in 18 states and union territories. Bancroftian filariasis is widely distributed while brugian filariasis caused by *Brugia malayi* is restricted to 6 states – UP, Bihar, Andhra Pradesh, Orissa, Tamil Nadu, Kerala, and Gujarat. The WHO has estimated that 600 million people are at risk of infection in South east Asia and 60 million are actually infected in the region (WHO-SEARO 1999). There are about 454 million people (75.6%) at the risk of infection with 48 million (80%) infected with parasite are contributed only by India.

Economic Loss

About 1.2 billion man-days are lost due to filariasis every year leading to an economic loss of Rs. 3500 crore.

Indices of Filaria

Parasitological indices: 1. Microfilaria Rate: % of persons showing Mf in their peripheral blood in a sampled population; 2. Filarial Endemicity Rate: % of persons examined showing microfilariae in blood, or disease manifestation or both; 3. Microfilarial Density: No. of Mf per unit volume of blood in samples from individual persons; 4. Average Infestation Rate: Average number of Mf per positive slide. *Entomological indices:* 1. Vector density per 10 man – hours catch; 2. % of mosquitoes positive for all stages of development; 3. % of mosquitoes positive for infective larvae; 4. types of breeding places.

National Health Policy

“Elimination of Lymphatic filariasis by 2015”

Programme

The National Filaria Control Programme was launched in 1955. The activities were mainly confined to urban areas. However, the programme has been extended to rural areas since 1994.

Objectives

1. Reduction of the problem in un-surveyed areas; and
2. Control in urban areas through recurrent anti-larval and anti-parasitic measures.

Control Strategy

1. Vector Control through anti-larval spray/application at weekly intervals with appropriate larvicides;
2. Biological control through larvivorous fishes;
3. Environmental engineering through source reduction and water management;
4. Anti-parasitic measures through diagnosis and "treatment of microfilaria carriers and cases; and
5. Information, Education, and Communication to generate community awareness.

Anti-Mosquito and Anti-larval Measures

One or two round of residual insecticide spray with DDT in areas which is known to be endemic for filariasis. Anti-larval measures with temephos in prescribed dosage in water storage tanks every week and application of Mineral Larvicidal oils on water surface are practiced.