NATIONAL LEPROSY ERADICATION PROGRAMME (NLEP)

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M. leprae is discovered by Hansen from Norway in 1873
Main features

• Chronic infectious disease – mycobacterium leprae
• Affects peripheral nerves / skin, muscles.
• Eyes, bones, testes and internal organs

• 2 polar forms
  Lepromatous......borderline....indeterminate....tuberculoid
Agent: Mycobacterium leprae
• Source: untreated leprosy affected person
• Transmission: droplet infection
Host factors: Age, Gender, immunity
Socio economic factors: poor status
INTRODUCTION


• **Aim** - Leprosy elimination achieved globally by 2000

• Elimination – 1 or less than 1 case/10000 population

• India achieved this goal on 31st December 2005, and prevalence rate was 0.95/10,000 population
Current status-2017

• A total of 1.35 lakh new cases detected during 2016-17

• Annual new case detection rate (ANCDR) was 10.02 per 1,00,000 population

• Proportion of
  MB (49.57%),
  Female (39.17%),
  Child (8.7%),
  Visible Deformity (3.87%),

Source-NLEP annual report 2017
• A total of 0.88 Lakh cases on record as on 1\textsuperscript{st} April 2017.
• Prevalence rate 0.66/10,000 population
• Grade 2 disability rate 3.92/million population
Trends of Prevalence Rate (PR) and Annual New Case Detection (ANCDR) (Per 10,000 pop)

Prevalence Rate in India as on March 2017
Components of the programme

1. Decentralized integrated leprosy services through general health care system
2. Capacity building of all general health services Functionaries
3. Intensified information, education and communication
4. Prevention of disability and medical rehabilitation
5. Intensified monitoring and supervision.
• With implementation of MDT Prevalence of leprosy declined

- 1983: 57/10000
- 1992: 24/10000
- April 2005: 1.34/10000
- December 2005: 0.95/10000
Strategies

• Active case finding through various types of surveys has been done previously.

• Now the reliance is on voluntary reporting enabled by IEC efforts.

• In blocks where PR>5/10,000 active efforts at case findings are continuing.
Special efforts for leprosy case detection & prompt MDT

• **SAPEL** – Special Action Project for Elimination of Leprosy (2001-04)

• **LEC** – Leprosy Elimination Campaign
  
  For early case detection .
  
  Mainly in difficult and inaccessible rural/tribal areas as well as slums
• **MLEC** – Modified Leprosy Elimination Campaign.

• Five such nation wide campaigns

• Carried out during 1997-98 to 2003-05

• Helped in bringing out 9.9 lakh new cases under treatment in a short span of time

• Helped in increasing leprosy awareness among the masses.
• **LEM** – Leprosy Elimination Monitoring

  Helped assess the performance of leprosy services, collect key information on issues like integration with general health services.
• Focused leprosy elimination plan (FLEP) – 2005-06

• Situational activity plan (SAP) – 2007

• Block leprosy awareness campaign (BLAC) – 2007

• These special services are no longer being carried out, as most of the country have achieved leprosy elimination
Mile stones of leprosy eradication

• 1898 – Leper act Later abolished by British india (Segregation)

• 1948 – Hind Kusht Nivaran Sangh

• 1955 – National leprosy control program- early detection of cases & regular sustained dapsone monotherapy-Very long duration of treatment & irregular compliance
• 1983 – National leprosy eradication program (MDT started)


• 1993 – World bank supported the MDT program phase NLEP 1
• 1998-2004 - Modified leprosy elimination campaigns

• 2001-2004 - NLEP project phase 2

• 2005 – National wide evaluation of phase 2

• 2005 December – Prevalence rate 0.95/10,000 and Govt declared achievement of elimination target.
• 2005 – NRHM covers NLEP
• 2006 – DPMR included as component of NLEP
• 2007 – DPMR three tier system
• 2011 – DPMR guidelines revised
• 2016 – LCDC (leprosy case detection campaign)
• 2017 - Sparsh Leprosy Awareness Campaign
Current activities under NLEP

• **Diagnosis and treatment of leprosy**

• MDT provided to all PHCs free of cost
• Difficult to diagnose cases & complicated cases referred to district hospitals
• ASHAs under NRHM helps bring out leprosy cases from villages for diagnosis and treatment completion
Clinical classification/operational classification

• **Pauci bacillary:**
  1-5 lesions,
  one nerve involvement,
  BI<2

• **Multi bacillary:**
  More than 5 lesions,
  >1 nerve involvement,
  BI>2
WHO Recommended regimens
Adults

*monthly / daily / both*

**Multi bacillary:**
- Rifampicin-600mg **monthly** under supervision x 12 mths
- DDS 100 mg OD x 12 mths
- CLF 300 mg **monthly** supervised and 50 mg OD- for 12 mths

**Pauci bacillary**
- Rifampicin-600mg **monthly** x 6 months supervised
- DDS 100 mg OD x 6 mths
WHO Recommended regimens
Children (10-14 years)

Multi bacillary:
• Rifampicin-450mg monthly under supervision x 12 mths
• DDS 50 mg OD x 12 mths
• CLF 150 mg mthly supervised and 50 mg alt days for 12 mths

Pauci bacillary
• Rifampicin-450mg x 6 mths supervised
• DDS 50 mg OD x 6 mths
• **LEPRA REACTION:**
  ✓ May occur before/during/after MDT.
  ✓ Not caused by MDT.
  ✓ Do not stop MDT.
    Type1 (Reversal reaction)
    Type2 (ENL)

*Treat ‘Reaction’ as a Medical Emergency:*
- Rest & Analgesics
- DOC-Prednisolone (40-60 mg)
- Taper gradually over 12-16 wks.
- All need a detailed Neuromuscular assessment by a physiotherapist.
• **Training**

• Training to Medical officers, health workers, lab technicians, ASHAs conducted every year

• Training of state & district Leprosy officers organized at CLTRI, Chingapalttu and RLTRI Raipur, Aska, Gouripur
• **Involvement of NGOs**

• Help reduce burden of leprosy
• Serve in remote, inaccessible, uncovered, urban slums, industrial/labour populations and other marginalized population groups.
• **SET** (Survey education and Treatment) Scheme.
• **Information, education & communication**

• IEC help reduction of stigma & discrimination against leprosy affected persons.

• Carried out through mass media, out door media, rural media & advocacy meetings.

• More focus on inter personal communication.
DO YOU KNOW?

- Leprosy is caused by Mycobacterium leprae

- If any body has:
  - Light/reddish patch with loss of sensation and/or
  - Thickened nerves with muscle weakness

  It can be leprosy

- MDT cures leprosy
- MDT is available FREE at all Govt. hospitals & dispensaries

In case of any problem, contact: Ph: 22304362
LEPROSY CONTROL CELL, GOVT. OF DELHI, DHS F-17, KARKARDOOMA, DELHI - 110032
• Disability prevention and medical rehabilitation.

• Patients provided with dressing materials, supportive medicines & MCR footwear

• Correction of disability through reconstructive surgery
Disability prevention and medical rehabilitation.

- Inform patients (specially MB) about common s/s of reactions
- Ask them to come to centre (as soon as possible)
- Start treatment for reaction (Prednisolone)
- Inform them how to protect insensitive hands/feet/eyes
- Involve family members
- Patients provided with dressing materials, supportive medicines & MCR footwear
- Correction of disability through reconstructive surgery
SELF CARE

Self care - hand

MCR chappal
Three tier system
Primary- PHCs, CHCs, Sub-divisional hospitals and urban leprosy centres/dispensaries
Secondary- all District Head Quarter Hospitals and District Nucleus Units.
Tertiary-
1. Central Government Institutes (CLTRI Chingalpettu and RLTRI at Aska/Gauripur/Raipur)
2. ICMR Institute JALMA, Agra.
3. ILEP supported Leprosy Hospitals.
4. All PMR Institutes and departments of medical colleges.
Referral system in NLEP

Sub-Centre:
- Implementation
  - Self care advice
  - Advise to RCS cases
  - Monitoring
- Referral
  - Reaction
  - Disability

PHC:
- Implementation
  - Manage reactions (if possible) or refer
  - Identify or refer patient needing RCS
  - Identify patient needing foot-wear
  - Advise to reconstructive surgery cases
  - Advise to self care
- Referral
  - Lepra reactions difficult to manage
  - Complicated ulcer
  - Eye problems
  - Reconstructive surgery cases
  - Persons needing foot-wear
  - Follow-up of RCS, lepra reaction

District Hospital:
- Implementation
  - Management of complicated ulcers
  - Management of lepra reactions
- Referral
  - Refer difficult ulcer cases to reconstructive surgery centre

District Nucleus:
- Implementation
  - Management of lepra reactions
  - Supply of foot-wear
- Referral
  - Referral for reconstructive surgeries/ follow-up of RCS

Reconstructive surgery centre
- Implementation
- Referral
- Implementation
  - Reconstructive surgery
  - Follow-up after reconstructive surgery
  - Supply of foot-wear to district nucleus
• **Urban leprosy control**

• Implemented in 524 urban areas with population size more than 1 lakh

• Includes MDT delivery services & follow up of patients with treatment completion, providing supportive medicines and dressing materials.

<table>
<thead>
<tr>
<th>Town and city</th>
<th>1 lac to 5 lac</th>
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<tbody>
<tr>
<td>Medium city 1</td>
<td>5 lac to 1 million</td>
</tr>
<tr>
<td>Medium city 2</td>
<td>1 million to 4.5 million</td>
</tr>
<tr>
<td>Mega cities</td>
<td>&gt; 4.5 millions</td>
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Monitoring & Supervision

- By analysis of monthly progress reports, through field visits by supervisory officers, and programme review meetings held at central, State & District levels.
New initiatives

• **Reconstructive surgery**

• Amount of Rs 8000 provided as incentive to leprosy patients for undergoing major reconstructive surgeries in identified Govt/NGO institutions irrespective of financial status.
• **Involvement of ASHAs**

• Incentives provided for ASHAs for bringing out cases from their villages

• Rs 250 for confirmed diagnosis of cases

• On completion of treatment within specified time Rs 400 for PB & Rs 600 for MB.

• Rs 250 for diagnosing before disability and Rs 200 after disability.
• **Special activities in High Endemic areas**

• Involves training, intensified IEC, case detection & prompt MDT through health care staff
Programme Implementation Plan for 12th Plan Period (2012-13 to 2016-17)

• Leprosy is still prevalent in 15% of country

1. Elimination of leprosy i.e. prevalence of less than 1 case per 10,000 population in all districts of the country

2. Strengthen disability prevention and medical rehabilitation of persons affected by leprosy.

3. Reduction in the level of stigma associated with leprosy.
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Indicators</th>
<th>Baseline (2011-12)</th>
<th>Targets (by March 2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Prevalence Rate (PR) &lt; 1/10,000</td>
<td>543 Districts (84.6%)</td>
<td>642 Districts (100%)</td>
</tr>
<tr>
<td>2</td>
<td>Annual New Case Detection Rate (ANCDR) &lt; 10/100,000 population</td>
<td>445 Districts (69.3%)</td>
<td>642 Districts (100%)</td>
</tr>
<tr>
<td>3</td>
<td>Cure rate Multi Bacillary Leprosy cases (MB)</td>
<td>90.56%</td>
<td>&gt;95%</td>
</tr>
<tr>
<td>4</td>
<td>Cure rate Pauci Bacillary Leprosy Cases (PB)</td>
<td>95.28%</td>
<td>&gt;97%</td>
</tr>
<tr>
<td>5</td>
<td>Gr.II disability rate in percentage of New cases</td>
<td>3.04%*</td>
<td>35% reduction 1.98%</td>
</tr>
<tr>
<td>6</td>
<td>Stigma reduction</td>
<td>Percentage reported (NSS 2010-11)**</td>
<td>50% Reduction over the percentage reported by NSS</td>
</tr>
</tbody>
</table>

*Gr-II disability rate among new cases per million population to be reduced by 35% i.e. from 3 (2011-12) to 2 per million pop. by end of the 12th Plan.

**Based on the National Sample Survey (NSS) report, 2010-11(yet to be on record).
2016-2020
GLOBAL LEPROSY STRATEGY

VISION
A LEPROSY-FREE WORLD
- Zero disease
- Zero transmission of leprosy infection
- Zero disability due to leprosy
- Zero stigma and discrimination

GOAL
Further reduce the global and local leprosy burden

TARGETS

INDICATORS
<table>
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<th>2020 Target</th>
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<tr>
<td>Number of children diagnosed with leprosy and visible deformities</td>
</tr>
<tr>
<td>Rate of newly diagnosed leprosy patients with visible deformities</td>
</tr>
<tr>
<td>Number of countries with legislation allowing discrimination on basis of leprosy</td>
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</tbody>
</table>
Officials/ Staff attached to District Leprosy Organisation

- Deputy Director of Medical Services (Leprosy)
- Medical Officer- Deputy Director (Leprosy)
- Health Educator
- Non Medical Supervisor
- Physio Technicians
- Health Inspectors
- Lab technician
Anti Leprosy Activities in India

• Leprosy Mission - founded in 1874
• Hind Kusht Nivaran Sangh
• Gandhiji Memorial Leprosy Foundation, Sevagram, Wardha
• The German Leprosy Relief Association
• Damien Foundation
• The Danish Save the Child Fund
• JALMA- taken over by ICMR in 1975
• National Leprosy Organization- 1965
The Leprosy patch...?
It was some where here!

Early treatment with MDT has cured Leprosy without deformity

Let us all pledge to make India Leprosy free

Central Leprosy Division - Directorate General of Health Services
Ministry of Health & Family Welfare, Government of India
Nirman Bhawan, New Delhi - 110011

For more details, please consult The Medical Officer of your nearest Health Centre, Hospital and/or District Leprosy Officer
SPARSH Leprosy Awareness Campaign

LEPROSY IS FULLY CURABLE WITH MDT
Leprosy is caused by a bacterium called Mycobacterium leprae. Leprosy can be cured with multidrug therapy (MDT). MDT is available free of charge in all Primary Health Centres and leprosy hospitals run by NGOs.

Hi Seema !
How is your treatment for leprosy going on?

Sapna, the doctor had prescribed MDT for six months. But after four months, I am already feeling alright. So I have stopped the medicine now.

That's not right Seema ! You cannot stop your MDT before completing the full course. This way the disease can relapse. Please see your doctor immediately and ask him what to do.

MDT SHOULD BE TAKEN REGULARLY FOR COMPLETE CURE OF LEPROSY
Multidrug therapy (MDT) taken regularly ensures complete cure of leprosy, prevents deformities and stops transmission to other individuals.

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The **NLEP Emblem**

Symbolizes beauty and purity in lotus

- Leprosy can be cured and a leprosy patient can be a useful member of the society in the form of a **partially affected thumb**;
- a **normal fore-finger** and the shape of **house**;
- the symbol of hope and optimism in a rising sun.
- The Emblem captures the **spirit of hope** positive action in the eradication of Leprosy.
Leprosy work is not merely medical relief; it is transforming frustration of life into joy of dedication, personal ambition into selfless service.

THANKYOU

World Leprosy Day
29.01.17
lepra
I’m helping Lepra to #BeatLeprosy - you can too
www.lepra.org.uk

Registered charity number 213251 (England and Wales) SC039715 (Scotland).