



National Leprosy Eradication Programme (NLEP)



"Leprosy work is not merely medical relief; it is transforming frustration of life in to joy of dedication, personal ambition into selfless service"

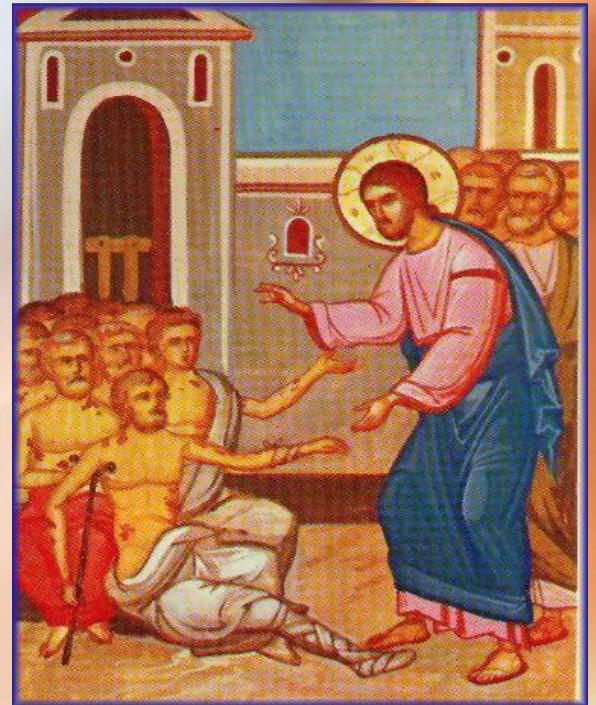
- Mahatma Gandhi

Gandhiji With Leprosy patient

- The Programme is centrally sponsored Health Scheme of the Ministry of Health and Family Welfare, Govt. of India.
- It is headed by the Deputy Director of Health Services (Leprosy) under the administrative control of the Directorate General Health Services Govt. of India.

National Leprosy Elimination Programme

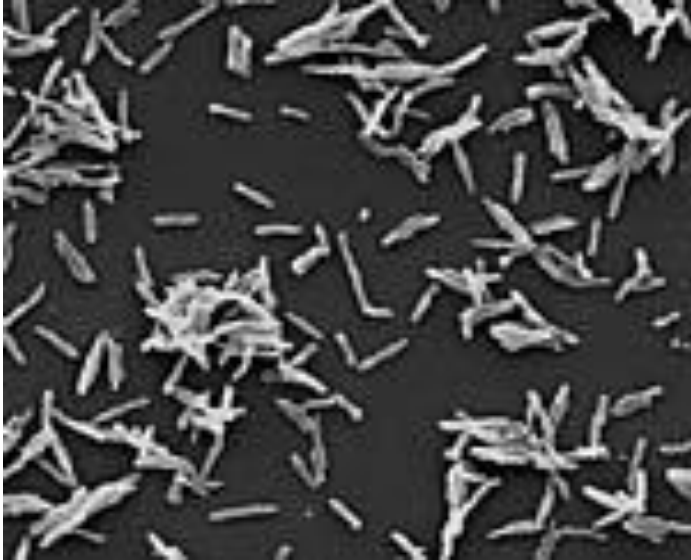
Dr Madhavi Mankar



History of Leprosy:

- Earliest record of leprosy like disease came from Egypt in 1400 BC.**
- In China and India, the first records appeared in the 6th century BC.**
- In India leprosy was first described in the Susruth Samhita and treatment with Chaulmoora oil. leprosy was referred as Kusht in the Vedic writing.**
- Disease was probably carried from India to Europe in the 4th century BC soldiers and camp followers from the Greek war of conquest in Asia led by Alexander the great.**
- From the Greece leprosy slowly spread through out the Europe.**
- Leprosy now prevalent in SEAR & African countries.**

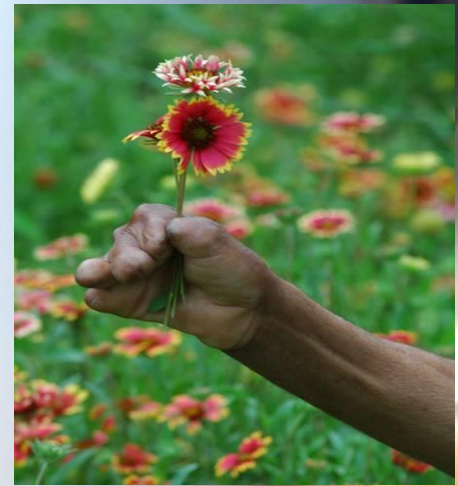
What causes it?



<http://www.aaas.org/news/science/2005/may%205/leprosy%20flower.jpg>



http://genomenewsnetwork.org/articles/02_01/Leprosy.shtml



Mycobacterium leprae

Rod Shaped

First bacterium disease in
humans

Humans and **Armadillos**
are only known natural hosts

Who is at risk?



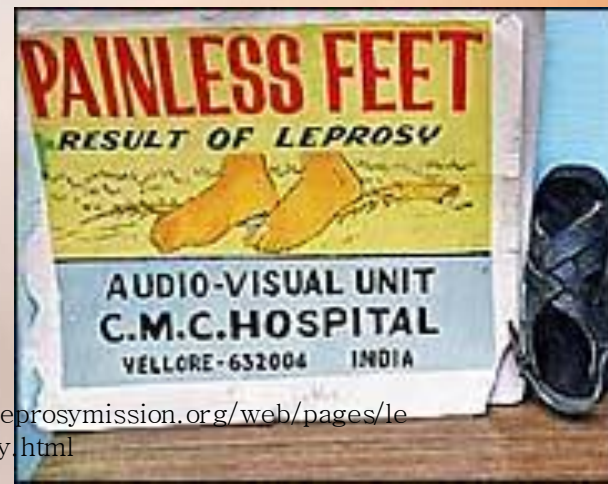
<http://microbes.historique.net/images/lep3.jpg>



bp2.blogger.com/.../s320/lepromatous_leprosy.jpg



<http://www.leprosymission.org/web/pages/leprosy/images/girlwithleprosy.patch.jpg>

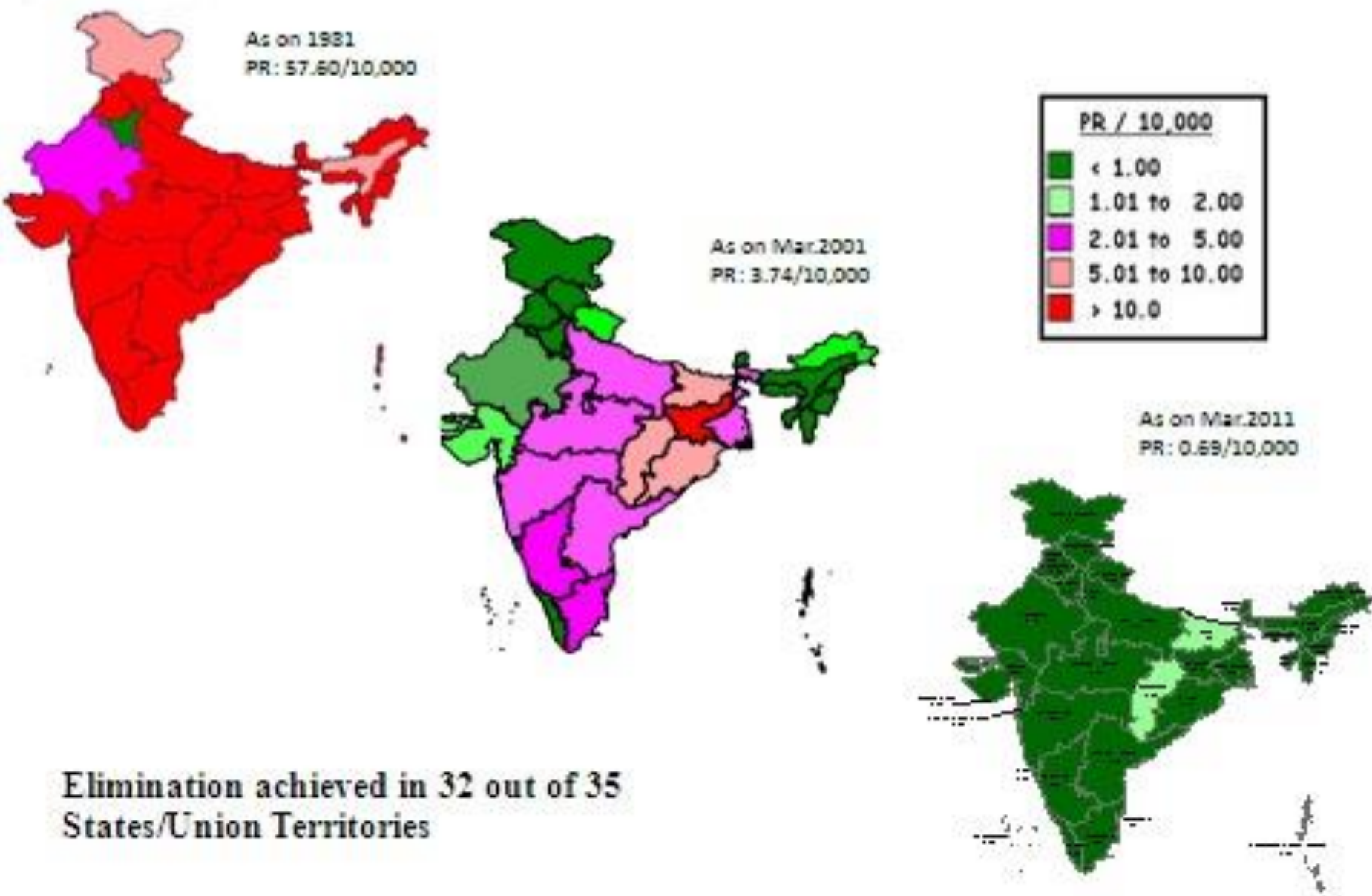


<http://www.leprosymission.org/web/pages/leprosy/leprosy.html>

Magnitude of problem:

- 1.3 million Cases of leprosy in the world.**
- Public health problem in 55 countries but 16 countries account for 91% of the total burden of registered cases.**
- Brazil, India, Nepal & Nigeria account for about 82% of leprosy burden.**
- Globally 60% of the estimated cases contributed by the India & 88% of regional case load.**

DECLINING LEPROSY PREVALENCE IN INDIA



SEAR:

SEAR is the only region yet to achieve the goal of elimination of leprosy.

PR (March 2004) 2.4 / 10000population.

Creditable achievements :

- 92% reduction in PR over a 15 year period (1987-2002)**
- Over 10 million people have been cured.**
- Bangladesh, Bhutan, DPR Korea, Indonesia, Shri-Lanka& Thailand achieved National level of Elimination by Dec.2000.**
- Myanmar achieved goal of Elimination in 2003.**
- India, Nepal, Timor leste are targeted to achieve by the goal by 2005.**
- All countries have taken action to integrate leprosy services in to general heath services and implementing critical & focused activities.**

STATUS OF LEPROSY IN INDIA:

- India contributes 60% of global burden.**
- India has eight times more cases than the whole African continents & six time more cases than all Asian country.**
- 5 States, Chattisgarh, Bihar, UP, Orrisa, Jharkhand contribute 60% burden of India.**
- India substantially control leprosy since 1953-54, PR was 57.60/10000 in 1981---- 2.4 /10000 in March 2004.**

STATUS OF LEPROSY IN INDIA:

- 29 States /UTs achieved Leprosy Elimination goal.**
- In 2007-08, total 1.38 lakh new cases leprosy detected, NCDR 11.70**
- In 2008, 0.87 lakh cases on record which gives prevalence (PR) 0.74 /10000 cases**
- 9.4% child cases, 2.1% Deformity grade II, and above 47.2% MB cases.**
- 100% coverage of MDT.**

MILESTONES in NLEP in India

- 1955 – Govt. of India launched National Leprosy Control Programme**
- 1970s – Definite cure through MDT was identified**
- 1982 – WHO study group recommended use of MDT**
- 1983 – Govt. of India launched NLEP and introduced MDT**
- 1991 – WHO declaration to eliminate leprosy at global level by 2000.**
- 1993 - 2000 – World Bank supported NLEP – I**
- 2001 - 2004 – World Bank supported NLEP – II**
- 2005 – Elimination of Leprosy at National Level by Dec. 2005 (National Health Policy)**



National Leprosy Control Programme: (1954-55)

Was launched in 1954-55 in the country.

The Programme moved ahead initially very slow pace in a phased manner spread over a period of 25 years & with patchy coverage.

Strategy:

Mass Campaign for early case detection and regular treatment.

Health education so that quantum of infection in the community gradually reduced thereby transmission of disease interrupted.

Use of mass chemotherapy by **Dapsone orally.**

National Leprosy Eradication Programme: (1983)

Strategy:

Early detection through active surveillance by trained health workers.

Regular treatment of cases by providing multi-drug therapy (MDT) at fixed in or centers a nearby village of moderate to low endemic areas/district.

Intensified Health Education & public awareness campaign to remove social stigma attached disease.

Appropriate medical rehabilitation & leprosy ulcer care services.

1993-94, initially it was taken up in endemic districts & was extended to all districts in country with the help of World Bank.

Infrastructure according to endemicity at the start of phase I:

Four research and training institutes were established directly under DGHS

- 1. Central Leprosy Training & Research Institution (CLTRL) Chegalpattu.**
- 2. Regional Leprosy Training & Research Institute (RLTRI) at Raipur, Gauripur, Aska.**
- 3. Training center at Agra under ICMR.**

PR > 50/10000, 218 High endemic districts:

Leprosy Control Unit (LCU) 1 per 4.5 lakh population

Manned by 1 one Medical Officer (MO)
4 non medical supervisor (NMS) & 20
paramedical workers (PMW).

Modified leprosy control unit (MLCU): rural areas.

Urban leprosy control unit (ULCU): 1 for 50,000 populations, 1 PMW/ NMS under MO.

Temporary Hospitalization Wards (THW):
specialized service with complication/ problem in
leprosy patients.

Moderately endemic Districts:

**2 Mobile Leprosy Treatment units
(MLTU) for each moderately
endemic district**

1 MLTU for low endemic district.

Low endemic district:

**MLTU for leprosy patients with help of
general health staff**

**Contract basis staff, 1MO, NMS-1, PMS-1,
Driver-1, 350 units sanctioned.**

**SET centers:1 SET for 25000 population,
attached to PHC/hospitals in rural endemic
pockets,1PMW under PHC MO**

ULCs in urban endemic pockets.

National Leprosy Elimination Programme: in 1997:

Strategy:

Supported by mid term appraisal of World Bank.

Satisfactory progress at national level, uneven progress at State level –**more focus at State level to eliminate level.**

Political and bureaucratic commitment in high endemic areas.

Leprosy Elimination Campaign is recommended in several areas to increase community awareness & involvement of peripheral staff.

National Leprosy Elimination Programme: in 1997:

Strategy:

MDT drugs at every health facility & strengthening of drug delivery system.
Involvement of General Health Staff for moderate & low endemic district.
Posting of full time Supervisor for technical supervision & monitoring.

NLEP phase II

started for a period of 3 years from 2001-2002

OBJECTIVES:

Decentralization of NLEP responsibilities to States/UTs through States and District Leprosy societies.

Accomplish integration of leprosy services with General Health Care System (GHS).

Achieve elimination of leprosy at National level by the end of project.

NLEP phase II

Strategy:

Decentralization of NLEP to States & Districts.

Integration of leprosy services to General Health Care System.

Leprosy training of GHS functionaries.

Surveillance for early diagnosis and prompt MDT through routine and special efforts.

NLEP phase II Contd:

Strategy:

Intensified IEC using local and mass media approaches.

Prevention of disability and care.

Monitoring and Evaluation on regular (monthly/ quarterly/annually) basis as well as with special efforts such as

Independent Evaluation, Leprosy Elimination Monitoring (LEM) annual survey (S) and validation of elimination etc.

Modified Leprosy Elimination Campaign (MLEC):

Package of teaching, /training, intensified IEC, case detection and prompt MDT implemented through out the country with the help of General Health Care System, District Technical Support Teams, and community Volunteers.

Organized 1-2 weeks camps – case detection treatment referral to constructive surgeries.

Extensive IEC through Radio-TV-Newspaper

Special action project for Leprosy Elimination (SAPEL):

Carried out in
high hidden case load,
poor coverage of MDT,
difficult to access/ border area urban/peri-
urban/urban slums
poor awareness about the disease,
traditionally negative images of the
disease.

Objectives

Capacity building of general health workers to provide MDT services to the community.

Raising community awareness and encouraging participation to promote self-reporting and remove negative perception of the disease.

Ensuring that all cases of leprosy are diagnosed and patient received full course of treatment.

Treatment of Leprosy MB

Adult	Children
Supervised monthly treatment: Day 1 Refampicin 600 mg Clofazimine 300 mg Depsone 100mg	Supervised monthly treatment: Day 1 Refampicin 450mg Clofazimine 150mg Depsone 50mg
Daily treatment: Day 2-28 Clofazimine 50 mg Depsone 100mg	Daily treatment: Day 2-28 Clofazimine 50 mg every alternate day Depsone 50mg daily
Duration of treatment 12 months	Duration of treatment 12 months

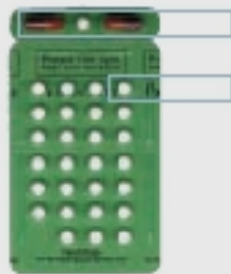
Treatment of Leprosy PB

Adult	Children
Supervised monthly treatment: Day 1 Refampicin 600 mg Depsone 100mg	Supervised monthly treatment: Day 1 Refampicin 450mg Depsone 50mg
Daily treatment: Day 2-28 Depsone 100mg	Daily treatment: Day 2-28 Depsone 50mg daily
Duration of treatment 06 months	Duration of treatment 06 months

Dosage

MDT Regimens

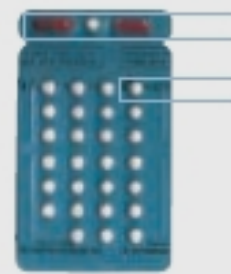
Each blister pack contains treatment for 4 weeks.



PB adult blister pack

PB adult treatment:

- Once a month: Day 1
 - 2 capsules of rifampicin (300 mg X 2)
 - 1 tablet of dapsone (100 mg)
 - Once a day: Days 2–28
 - 1 tablet of dapsone (100 mg)
- Full course: 6 blister packs

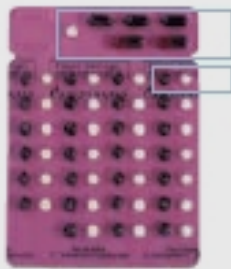


PB child blister pack

PB child treatment (10–14 years):

- Once a month: Day 1
 - 2 capsules of rifampicin (300 mg+150 mg)
 - 1 tablet of dapsone (50 mg)
 - Once a day: Days 2–28
 - 1 tablet of dapsone (50 mg)
- Full course: 6 blister packs

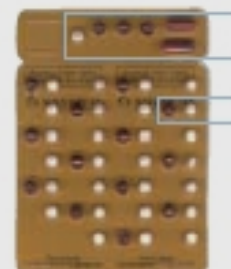
For children younger than 10, the dose must be adjusted according to body weight



MB adult blister pack

MB adult treatment:

- Once a month: Day 1
 - 2 capsules of rifampicin (300 mg X 2)
 - 3 capsules of clofazimine (100mg X 3)
 - 1 tablet of dapsone (100 mg)
 - Once a day: Days 2–28
 - 1 capsule of clofazimine (50 mg)
 - 1 tablet of dapsone (100 mg)
- Full course: 12 blister packs



MB child blister pack

MB child treatment (10–14 years):

- Once a month: Day 1
 - 2 capsules of rifampicin (300 mg+150 mg)
 - 3 capsules of clofazimine (50 mg X 3)
 - 1 tablet of dapsone (50 mg)
 - Once a day: Days 2–28
 - 1 capsule of clofazimine every other day (50 mg)
 - 1 tablet of dapsone (50 mg)
- Full course: 12 blister packs

For children younger than 10, the dose must be adjusted according to body weight