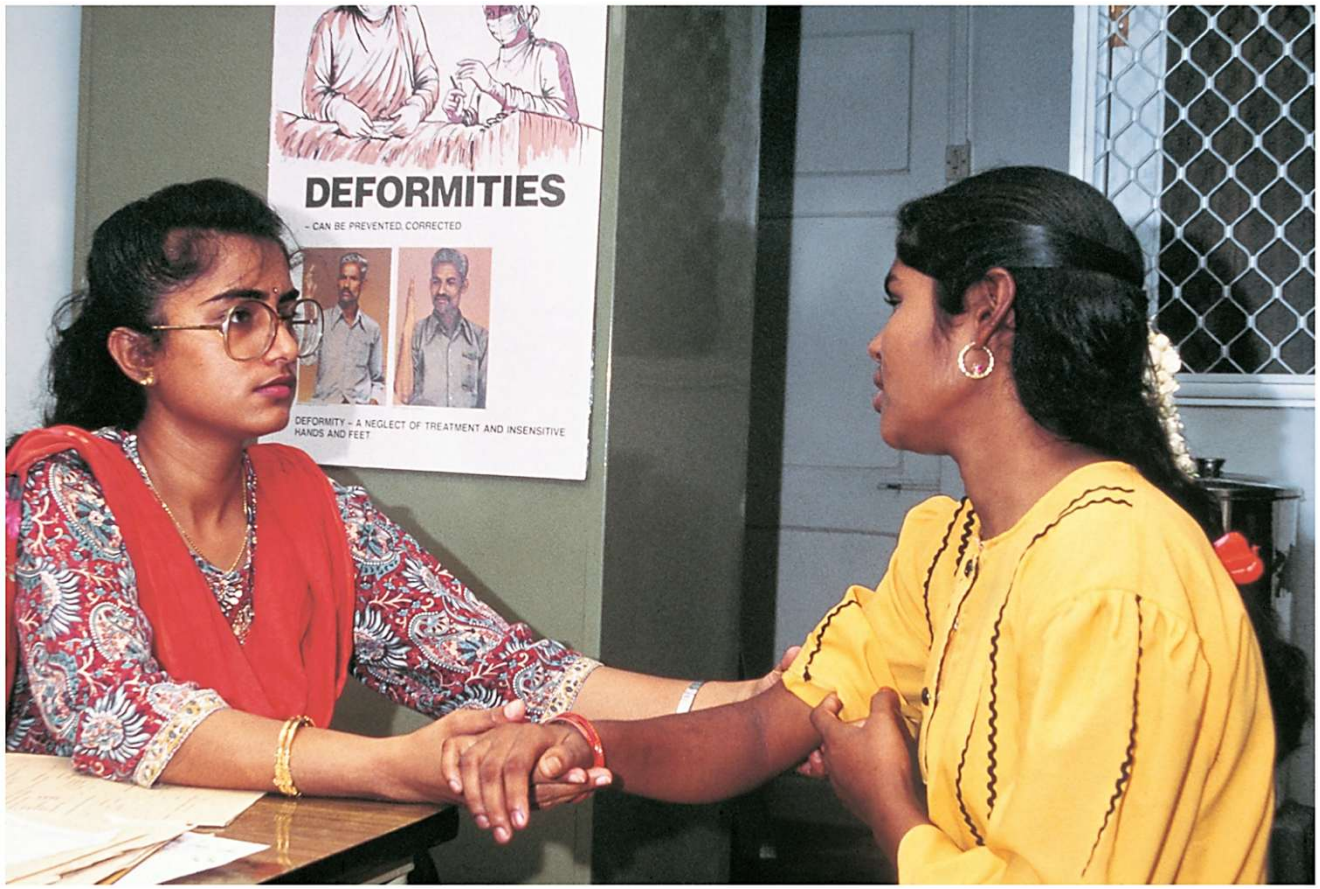
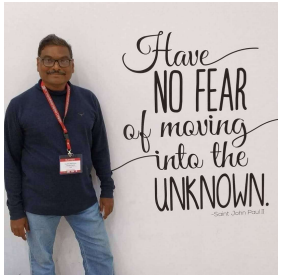



# **Establishing LRC** within the **GHC setup** and **linkages**

Rajeev Dudhalkar

+91 9324381408

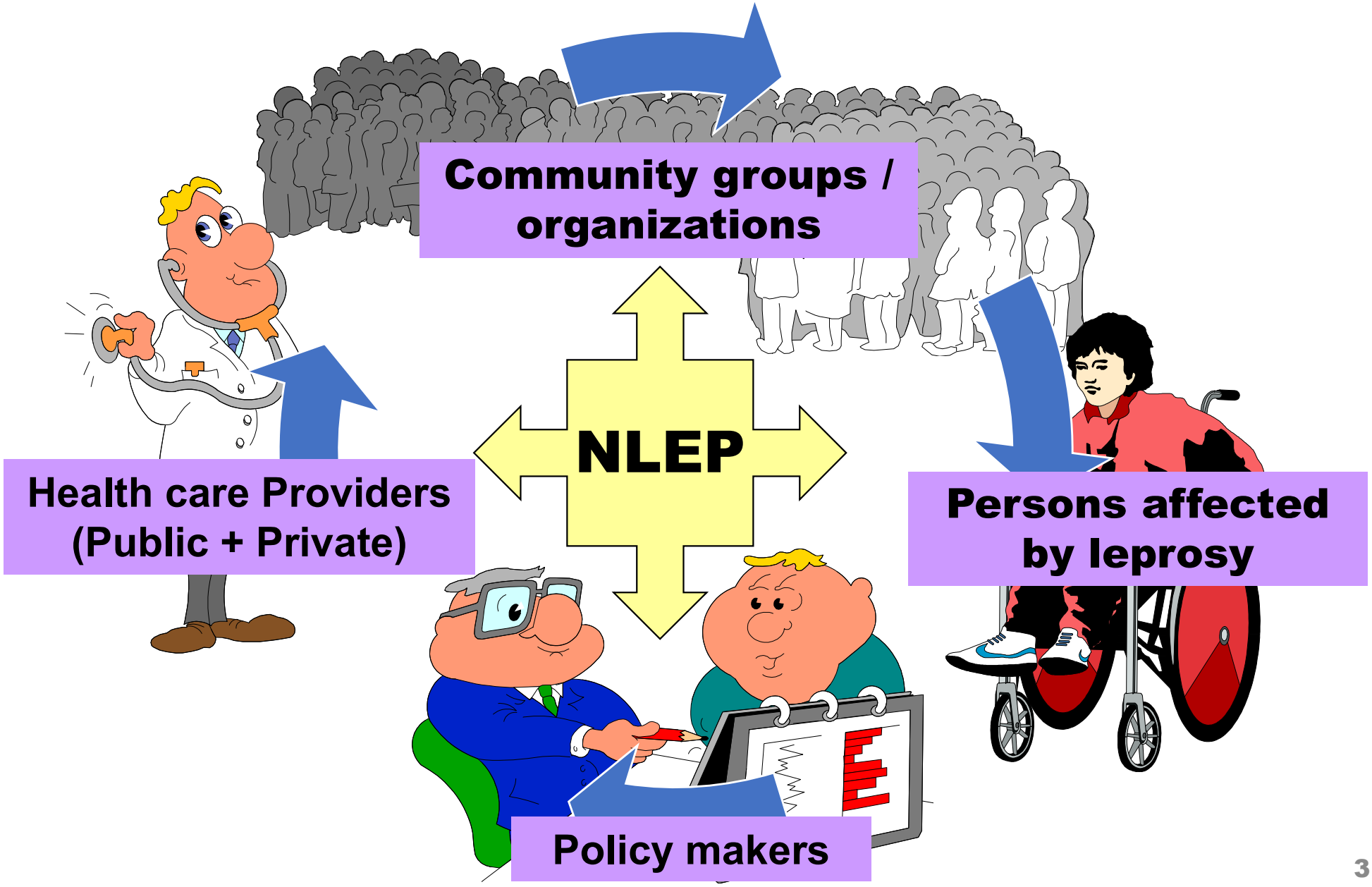
rajeevdudhalkar@gmail.com




*"Fostering disability-inclusive societies for advancing social progress."*

**To promote a society where persons with disabilities can participate fully and equally in all areas of life.**

# Stakeholders for leprosy control



# National Leprosy Eradication Program

## Disability Prevention & Medical Rehabilitation

## Guidelines for Primary, Secondary and Tertiary Level Care

**Central Leprosy Division**
**Directorate General of Health Services,**
**Ministry of Health & Family Welfare,**
**Government of India**
**Nirman Bhavan, New Delhi**

## Introduction

National Leprosy Eradication Programme (NLEP) is implemented with major objectives of reducing the disease burden, preventing disabilities and to improve awareness about leprosy in the country through general health care system.

Multi Drug Therapy is still considered as most potent drug regimen to reduce the burden of leprosy by interrupting transmission of disease and curing all registered cases of leprosy and making them released from treatment within shortest possible time. India has achieved the milestone of leprosy elimination since Dec. 2005 with wider use of MDT. But still a considerable numbers of new cases are being detected every year with disability and deformity. There also exists large number of cases who have completed the full course of MDT but have got different types of deformities and disability due to consequences of permanent nerve damage. Amongst the leprosy cured there are some of them though presently do not have any deformity but may develop same due to negligence in taking care of their anesthetics eye, hand or feet. As now the vertical program has been integrated into general health care system, it has become the responsibility of general health care system not only to ensure early case detection and provide regular MDT but also carry out all the activities required to prevent disability and provide medical rehabilitative services to patients who require those.

Presently the leprosy services like diagnosis & multi drug therapy, drug procurement and simplified information system have been well established in general health care system starting from sub center to district HQ hospitals and tertiary health care institutions. The disability prevention and medical rehabilitation services are comprehensive care to be provided to all old and new disability cases of leprosy so that they will not worsen their condition. It is estimated that around one million leprosy patients with disabilities exist in the country. There will be an average of 2000 to 3000 cured leprosy patients with disabilities living in a district. To institute care for individual leprosy patients with disabilities, it is essential to identify each patient having disability / deformity due to leprosy and motivate them to avail services at nearest CHC. Block CHC will be identified as first referral center for provision of DPMR services.

It is felt that prevention of deformities and disabilities need to be given higher emphasis during the 12th Five Year Plan period (2012-2017).

### NLEP Mile-stones

*1952*
*Dr. Wardekar's SET pattern for Survey Education and Treatment*

*1955*
*National Leprosy Control Program launched*

*1981*
*MDT (multidrug therapy) recommended by World Health Organisation as cure*

*1983*
*National Leprosy Eradication Program launched*

*1991*
*World Health Assembly adopts resolution to eliminate leprosy by the year 2000. Elimination was defined by WHO as prevalence of less than 1 per 10,000 population*

*1993*
*World Bank assisted the NLEP*

*2004*
*Leprosy integrated with GHS (general Health Service)*

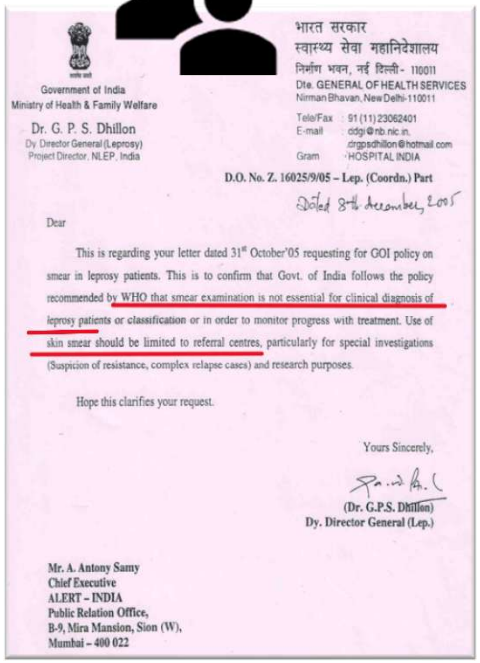
*2005*
*Leprosy 'elimination' achieved at the National level in India*

*2006*
*DPMR introduced as a component of NLEP*

*2007*
*Disability Prevention & Medical Rehabilitation Guidelines for primary, secondary and tertiary level distributed by NLEP*

*2011*
*Guidelines on DPMR for NLEP revised*

# Leprosy of consequence



भारत सरकार
स्वास्थ्य सेवा महानिदेशालय
निर्माण भवन, नई दिल्ली- 110011
Dte. GENERAL OF HEALTH SERVICES
Nirman Bhavan, New Delhi-110011

Government of India
Ministry of Health & Family Welfare

Dr. G. P. S. Dhillon
Dy. Director General (Leprosy)
Project Director, NLEP, India

Tele/Fax : 91 (11) 23062401
E-mail : cdgi@nb.nic.in, drgpsdhillon@hotmail.com
Gram : HOSPITAL INDIA

D.O. No. Z. 16025/9/05 – Lep. (Coordn.) Part

Dated 3rd December, 2005

Dear

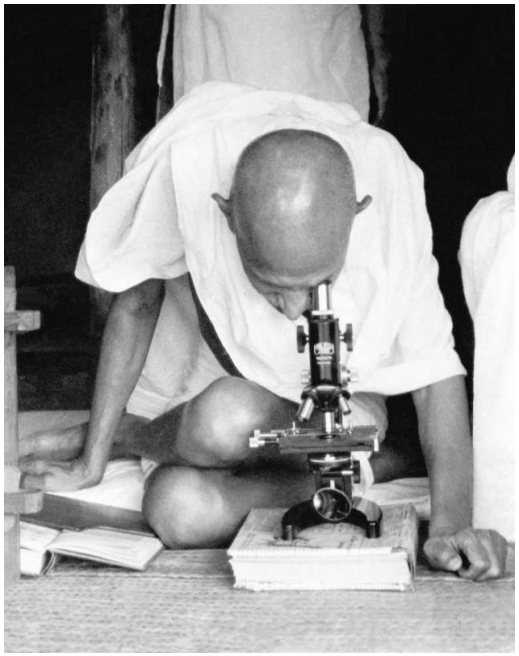
This is regarding your letter dated 31st October'05 requesting for GOI policy on smear in leprosy patients. This is to confirm that Govt. of India follows the policy recommended by WHO that smear examination is not essential for clinical diagnosis of leprosy patients or classification or in order to monitor progress with treatment. Use of skin smear should be limited to referral centres, particularly for special investigations (Suspicion of resistance, complex relapse cases) and research purposes.

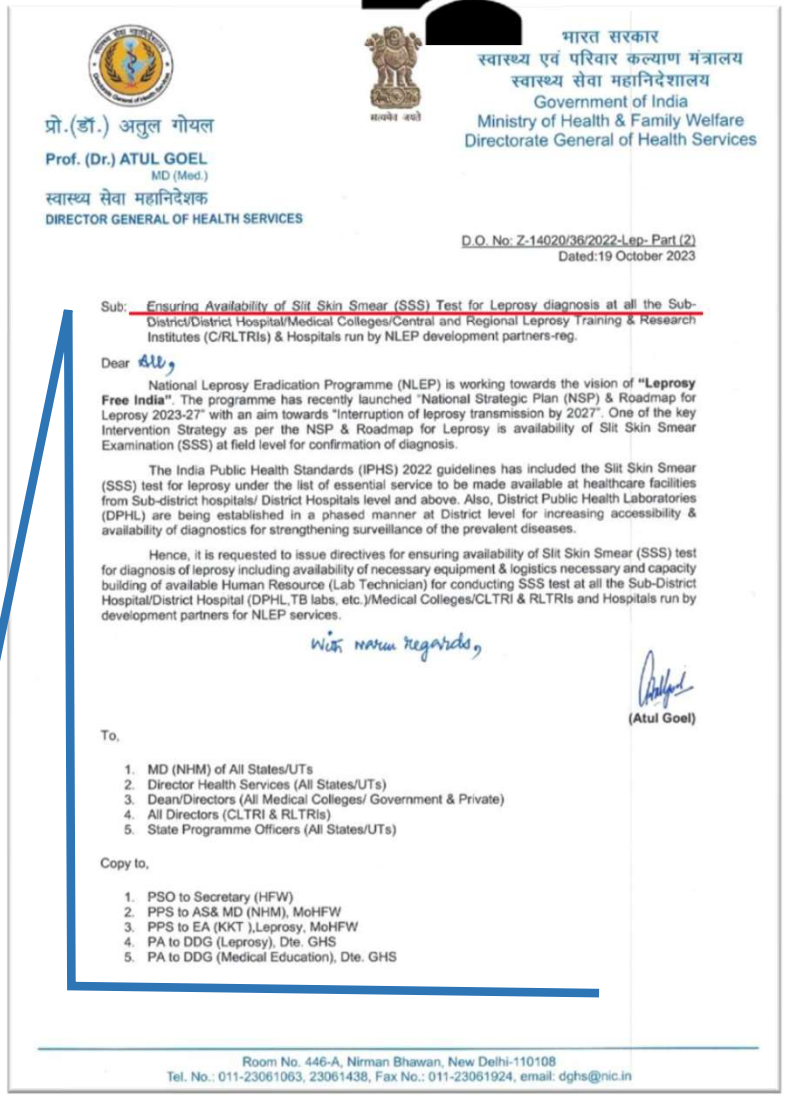
Hope this clarifies your request.

Yours Sincerely,

(Dr. G.P.S. Dhillon)
Dy. Director General (Lep.)

Mr. A. Antony Samy
Chief Executive
ALERT – INDIA
Public Relation Office,
B-9, Mira Mansion, Sion (W),
Mumbai – 400 022





प्रो.(डॉ.) अतुल गोयल
Prof. (Dr.) ATUL GOEL
MD (Med.)
स्वास्थ्य सेवा महानिदेशक
DIRECTOR GENERAL OF HEALTH SERVICES

भारत सरकार
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
स्वास्थ्य सेवा महानिदेशालय
Government of India
Ministry of Health & Family Welfare
Directorate General of Health Services

D.O. No: Z-14020/36/2022-Lep- Part (2)
Dated:19 October 2023

Sub: Ensuring Availability of Slit Skin Smear (SSS) Test for Leprosy diagnosis at all the Sub-District/District Hospital/Medical Colleges/Central and Regional Leprosy Training & Research Institutes (C/RLTRIs) & Hospitals run by NLEP development partners-reg.

Dear Sir,

National Leprosy Eradication Programme (NLEP) is working towards the vision of **"Leprosy Free India"**. The programme has recently launched "National Strategic Plan (NSP) & Roadmap for Leprosy 2023-27" with an aim towards "Interruption of leprosy transmission by 2027". One of the key Intervention Strategy as per the NSP & Roadmap for Leprosy is availability of Slit Skin Smear Examination (SSS) at field level for confirmation of diagnosis.

The India Public Health Standards (IPHS) 2022 guidelines has included the Slit Skin Smear (SSS) test for leprosy under the list of essential service to be made available at healthcare facilities from Sub-district hospitals/ District Hospitals level and above. Also, District Public Health Laboratories (DPHL) are being established in a phased manner at District level for increasing accessibility & availability of diagnostics for strengthening surveillance of the prevalent diseases.

Hence, it is requested to issue directives for ensuring availability of Slit Skin Smear (SSS) test for diagnosis of leprosy including availability of necessary equipment & logistics necessary and capacity building of available Human Resource (Lab Technician) for conducting SSS test at all the Sub-District Hospital/District Hospital (DPHL,TB labs, etc.)/Medical Colleges/CLTRI & RLTRIs and Hospitals run by development partners for NLEP services.

With warm regards,

(Atul Goel)

To,

1. MD (NHM) of All States/UTs
2. Director Health Services (All States/UTs)
3. Dean/Directors (All Medical Colleges/ Government & Private)
4. All Directors (CLTRI & RLTRIs)
5. State Programme Officers (All States/UTs)

Copy to,

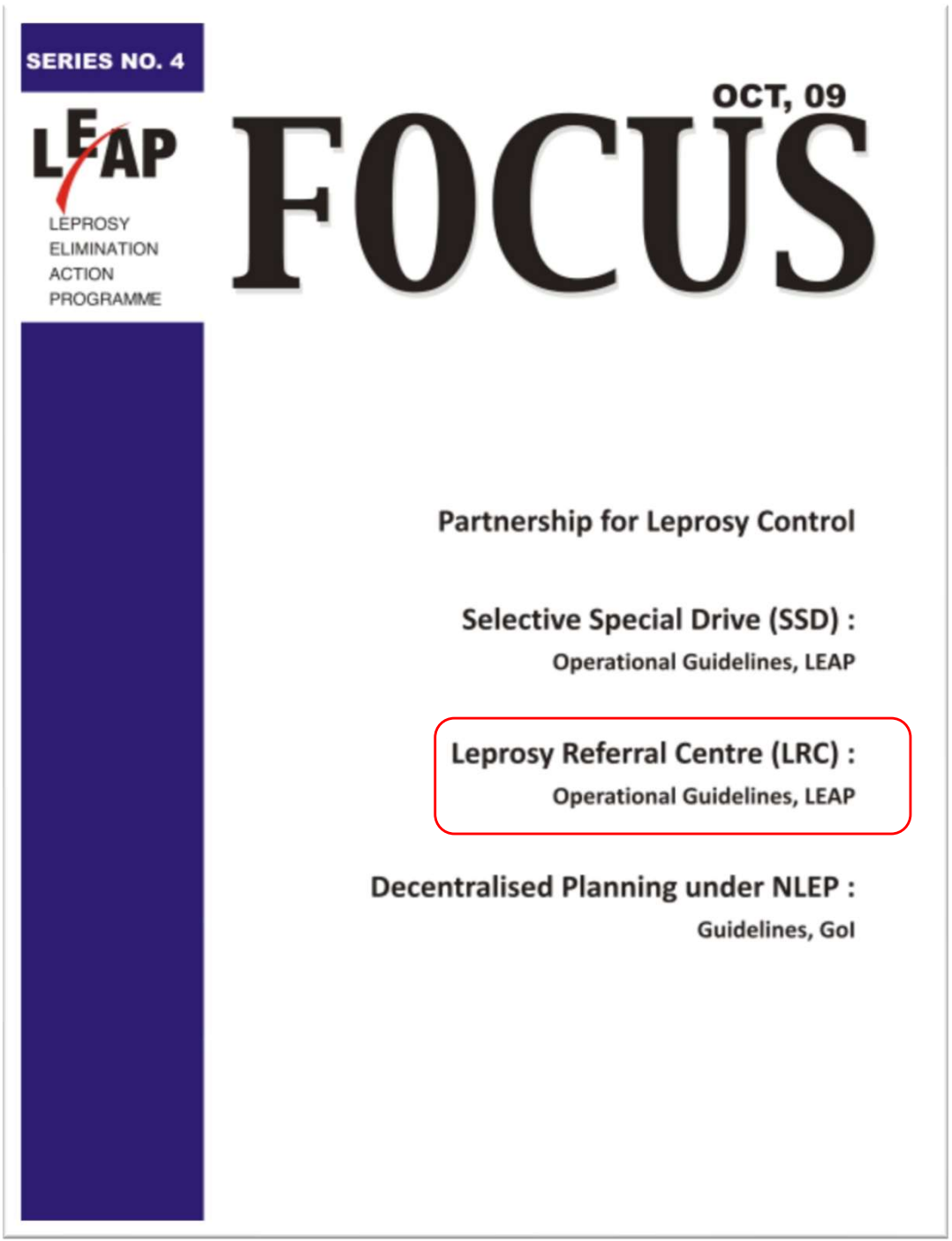
1. PSO to Secretary (HFW)
2. PPS to AS& MD (NHM), MoHFW
3. PPS to EA (KKT ),Leprosy, MoHFW
4. PA to DDG (Leprosy), Dte. GHS
5. PA to DDG (Medical Education), Dte. GHS

Room No. 446-A, Nirman Bhawan, New Delhi-110108
Tel. No.: 011-23061063, 23061438, Fax No.: 011-23061924, email: dghs@nic.in

The India Public Health Standers (IPHS) 2022 guidelines has included the **Slit Skin Smear** (SSS) test for leprosy under the list of **essential services** to be **made available** at **healthcare facilities** from Sub-district hospitals/ District Hospitals level and above. Also, **District Public Health Laboratories** (DPHL) are being established in a phased manner at District level for increasing **accessibility** & **availability** of **diagnostics** for strengthening surveillance of the prevalent diseases.

***What is the policy guideline of NLEP on skin smear examination?***

*NLEP no longer routinely advises skin smear examination in the leprosy control programme, as majority of the leprosy cases can be diagnosed clinically even without skin smears. However, it recommends skin smear examination, if you suspect leprosy without sensory loss or have any doubts on the clinical signs that can be done at any LRC or general hospital, which is equipped with reliable laboratory facilities and trained technicians, preferably at the sputom examination centre of RNTCP.*




- To **establish LRCs** within the **existing health infrastructure of GHS** as a **'secondary level care'** unit at the **block / taluk level** in a district.
- To provide quality care to leprosy cases during integration phase through **capacity building** of **GHS personnel**.
- To **create linkages** with the **specialized or tertiary level centres** at the district level and establish a referral system **with the care at primary level.**

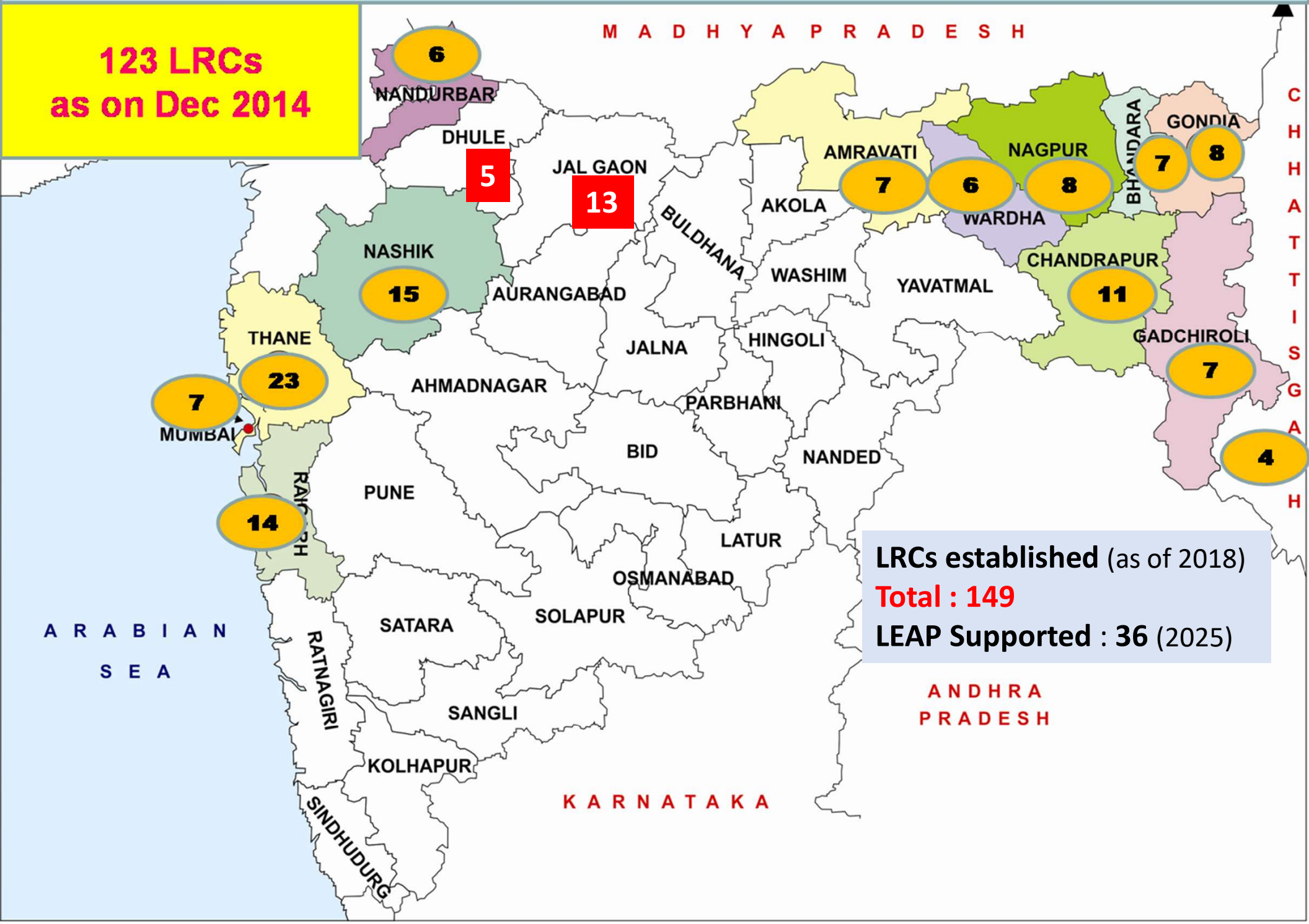
**Accountability** of the **District Nucleus Team (DNT) in sustaining the quality care and also to involve the GHC system in the leprosy control programme.**

DPMR programme, to strengthen the services at the 'secondary' level.

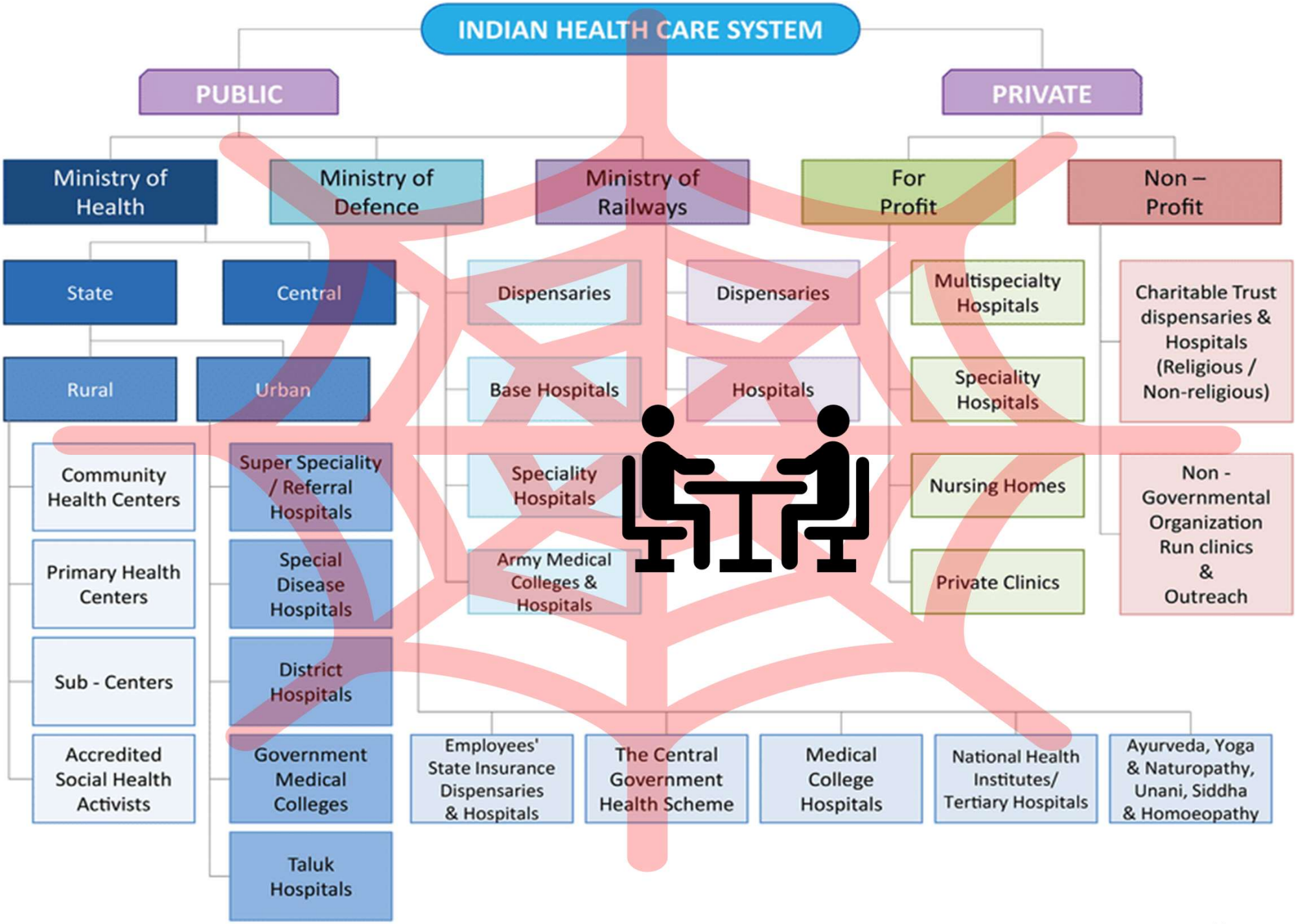
Referrals and re-referrals between 'primary' and 'tertiary' levels of public health care system.

# LEAP supported LRCs in Maharashtra(12 districts) & CG(1 district)

**123 LRCs as on Dec 2014**

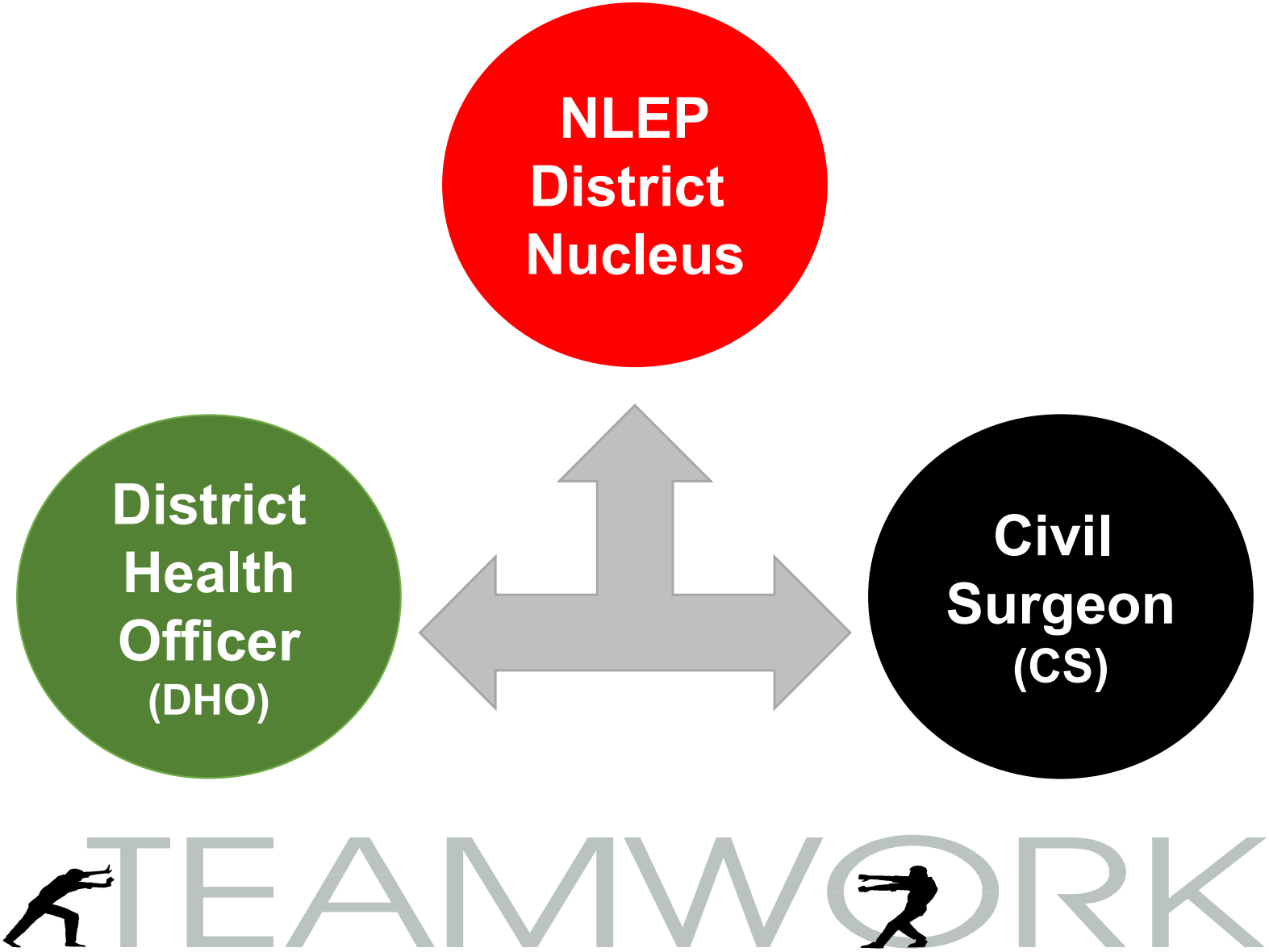



**LRCs established** (as of 2018)
**Total : 149**
**LEAP Supported** : **36** (2025)

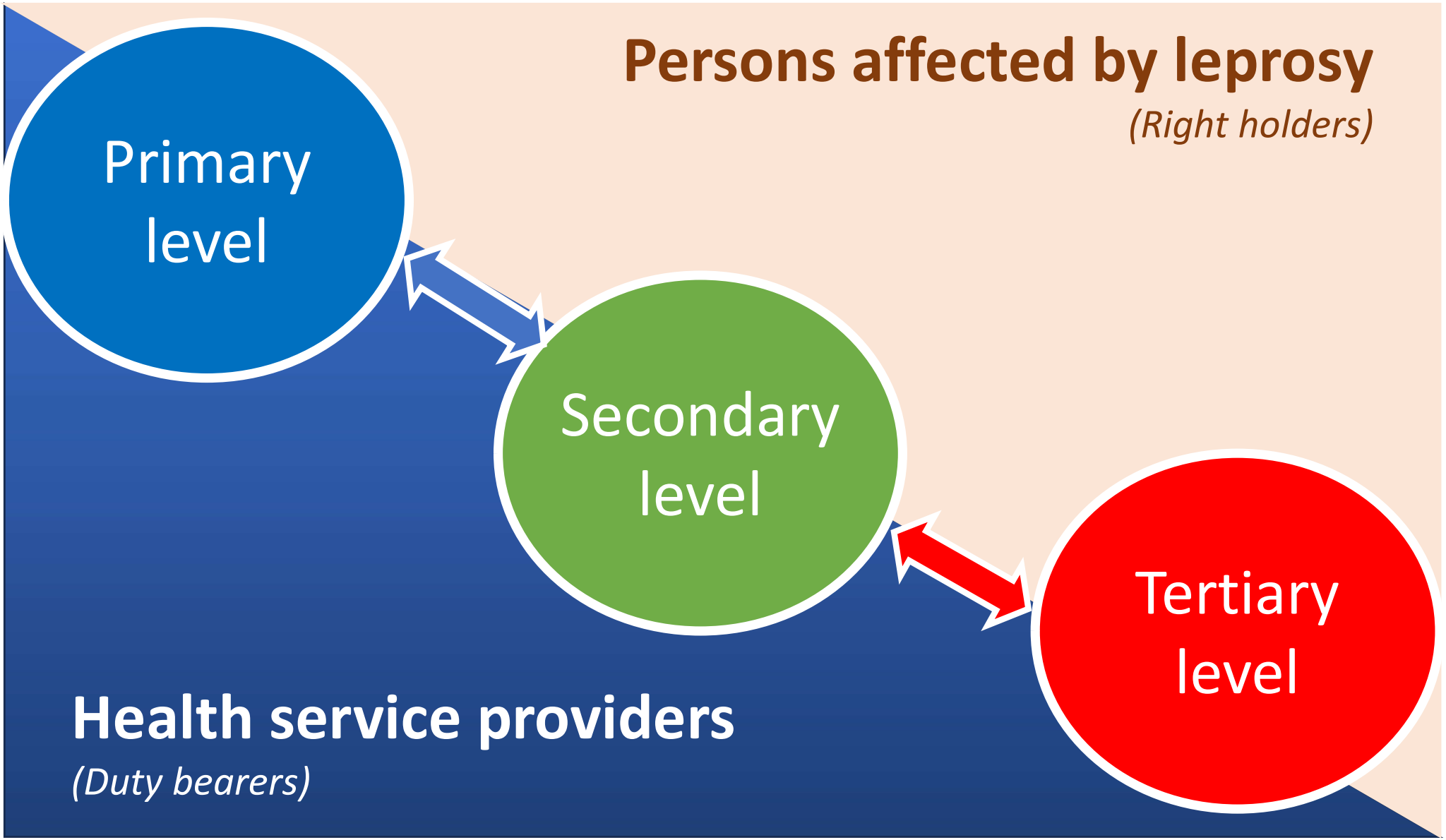

INDIAN HEALTH CARE SYSTEM
PUBLIC
PRIVATE
Ministry of Health
Ministry of Defence
Ministry of Railways
For Profit
Non – Profit
State
Central
Rural
Urban
Community Health Centers
Primary Health Centers
Sub - Centers
Accredited Social Health Activists
Super Speciality / Referral Hospitals
Special Disease Hospitals
District Hospitals
Government Medical Colleges
Taluk Hospitals
Dispensaries
Base Hospitals
Speciality Hospitals
Army Medical Colleges & Hospitals
Dispensaries
Hospitals
Employees' State Insurance Dispensaries & Hospitals
The Central Government Health Scheme
Medical College Hospitals
National Health Institutes/ Tertiary Hospitals
Ayurveda, Yoga & Naturopathy, Unani, Siddha & Homoeopathy
Multispecialty Hospitals
Speciality Hospitals
Nursing Homes
Private Clinics
Charitable Trust dispensaries & Hospitals (Religious / Non-religious)
Non - Governmental Organization Run clinics & Outreach

# *Establishing LRCs at* secondary level

*Coordination*



# DPMR Referral system



# Viable referral level system under NLEP

**Secondary**

Sub-District/
Rural Hospital
First Referral
Unit / UHC

**Tertiary**

District Hospital
Civil Hospital
MC Hospital


**Primary**

PHC / CHC
UHP / MCD

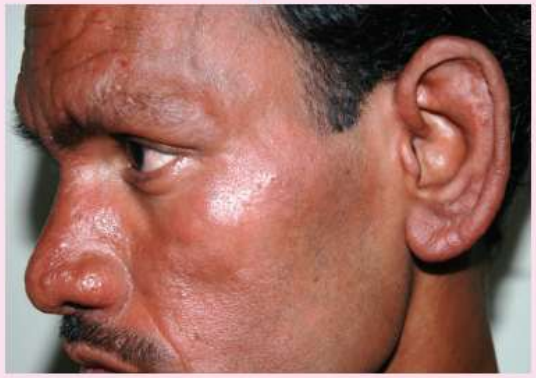
"It was noted that the training issue was integrally linked to that of referral systems and centres. It was agreed that health staff in referral centres needed to have more clinical exposure to patients and leprosy issues and that people in general needed to be more sensitised to the referral process".

*- Excerpts from the Minutes of the 13th Meeting of the ILEP Technical Commission (ITC), 19th April 2009, New Delhi, India*

# Look for THREE group of suggestive symptoms

for early leprosy case detection and management.

## 1. Suspect



**Changes in skin texture**

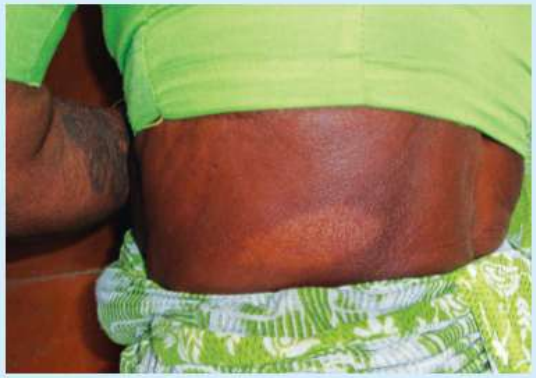
- Smooth, Oily, Shiny (SOS skin), **thickened** skin and **earlobe.**
- **Nodules**

## 2. Observe

**Disability & deformity**

- **Sensory loss** in hands and feet (palm and sole)
- **Muscle weakness** / paralysis face, hand & foot .

## 3. Examine



**Skin patch/es**

- **Pale** / lighter than skin color, **flat.**
- **Redish** than skin color, **raised.**

- Sighting symptoms on exposed body parts is very simple and easier than examining covered body parts for patches is the challenge.
- Cautious followup of suspect for diagnosis is must for early case detection.
- Community awareness about leprosy is the strategy for leprosy eradication.

# LEPROSY- Examining Leprosy suspects

## 1. Cases with Patches

**Test patches for sensation**

**Patches with sensory loss**

**Patches without sensory loss**

## 2. Cases without Patches

- Smooth, Oily and Shiny (SOS) skin
- Thickened earlobes with SOS skin
- Noddules: Skin colour/ erythematous

**Examine commonly affected nerves for sensory loss**

**Sensory loss** in the area of the **distribution of nerve**

**No sensory loss** in the area of the distribution of nerve

**Skin Smear Examination**

**Sites for smear**

- Earlobe
- Affected skin
- Normal skin

**Smear POSITIVE**

**Smear NEGATIVE.**
**NO LEPROSY,**
Rule out other conditions

**Diagnose**
**LEPROSY**

**3. PURE NEURITIC CASES, with only nerve involvement:**
Nerve examination and function Assessment (NFI-Nerve Function Impairment) showing sensory loss confirms the diagnosis.


# DIAGNOSIS OF LEPROSY

It is usually **accepted** that in view of

the **social** and **medical** implications of leprosy,

it is **wiser** not to make the diagnosis,

unless the evidence is fairly definite !

## Source of Leprosy infection

*Untreated infectious cases*

## Individuals with suggestive symptoms

## Diagnosis of New Cases

***Infectious***

*Risk for disability /deformity*

*With disability / deformity*

## MDT - Cure

**Infectious ➡ Non-infectious**

Reduce the risk of nerve damage, disability & deformity

## Managements of complication

*Lepra reactions I & II, relapses*
*Nerve function impairment (NFI)*
*Drug sensitivity*

## Undetected cases

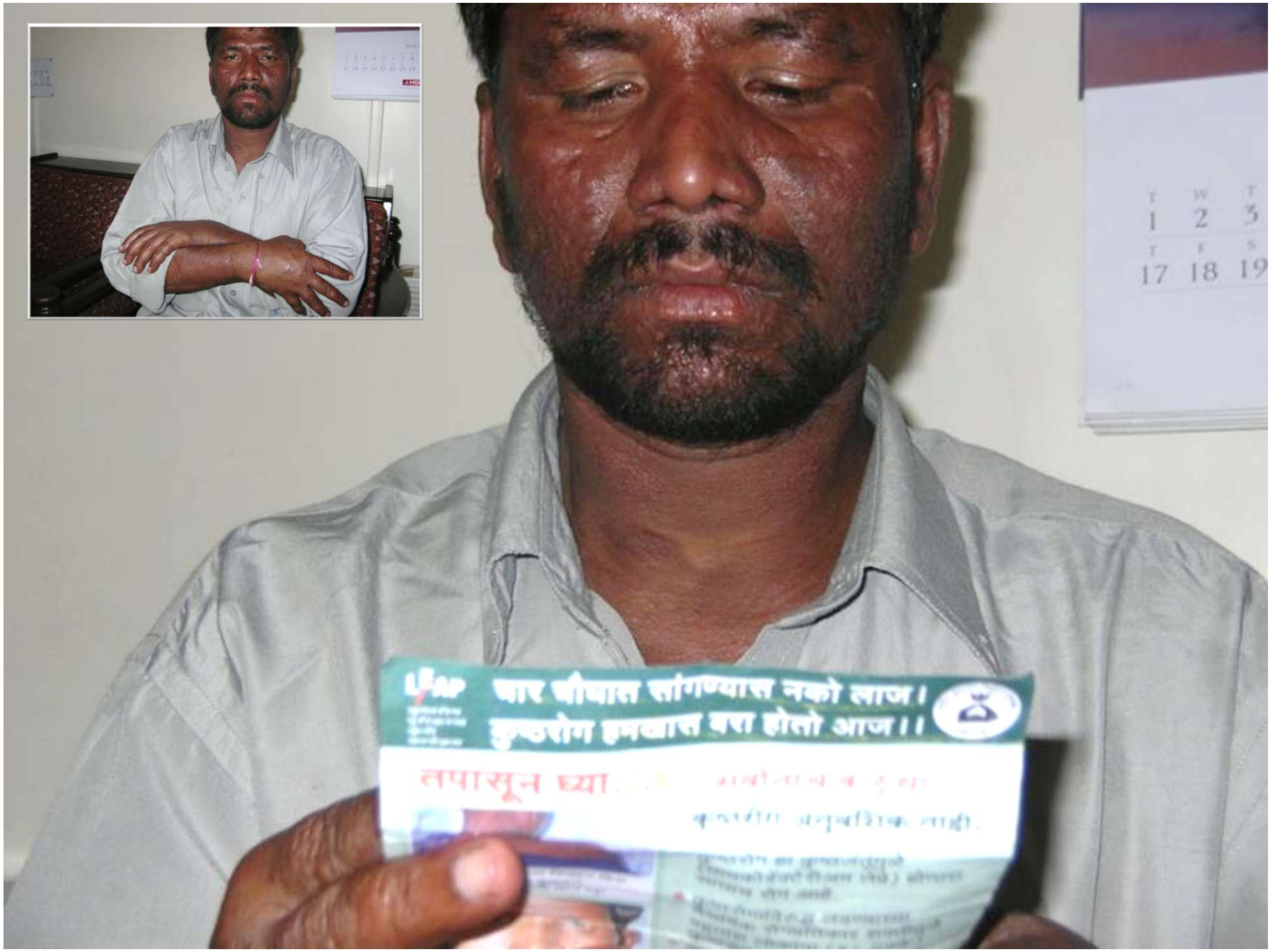
*Backlog*

*Incubation period*


IEC
Scientific
temperament
HANDS TO SERVE
HERE WE SWEAR
ALERT INDIA

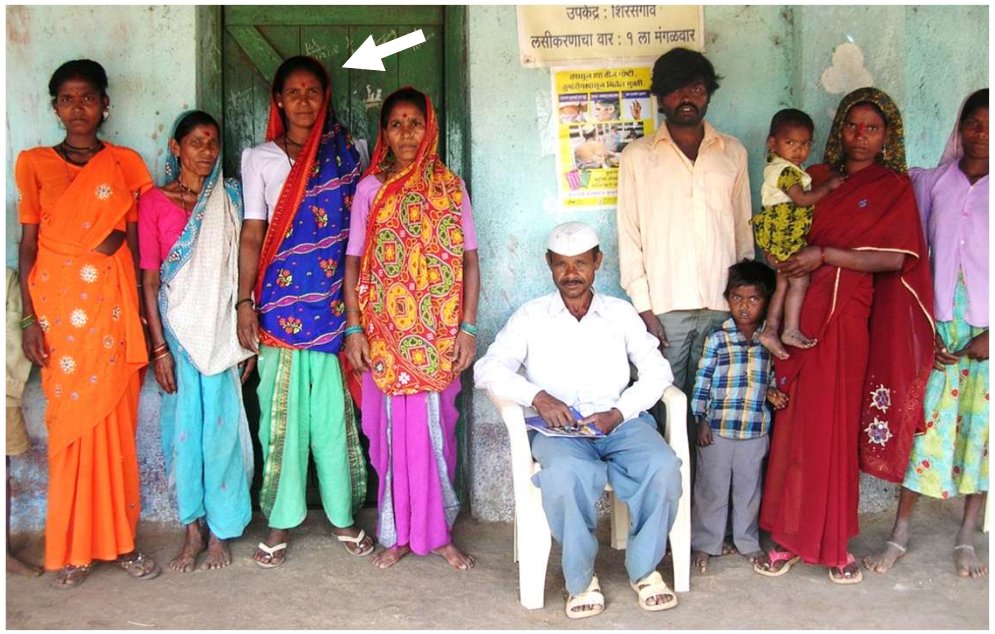
# leaflet changed the life....

*Student shared a leaflet with neighbor*



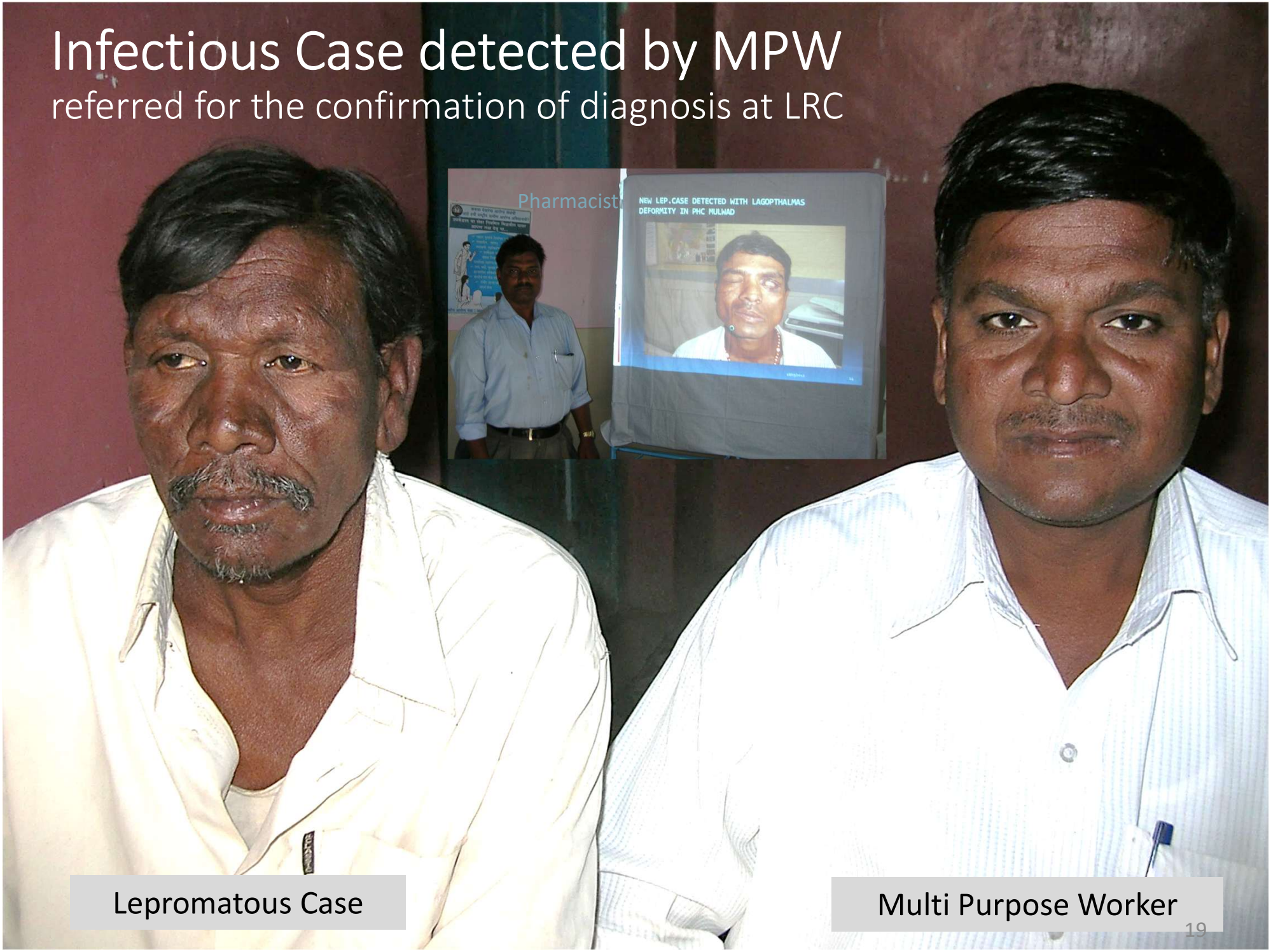
Jijabai can do this! Why not We?

ASHA worker felicitated sharing her experience in THO meeting and government published health magazine 'Aarogya Patrika'.



# Infectious Case detected by MPW

## referred for the confirmation of diagnosis at LRC

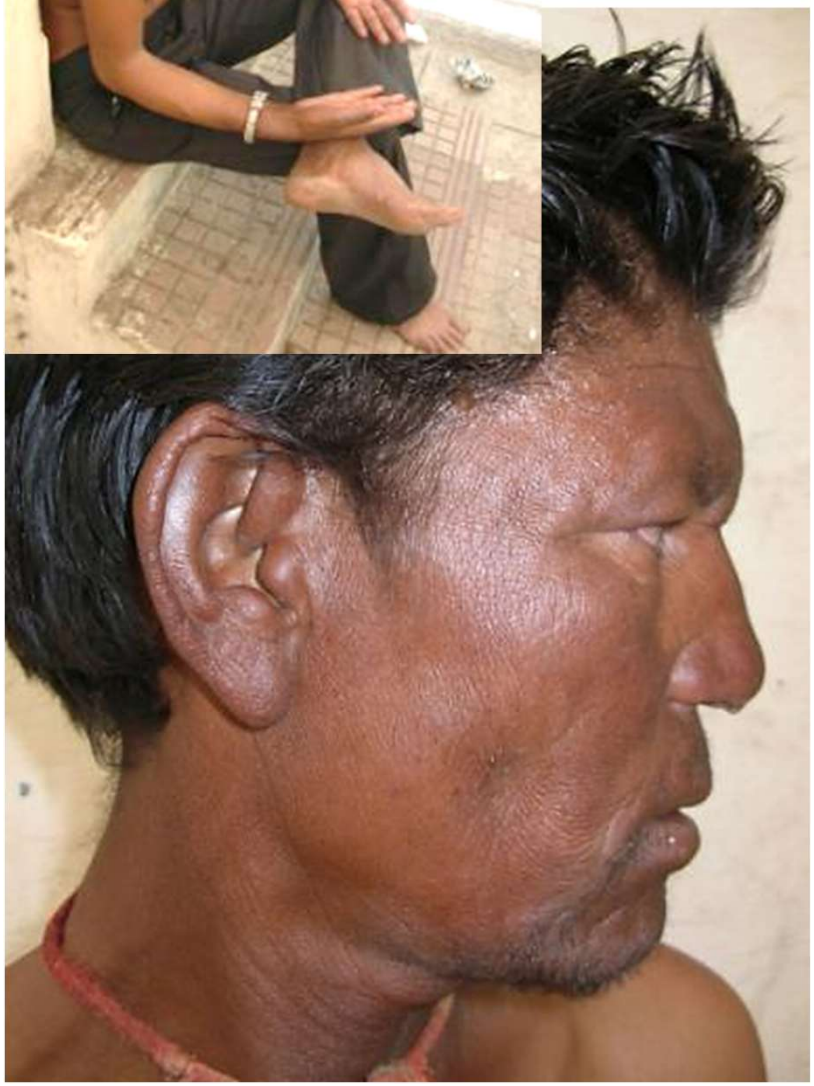


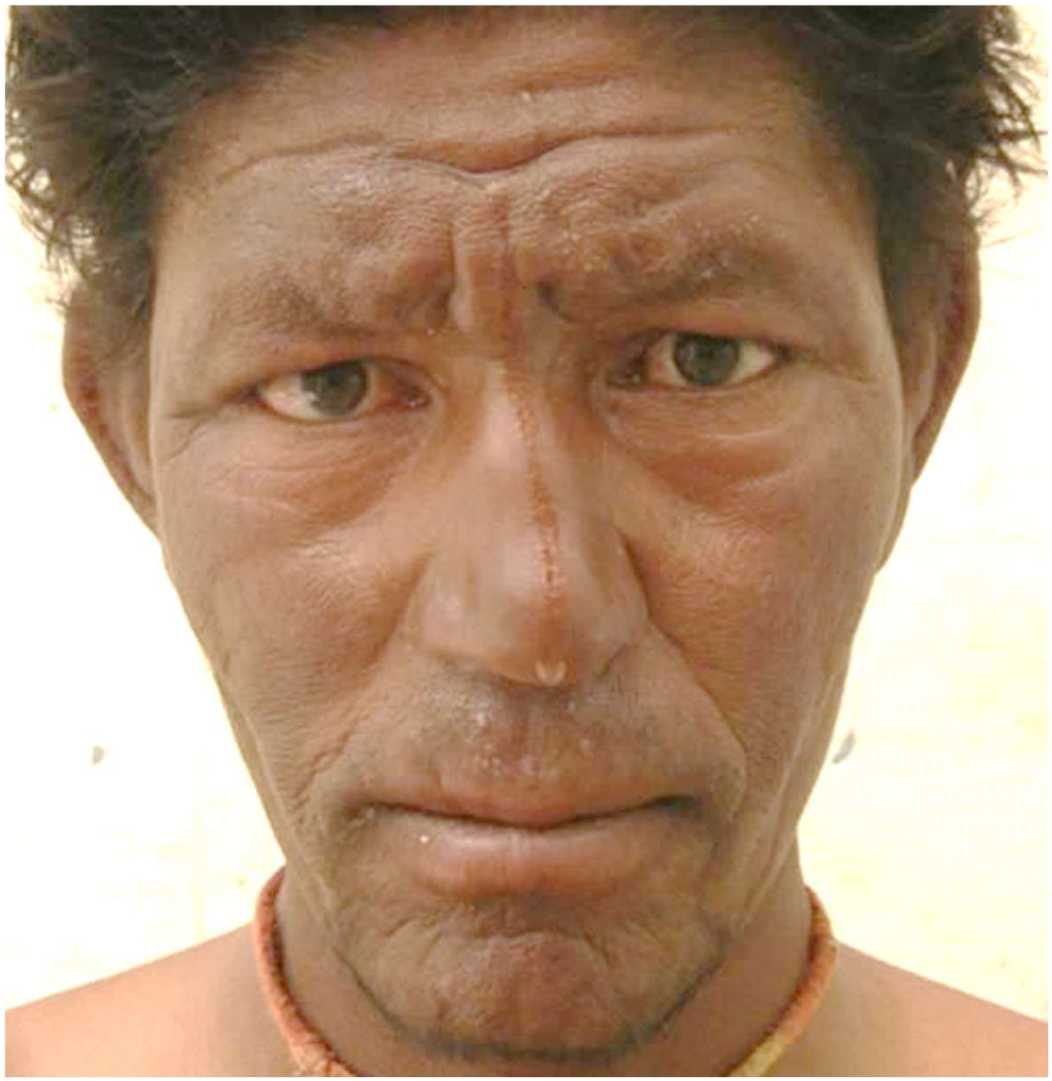

Lepromatous Case

Multi Purpose Worker

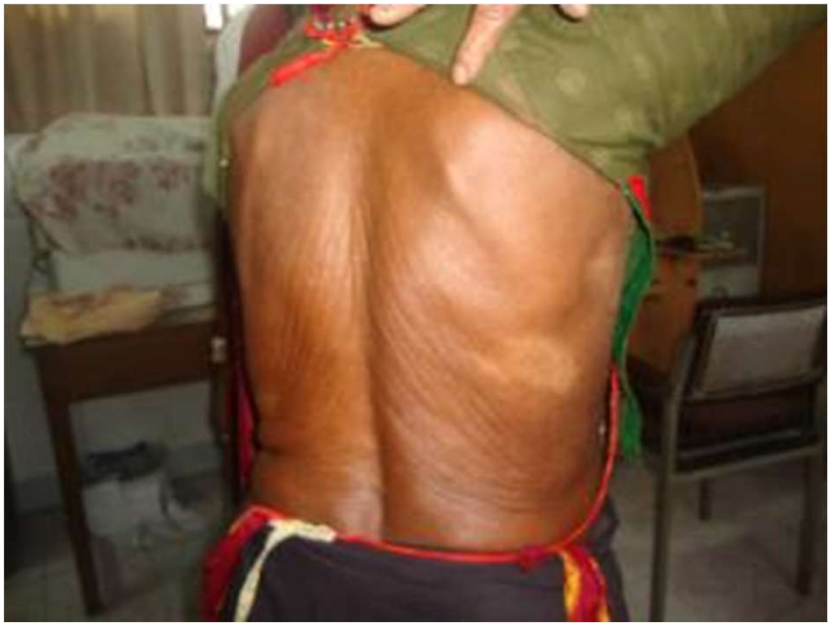
# Case detected by MO PHC

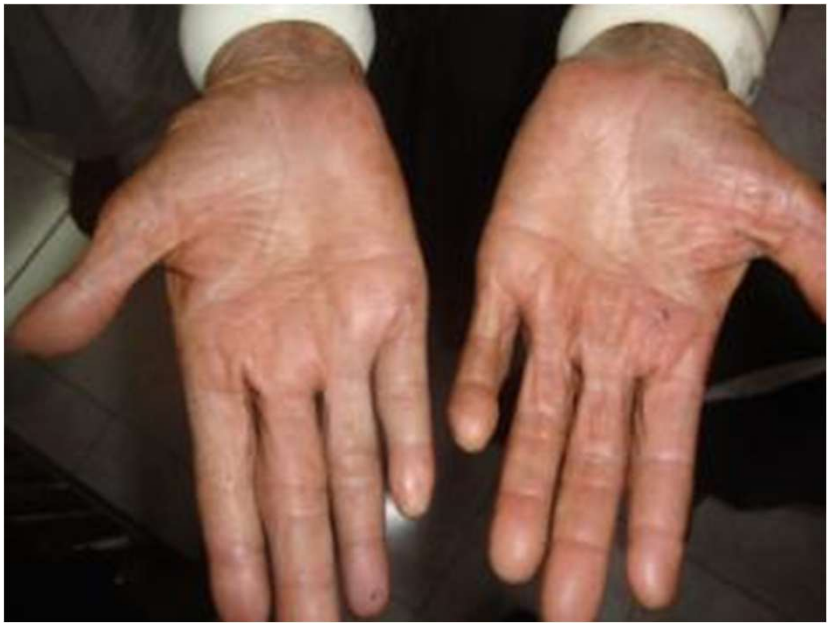
on the next very next OPD day
of the training





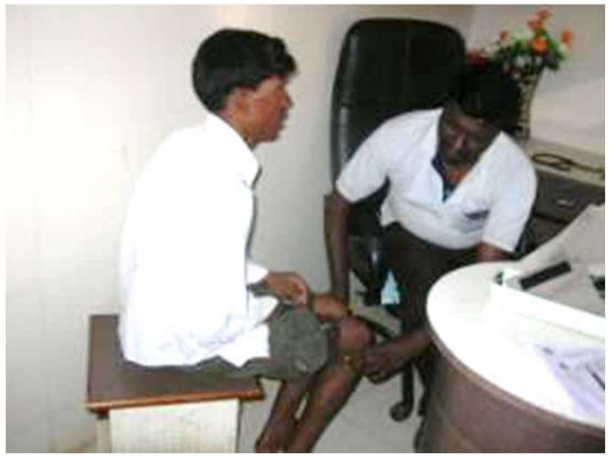
# Contacts examination

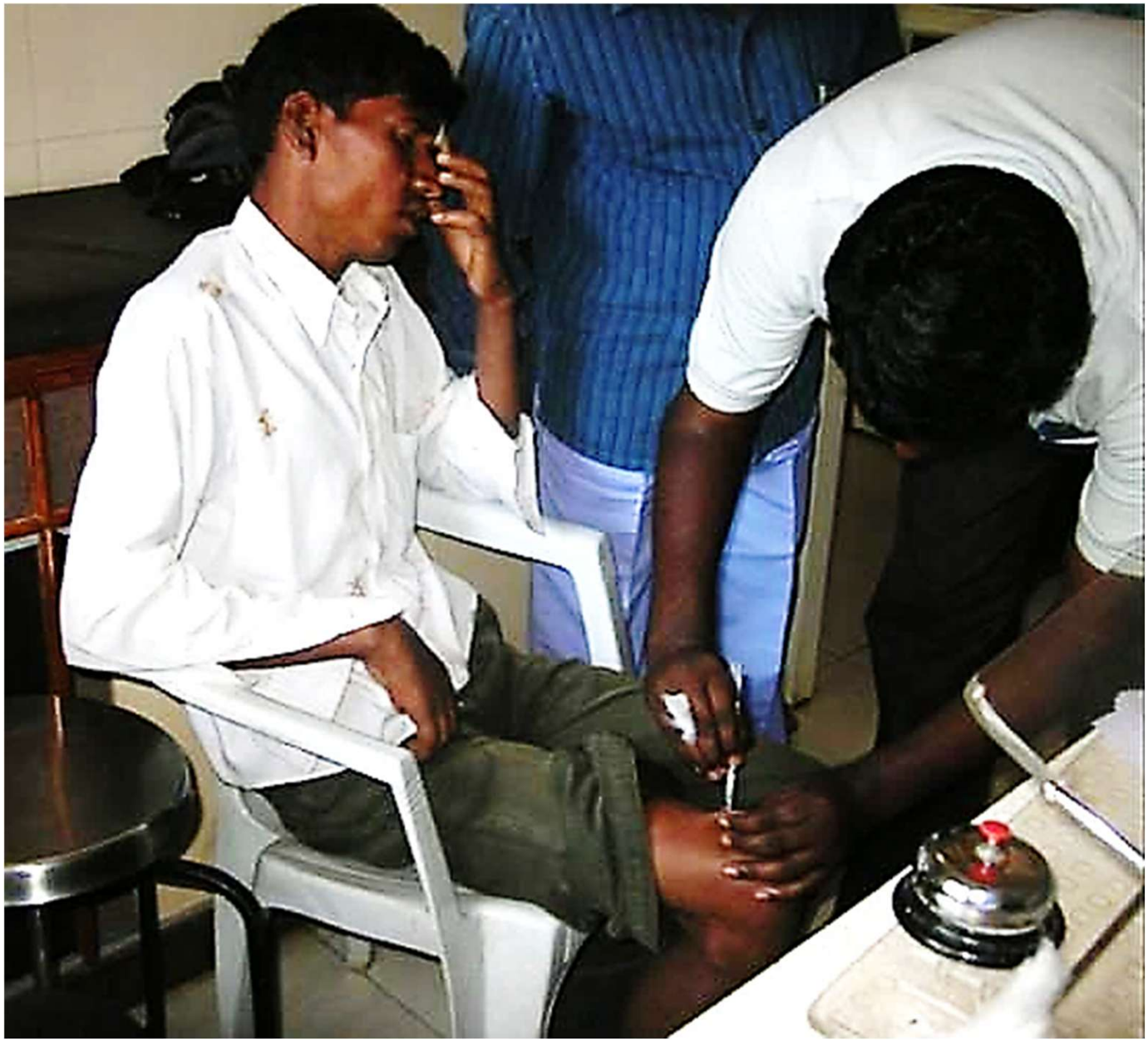




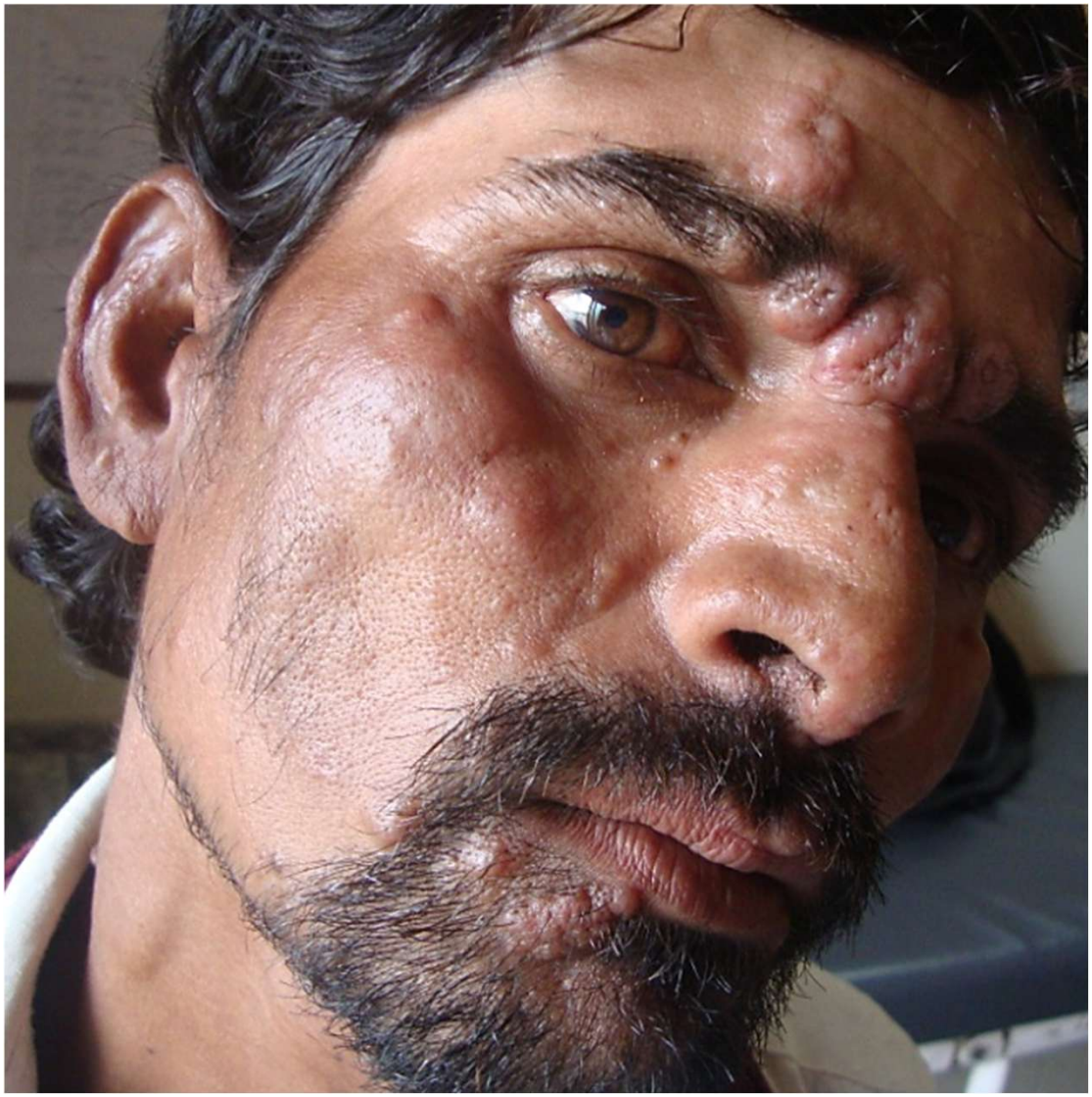
# LOR camp: Medical Officer, PHC

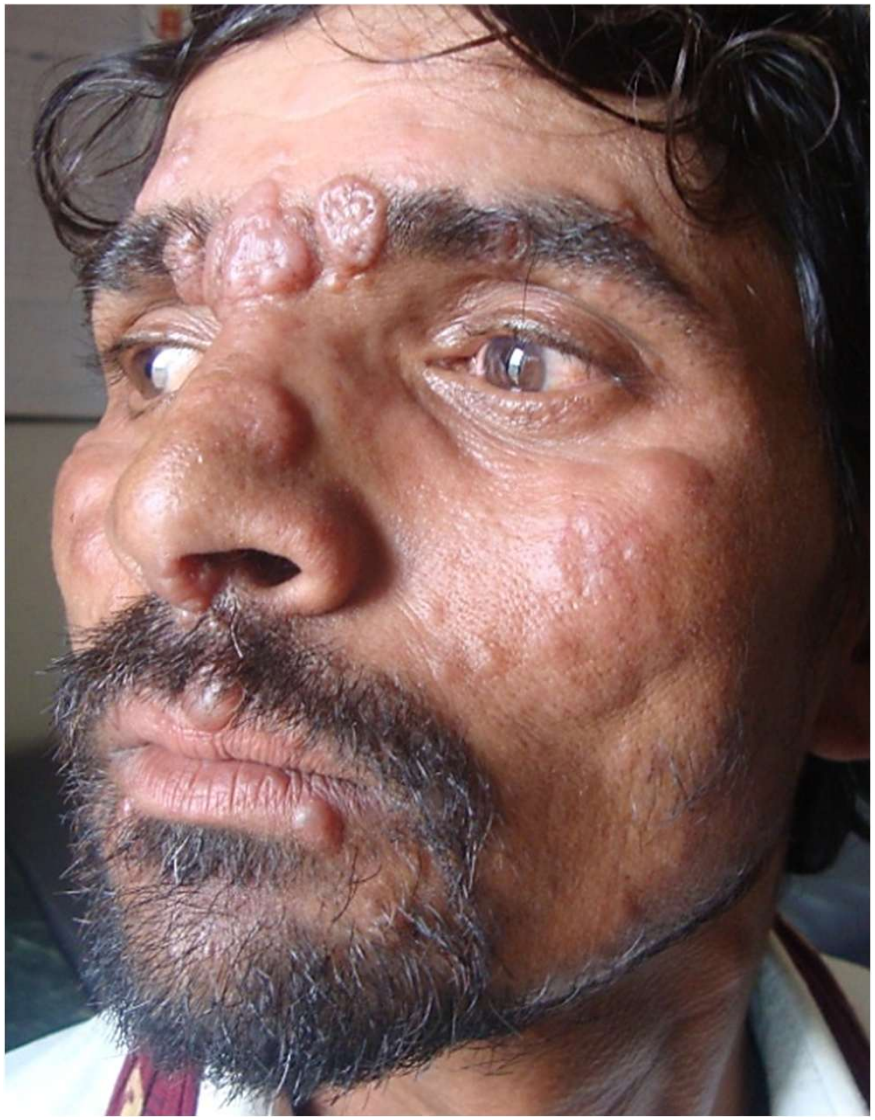
## New Cases detection





# ASHA worker suspect and referrer lepromatous case for diagnosis LOR Camp at PHC

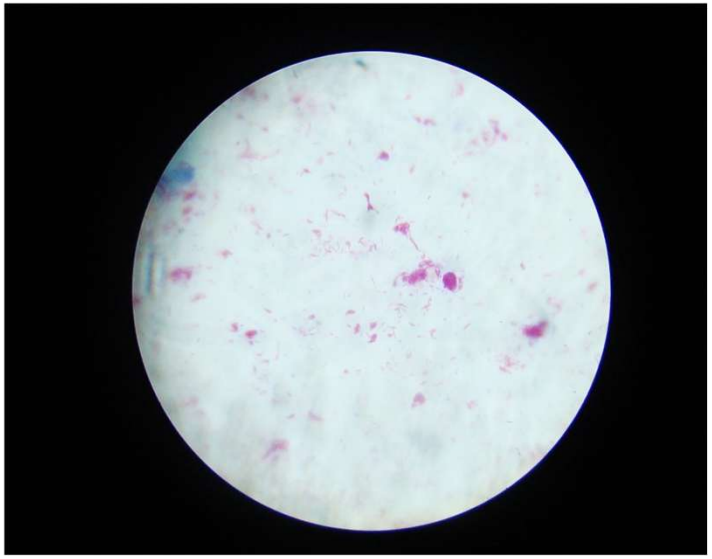




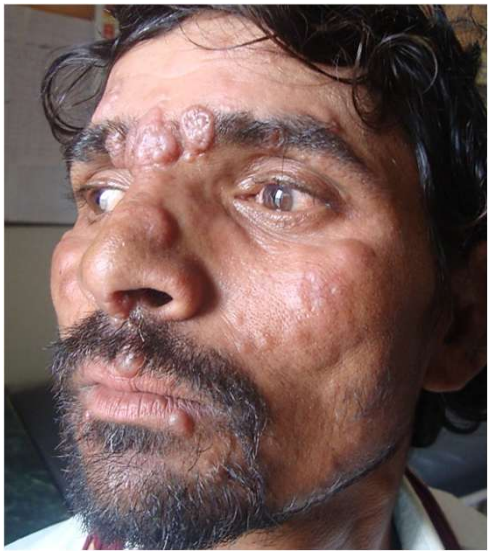
# Leprosy Referral Centre (LRC)
# LOR (LRC Out-reach) Camp

**Laboratory technician**

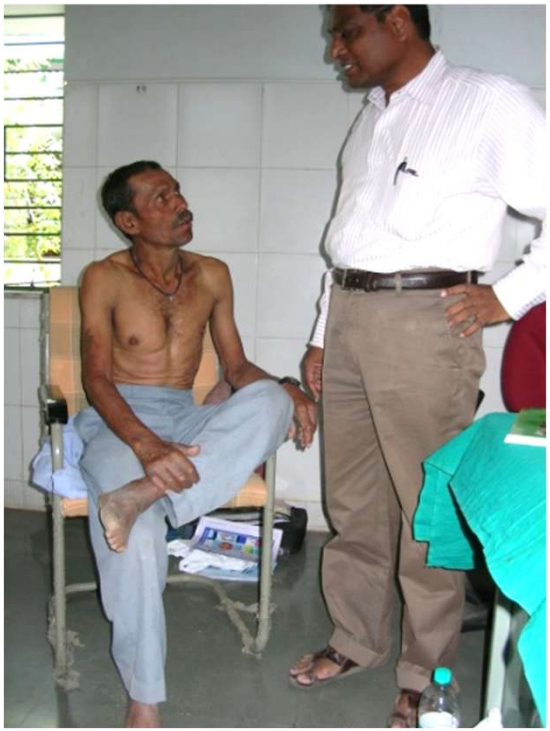
examining Skin
Skin Smear

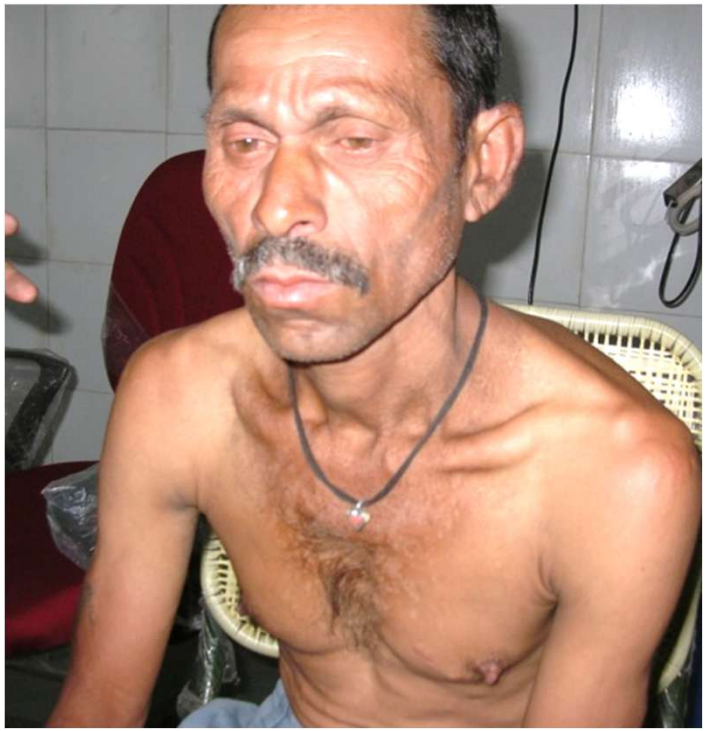


*Dr Mahulkar, ADHS Nashik*

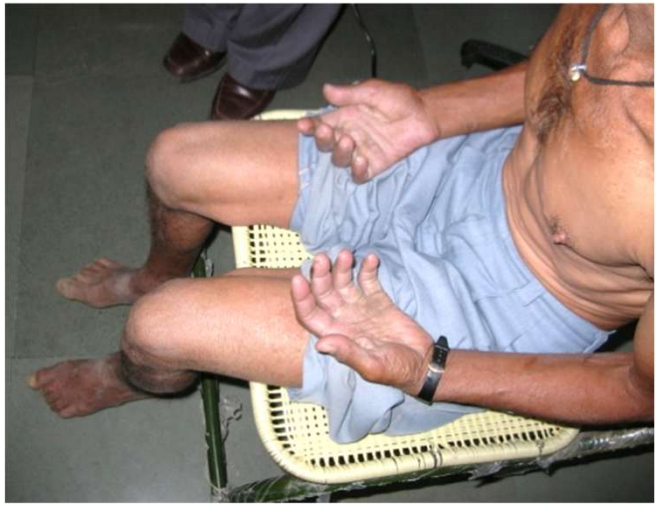


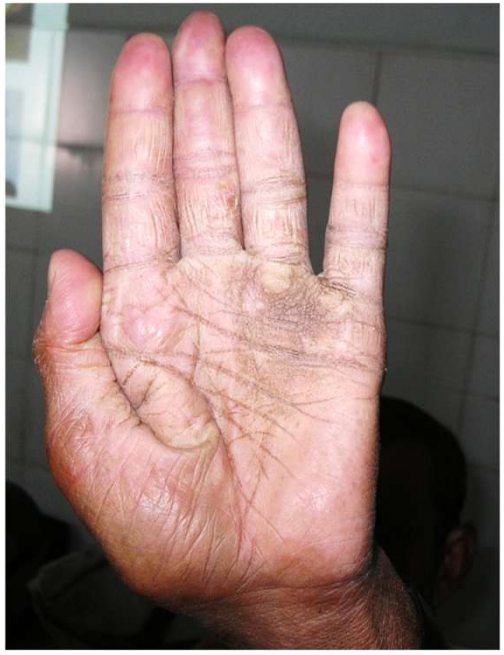
*Dr Mohite, MO PHC*
*Vadner Khakurdi Tal- Malegaon, Nashik*

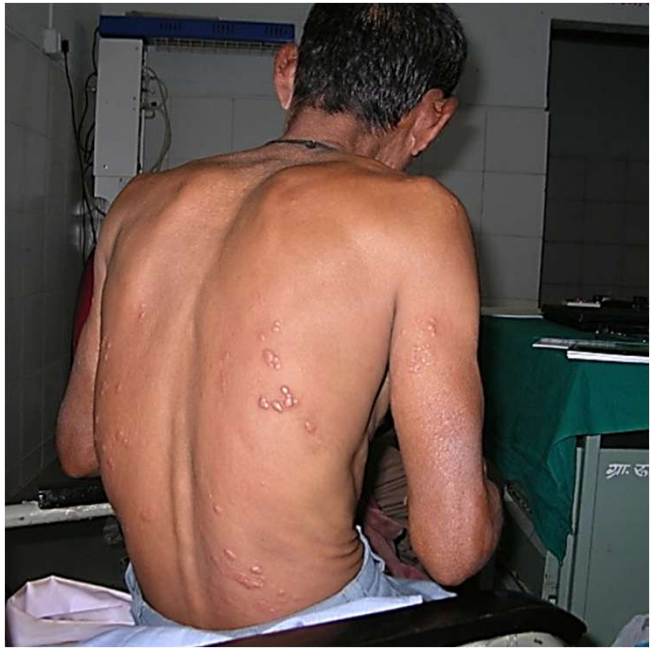




## **Case** missed **in OPD**

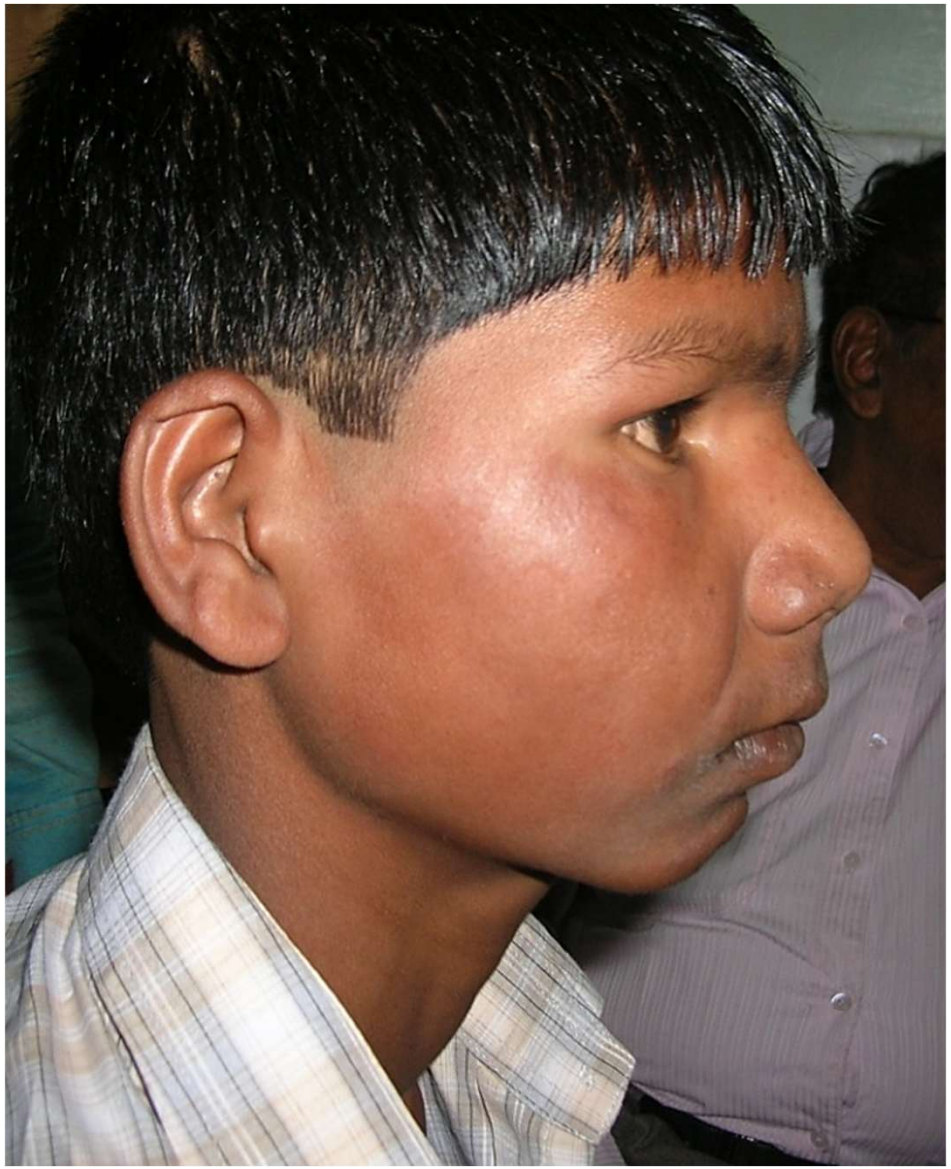


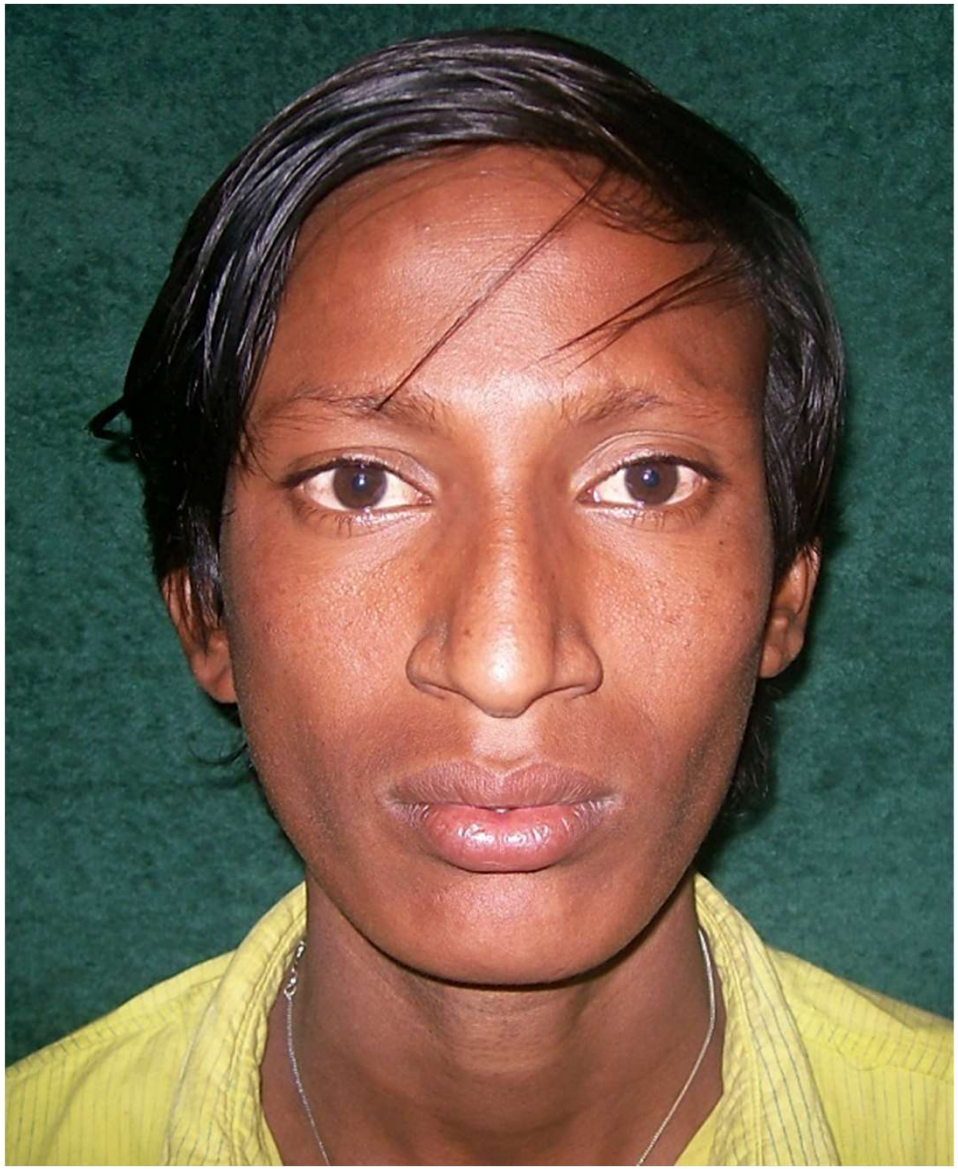


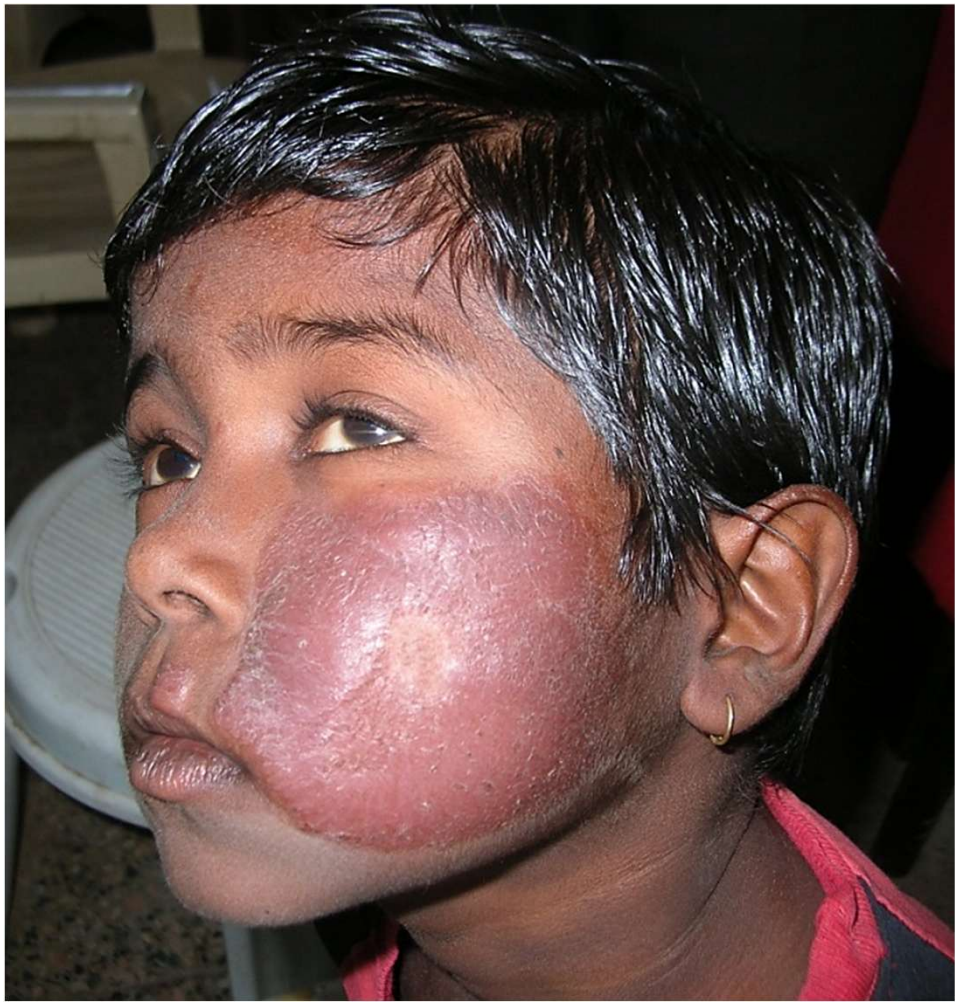


# After initiation of MDT affected can not spread Leprosy

# ASHA worker detected LL case



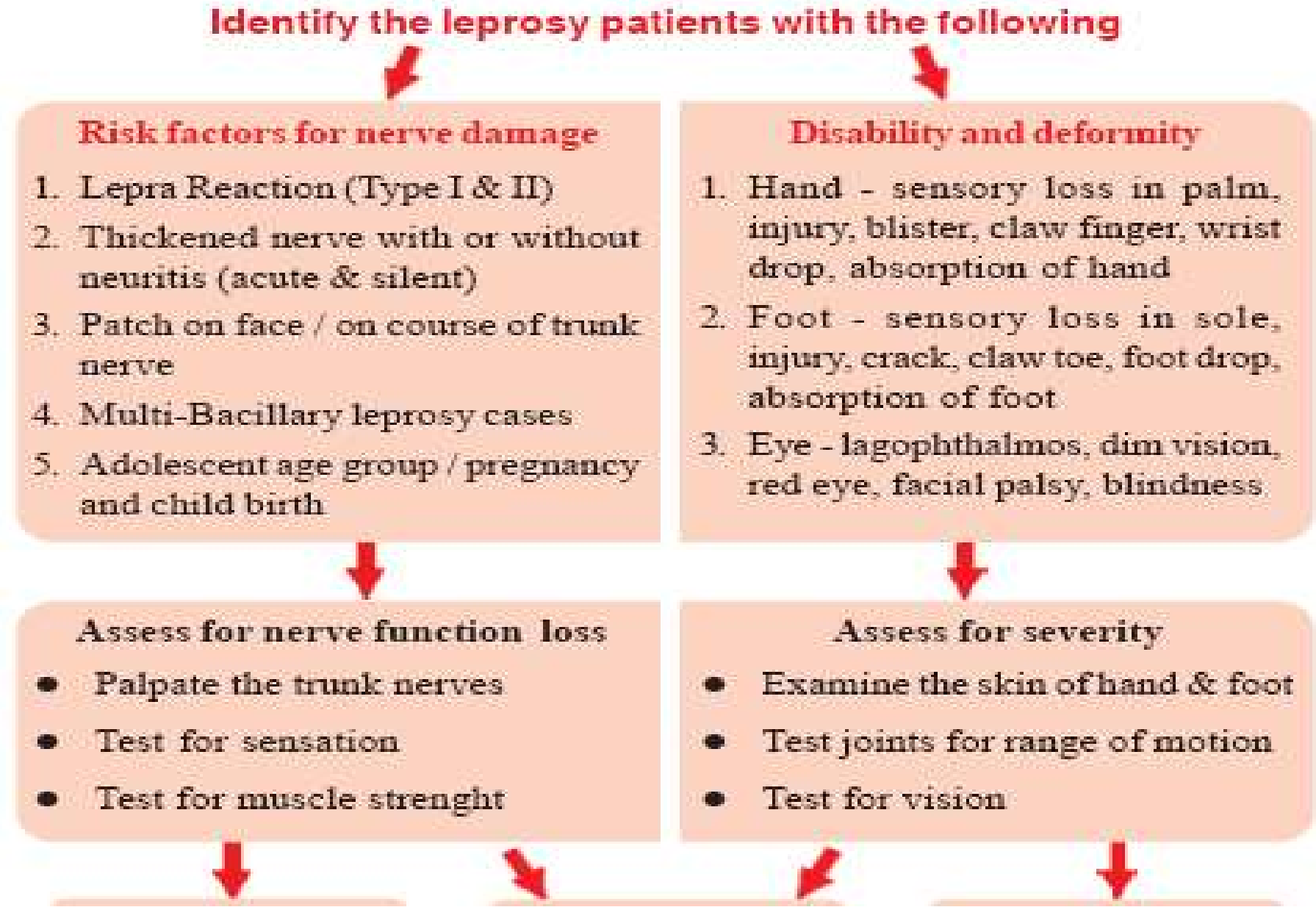




Type I lepra reaction

**‘High risk for deformity’** treated at Cottage Hospital LRC (Block level)

# Baseline information at Primary level



# Prevention of Disability

- Medical & surgical
- Physiotherapy
- Aids & appliances

**Educate and counsel**

1. To be aware about possible complications and adhere to treatment complaince.
2. To practice self care regularly and report for treatment, if develop any warning signs / symptoms.
3. To adopt safe functions and activities that help to prevent or correct deformities.

**Improve the productivity and quality of life of affected person**

**Table 5: Indication for quality care and services to be provided at LRC**

| Problems / Indication | Quality care and services |
|---|---|
| Suspect with doubtful signs of leprosy | Clinical examination & diagnosis |
| Suspect with skin patch & no sensory loss | Skin smear examination & diagnosis |
| Case with active signs of reaction / neuritis | Steroid therapy |
| Case with 'risk' factor but no disability | Regular nerve function assessment |
| Case with Gr.I disability in hand / feet / eye | Demonstrate skin care (HOPE) |
| Case with weak muscles in hand / feet / eye | Steroid therapy + Muscle stimulation |
| Case with claw finger / thumb / Wrist drop | Exercises + Splints + Wax therapy |
| Case with foot drop / claw toes | Exercises + MCR sandals |
| Case with Lagophthalmos / watering of eyes | Exercises + Goggles + Eye drop |
| Case with wounds / ulcers on hand & foot | Medicine + Dressing + MCR Sandal |

# Skin smear: Uses

1. Diagnosis of leprosy
2. Classification of leprosy (TT-LL)
3. Prognosis of leprosy
4. To know the infectiousness
5. Therapeutic trials
6. Diagnosis of relapse

Government of Maharashtra
HEALTH AND FAMILY WELFARE TRAINING CENTER, KOLHAPUR
LEPROSY SKIN SMEAR MICROSCOPY TRAINING

CERTIFICATE

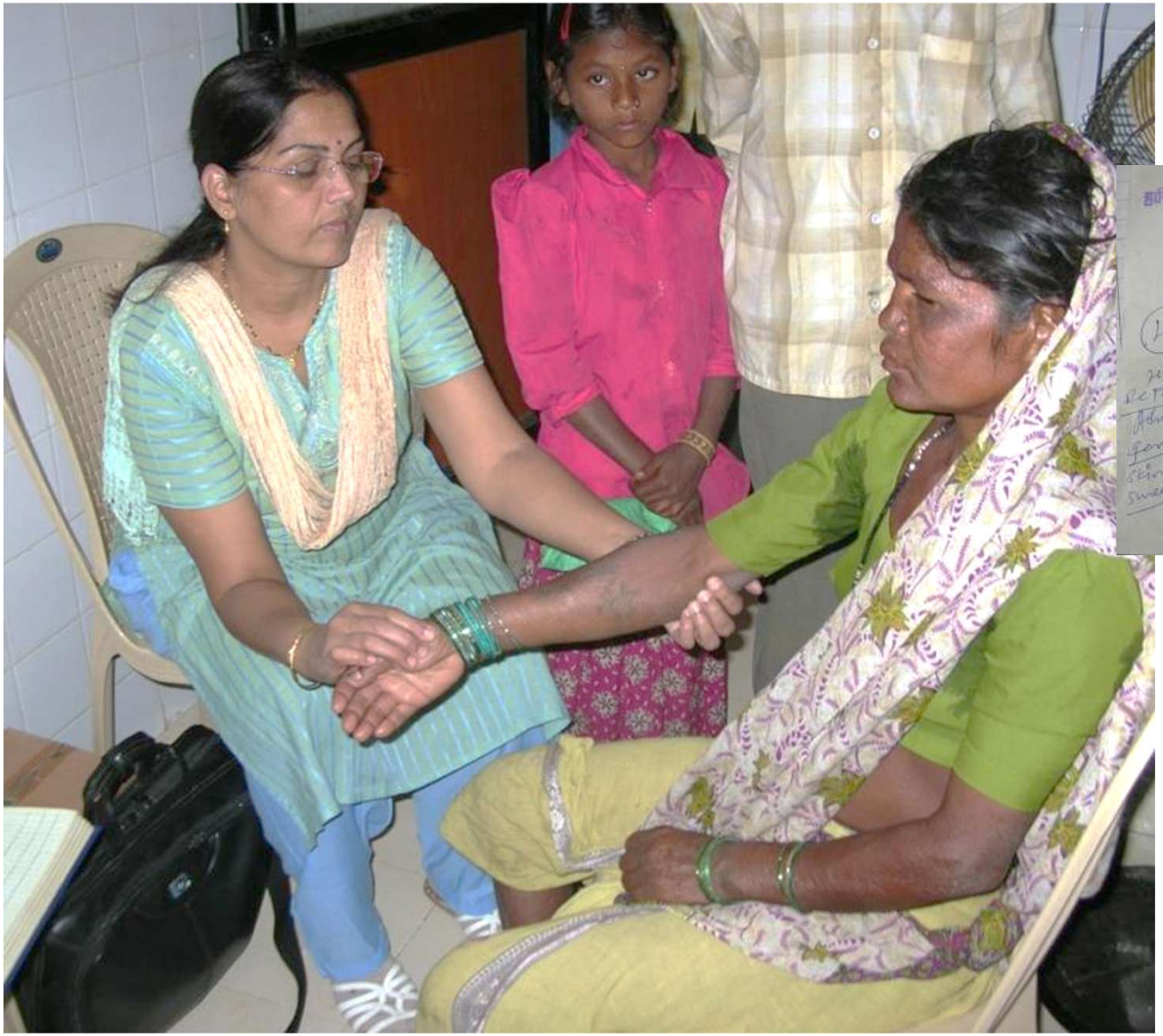
This is to Certify that Shri/Smt Sujata Chandrakant Patil Lab. Tch. from ~~GH/RH~~/SDH/~~PHC~~ Kadoli Dist. Kolhapur has successfully completed LAPROSY SKIN SMEAR MICROSCOPY TRAINING of 2 days from Dt. 25/10/2017 to 26/10/2017 at Health & Family Welfare Training Center, Kolhapur Organised and Supported by Jt. Director Health Services (Lep & TB), Government of Maharashtra and ALERT India.

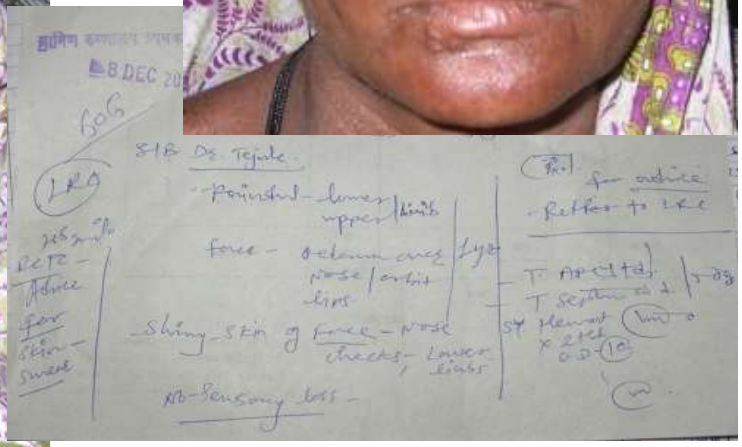
Date : 26/10/2017
Place : Kolhapur

(Dr. Harshala Vedak)
ADHS (Leprosy)
Kolhapur

(Dr. C. J. Shinde)
Principal
Health & Family Welfare
Training Center, Kolhapur

# RH Medical Officer detects lepromatous case in OPD





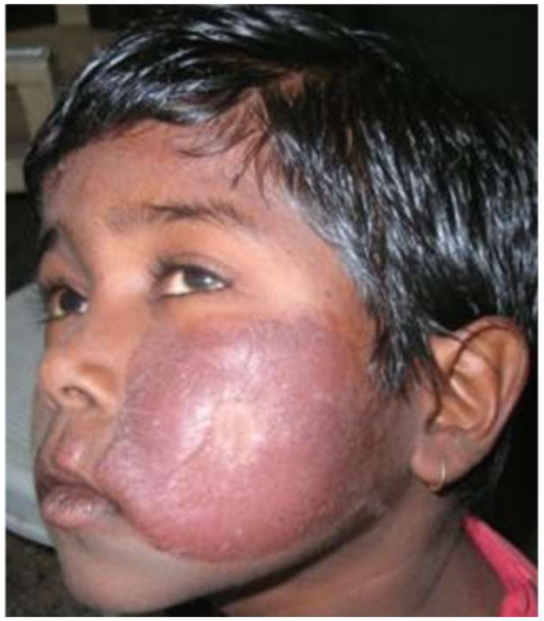
| S.NO. | SITES | BI | MI |
|---|---|---|---|
| 1 | Right Ear | 5+ | |
| 2 | Left ~~Ear~~ F. Head | 4+ | |
| 3 | Lesion (Active site) R/ Elbow | 3+ | |
| 4 | (Any other site-specify) Lt hand | 3+ | |
| 5 | | | |
| 6 | | | |
| — | AVERAGE | 3.75 | — |

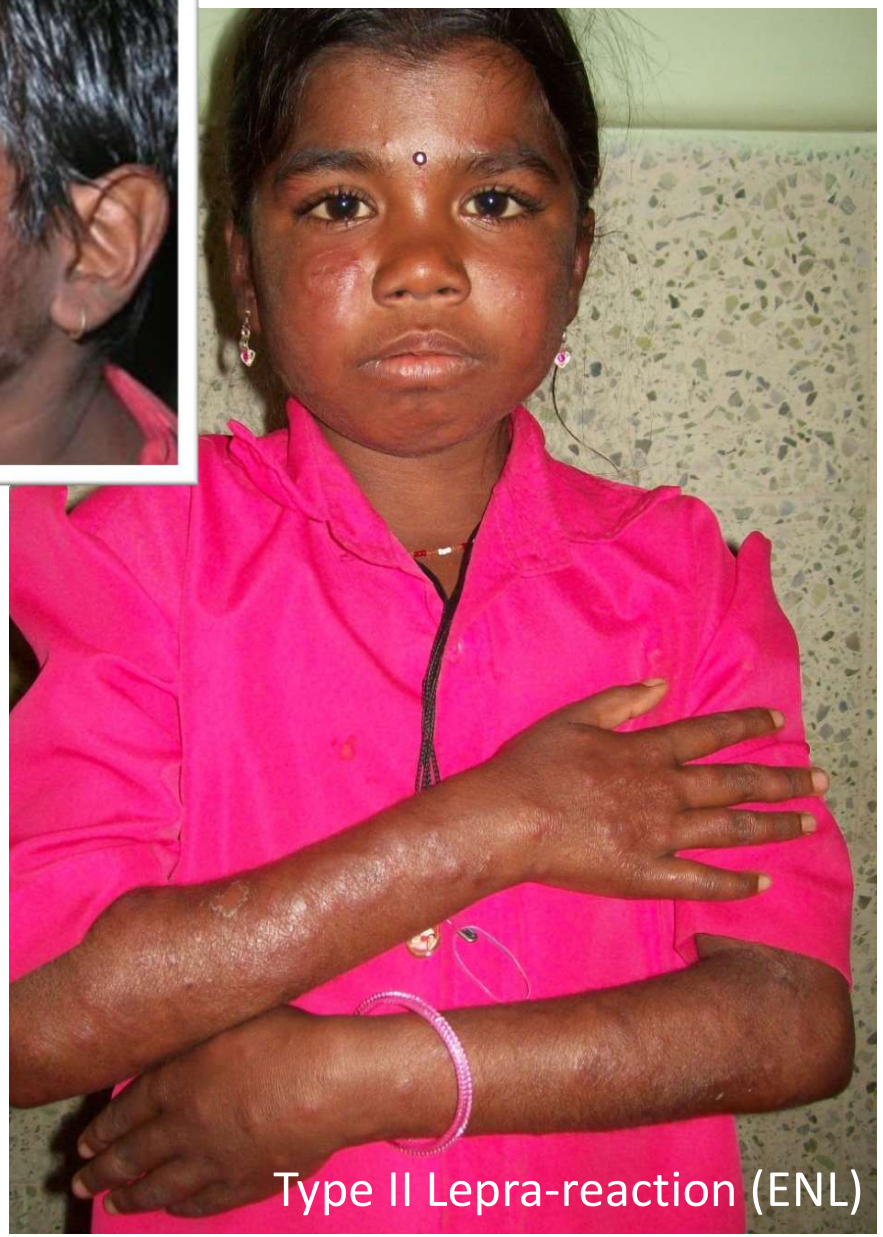
Collected by Raje-en. D. Date 8/12/10

Examined by Chahan Date 14/12/10

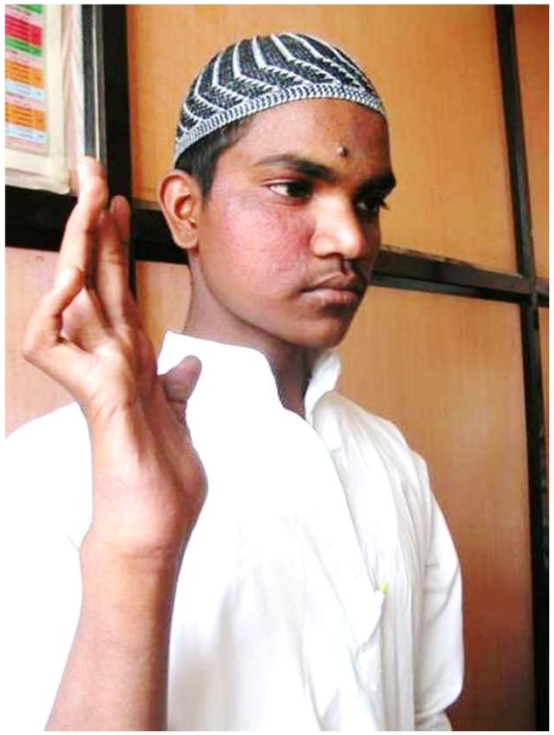
*This was the case from other block came to work at  for brick making 14 days back.*

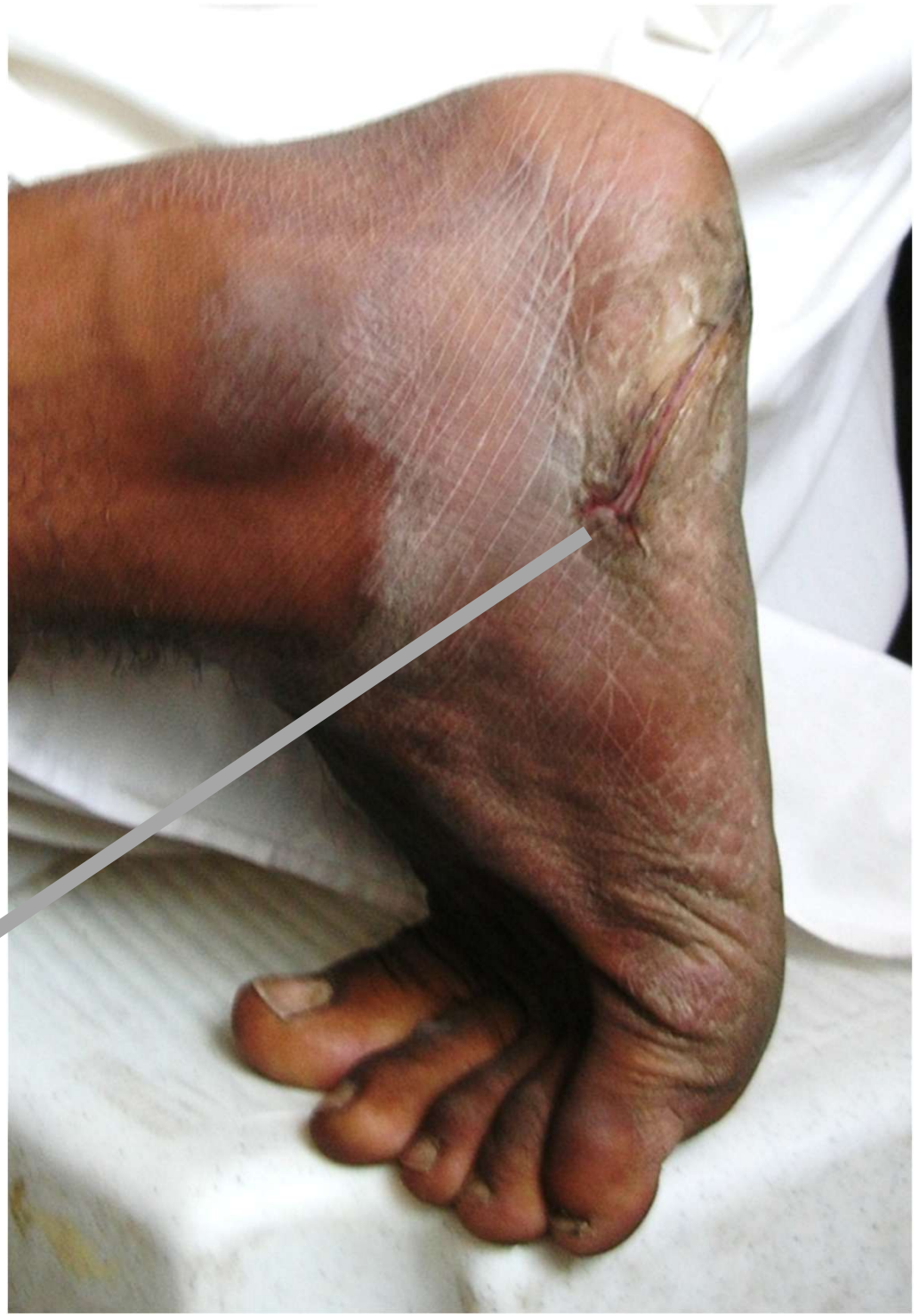
Type I Lepra-reaction

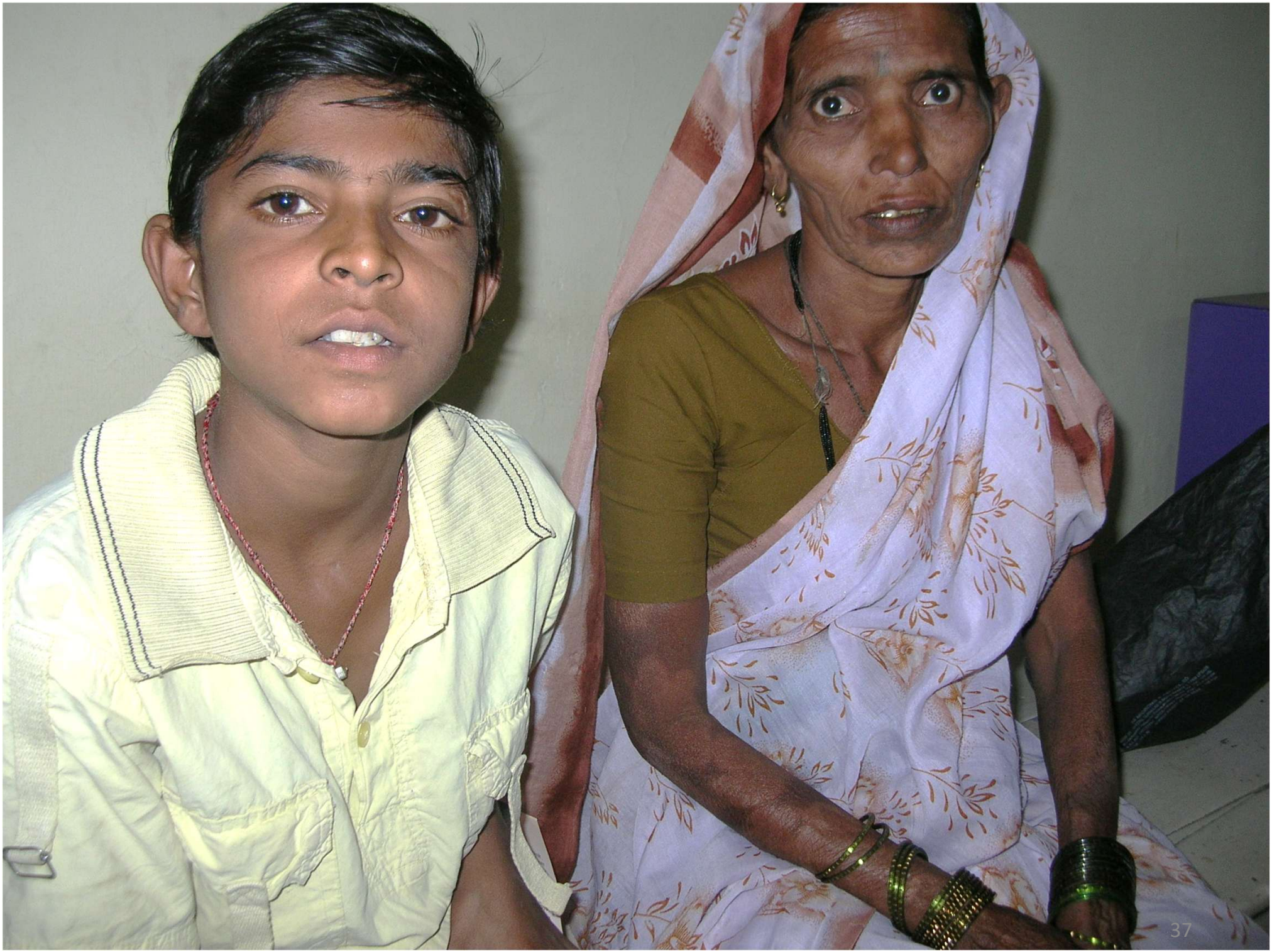


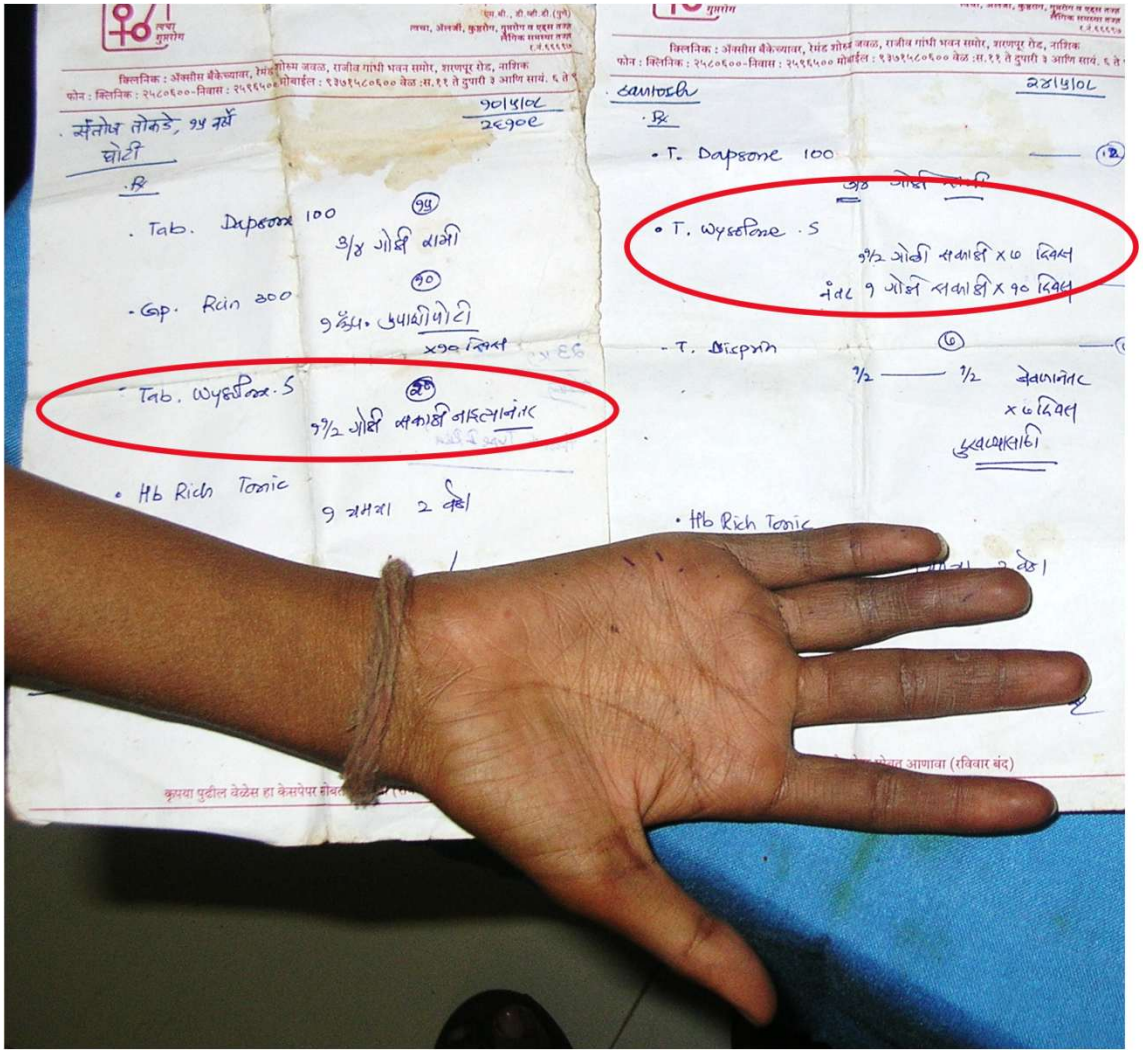


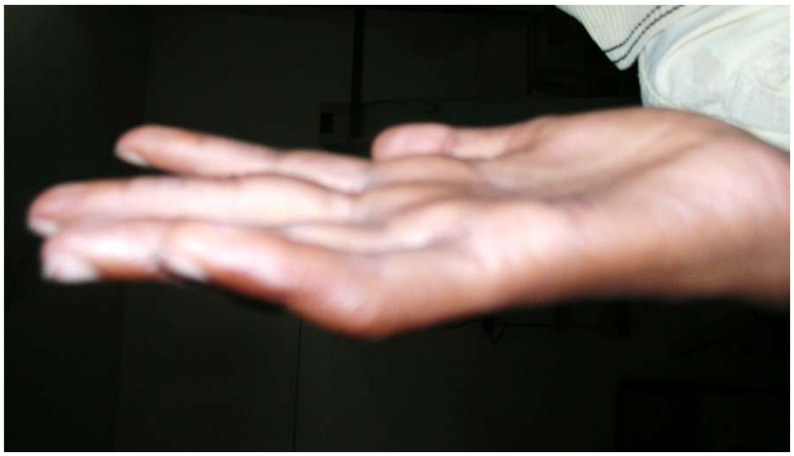
Type II Lepra-reaction (ENL)



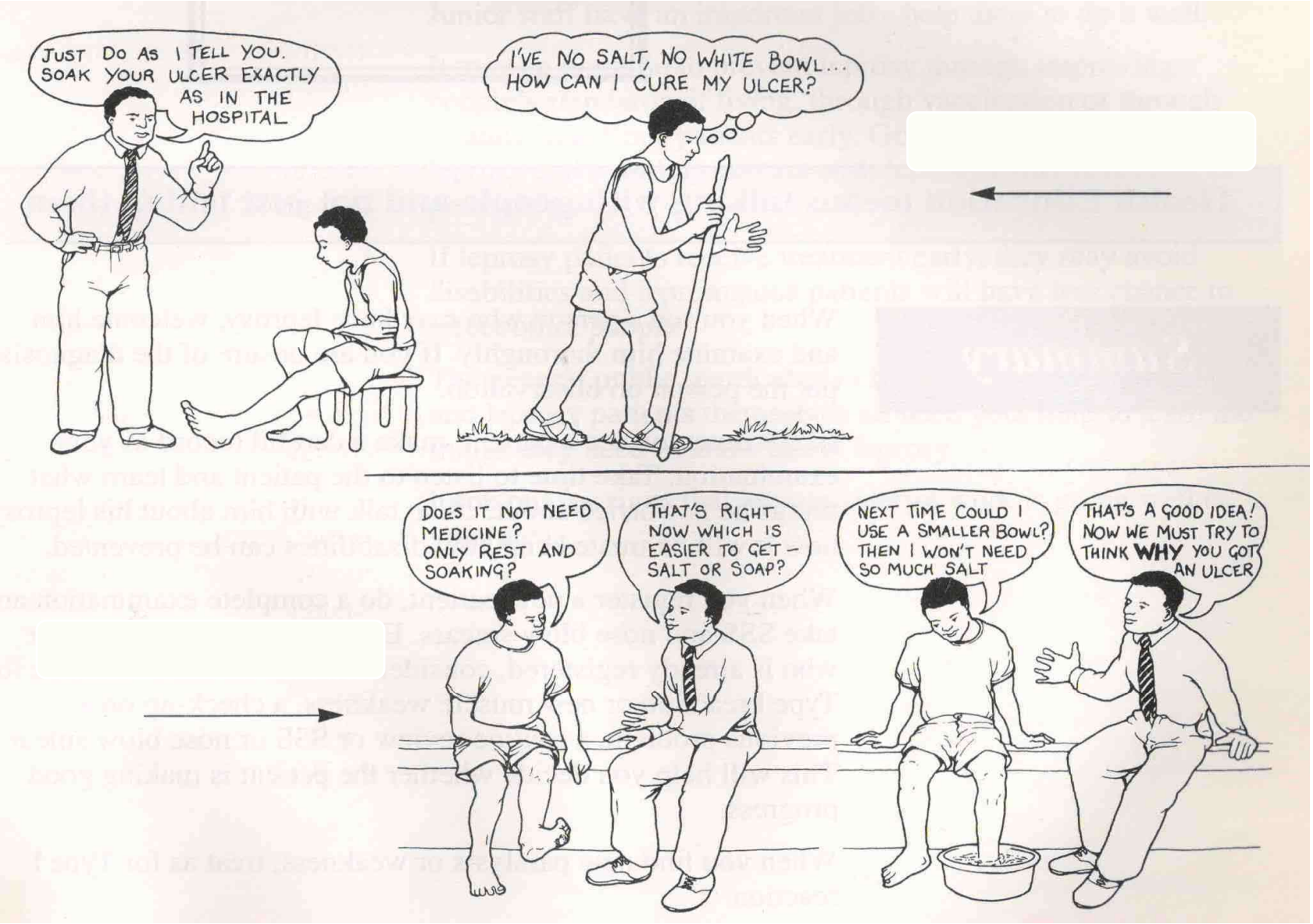


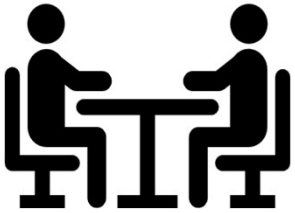




- Child case treated by Dermatologist with the course of steroid treatment and MB MDT in the private referred to LRC.
- Surprisingly his mother is cured case of leprosy, still her son developed deformity.



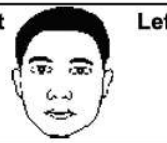
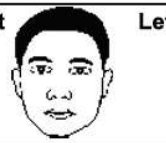
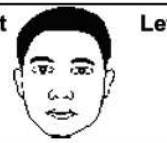
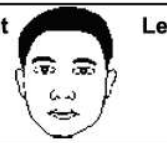
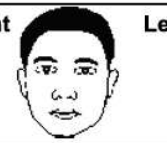
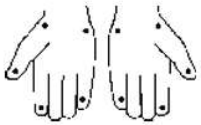
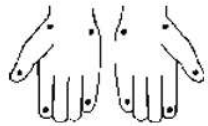
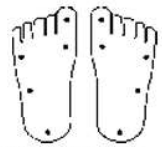
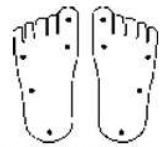
**Deformity** is a **reality,**
we should all **accept** but
it should always be **addressed** and
**attended** to at **whatever the stage.**

**NERVE FUNCTION IMPAIRMENT (NFI) ASSESSMENT** (At registration and repeated after 3 months. Once in a two weeks in case of neuritis / reaction): **चेतातंतूच्या कार्याची तपासणी**

| Nerves | Date | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Side | Rt | Lt | Rt | Lt | Rt | Lt | Rt | Lt | Rt | Lt | Rt | Lt | Rt | Lt | Rt | Lt | Rt | Lt | Rt | Lt | Rt | Lt | Rt | Lt |
| **Ulnar** | Nerve | | | | | | | | | | | | | | | | | | | | | | | | |
| | Sensation | | | | | | | | | | | | | | | | | | | | | | | | |
| | Motor - Little finger out | | | | | | | | | | | | | | | | | | | | | | | | |
| **Median** | Nerve | | | | | | | | | | | | | | | | | | | | | | | | |
| | Sensation | | | | | | | | | | | | | | | | | | | | | | | | |
| | Motor - Thumb up | | | | | | | | | | | | | | | | | | | | | | | | |
| **Radial** | Nerve | | | | | | | | | | | | | | | | | | | | | | | | |
| | Sensation | | | | | | | | | | | | | | | | | | | | | | | | |
| | Motor - Wrist up | | | | | | | | | | | | | | | | | | | | | | | | |
| **Lat. Popilteal** | Nerve | | | | | | | | | | | | | | | | | | | | | | | | |
| | Sensation | | | | | | | | | | | | | | | | | | | | | | | | |
| | Motor - Foot up | | | | | | | | | | | | | | | | | | | | | | | | |
| **Post. Tibial** | Nerve | | | | | | | | | | | | | | | | | | | | | | | | |
| | Sensation | | | | | | | | | | | | | | | | | | | | | | | | |
| **Facial** | Motor - Close eyelids | | | | | | | | | | | | | | | | | | | | | | | | |

**Keys:** For **Nerve :** **'N'** - Normal; **'E'** - Enlarged / thickened; **'T'** - Tender or painful; **'A'** - Abscess; For **Sensation :** **'P'** - Present; **'A'** - Absent; For **Motor :** **'S'** - Strong; **'W'** - Weak; **'P'** - Paralyzed

**DISABILITY / DEFORMITY ASSESSMENT** (once a year) : **असमर्थता आणि विकृतीची तपासणी**

| Date of assessment: | Initial: | Year 1: | Year 2: | Year 3: | Year 4: |
|---|---|---|---|---|---|
| **Key** **Disability / Deformity** **Duration** | Right Left | Right Left | Right Left | Right Left | Right Left |
| ✓ Sensation present |  |  |  |  |  |
| X Sensation absent |  |  |  |  |  |
| Λ Mobile claw finger | Hands 'X' Mark Count ...../10 | Hands 'X' Mark Count ...../10 | Hands 'X' Mark Count ...../10 | Hands 'X' Mark Count ...../10 | Hands 'X' Mark Count ...../10 |
| S Fixed claw finger |  |  |  |  |  |
| Z 'Z' / Ape thumb | | | | | |
| ↓ Wrist / Foot drop | Feet 'X' Mark Count ...../10 | Feet 'X' Mark Count ...../10 | Feet 'X' Mark Count ...../10 | Feet 'X' Mark Count ...../10 | Feet 'X' Mark Count ...../10 |
| ⊗ Ulcer Wound | | | | | |
| Mark Absorption Level | | | | | |
| > Lagopthalmos | | | | | |
| ⇆ Facial Palsy | | | | | |

| EHF score | Site | Eye | Hand | Foot | Total | Eye | Hand | Foot | Total | Eye | Hand | Foot | Total | Eye | Hand | Foot | Total | Eye | Hand | Foot | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Rt | | | | | | | | | | | | | | | | | | | | |
| | Lt | | | | | | | | | | | | | | | | | | | | |

M. Leprae invade peripheral nerve

**Nerve consist of**

**Sensory fibers**

**Sensory loss**

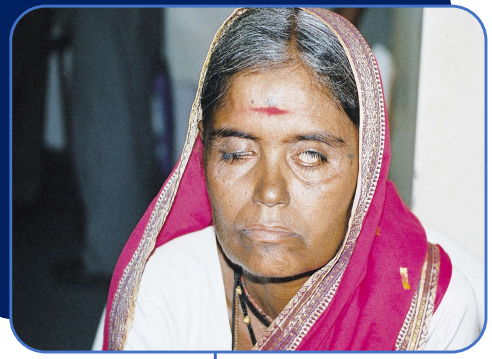
**Daily**

**Self care**

**Inspection**

**Motor fibers**

**Muscle weakness/paralysis**



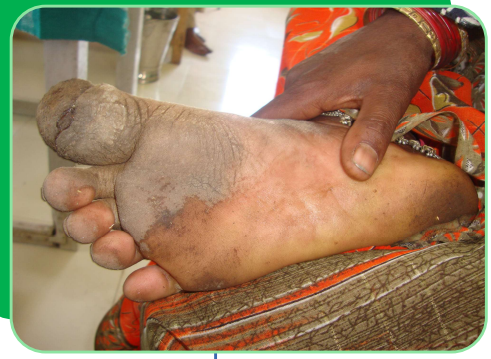
**Daily**

**HOPE**

**Massage/Exercise**

**Autonomic fibers**

**Lack of sweat and sebum**



**Daily**

**Soaking and lubrication**

## Early deformity

steroids

counseling

physiotherapy

PT, aids and appliances

## Grade 1 deformity

Self care advice

## Established deformity

Follow-up by Peripheral Health Personnel

Advice to prevent worsening.

Individual is himself responsible for maintaining good quality of life when guided by health staff.

When should person seek medical advice?

Relevant PT aids and appliances are timely provided.


## Know their environment

**Mental** status

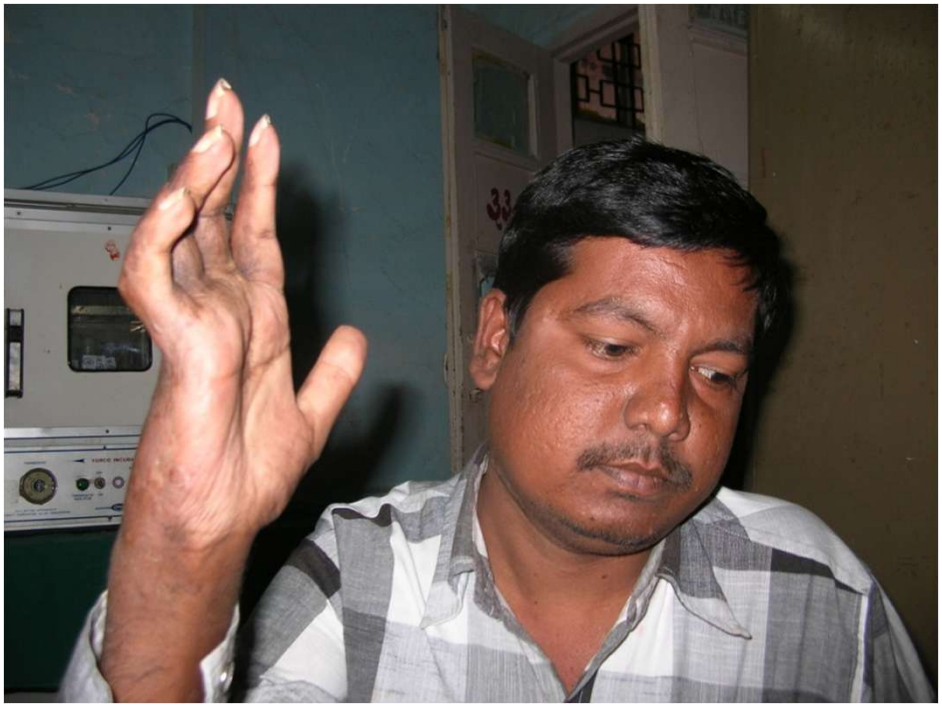
**ADL** (Activities of daily life)

**Occupation** hazard

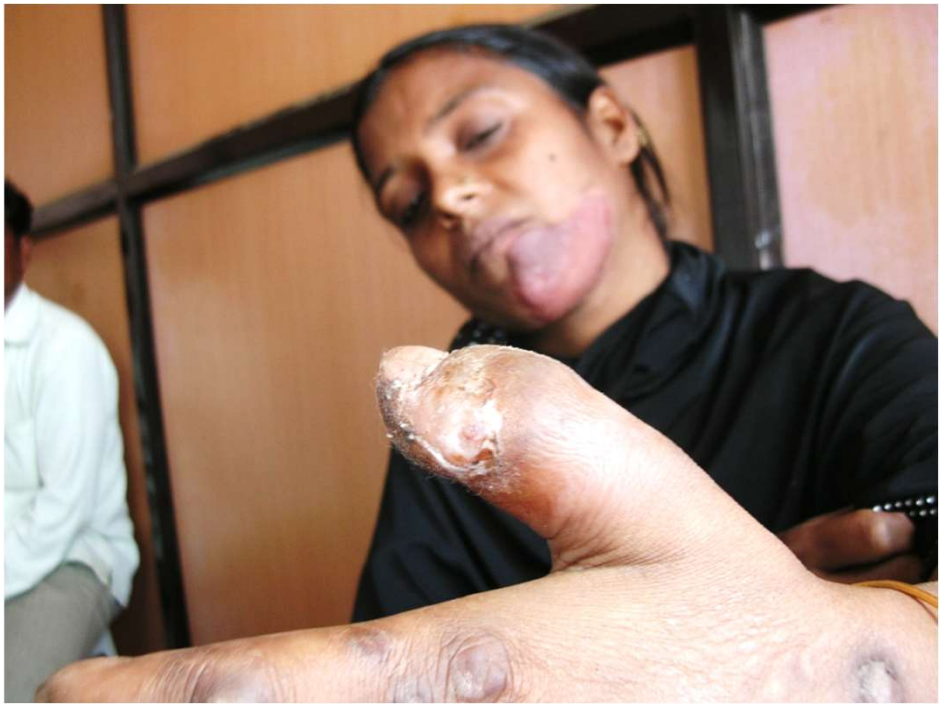
**Locomotion Mode:** Travelling

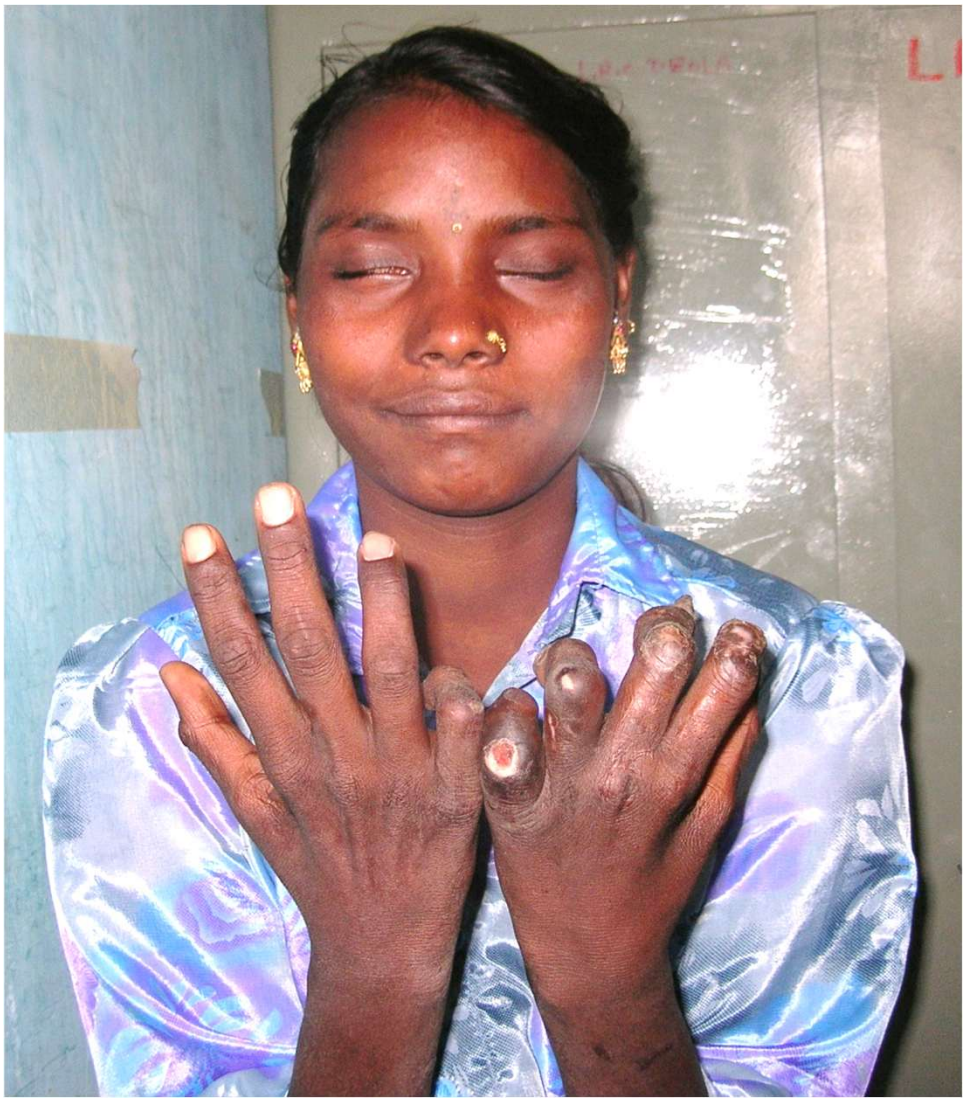
**Distance :** Services available

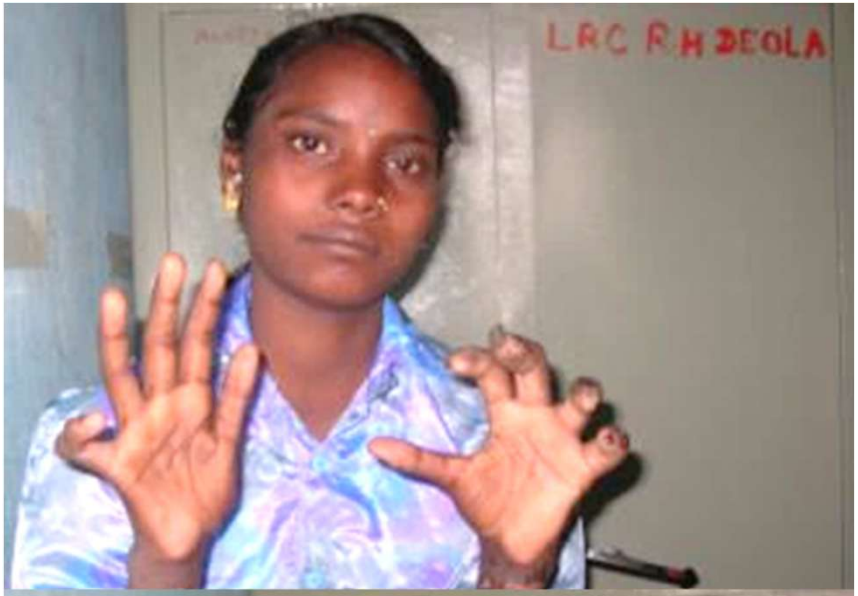
**Practical solution**

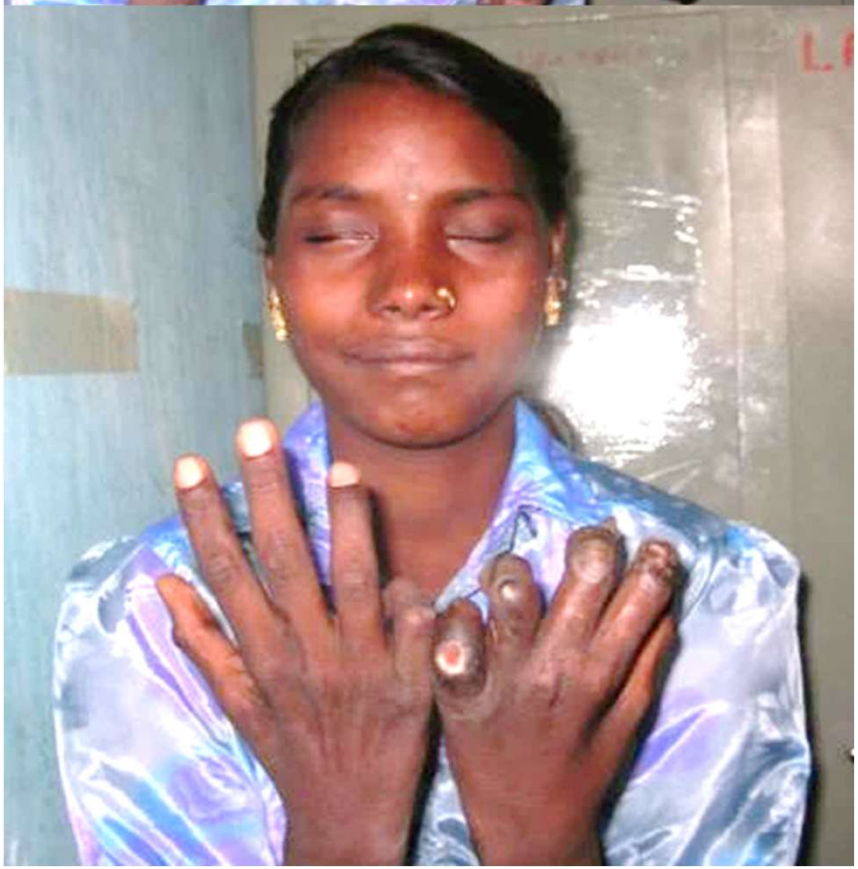


# LRC teams to utilize available expertise at all levels & institutions







# Cure at all stages of Leprosy

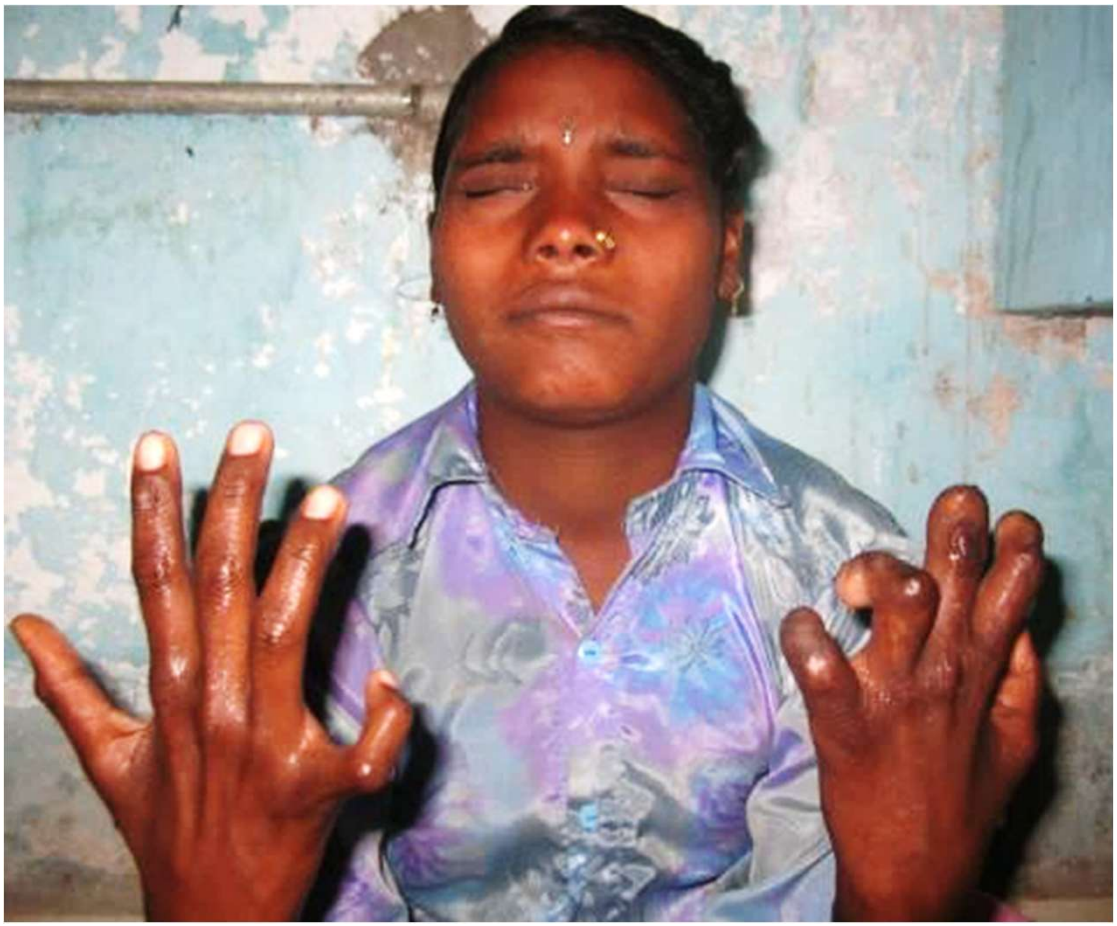
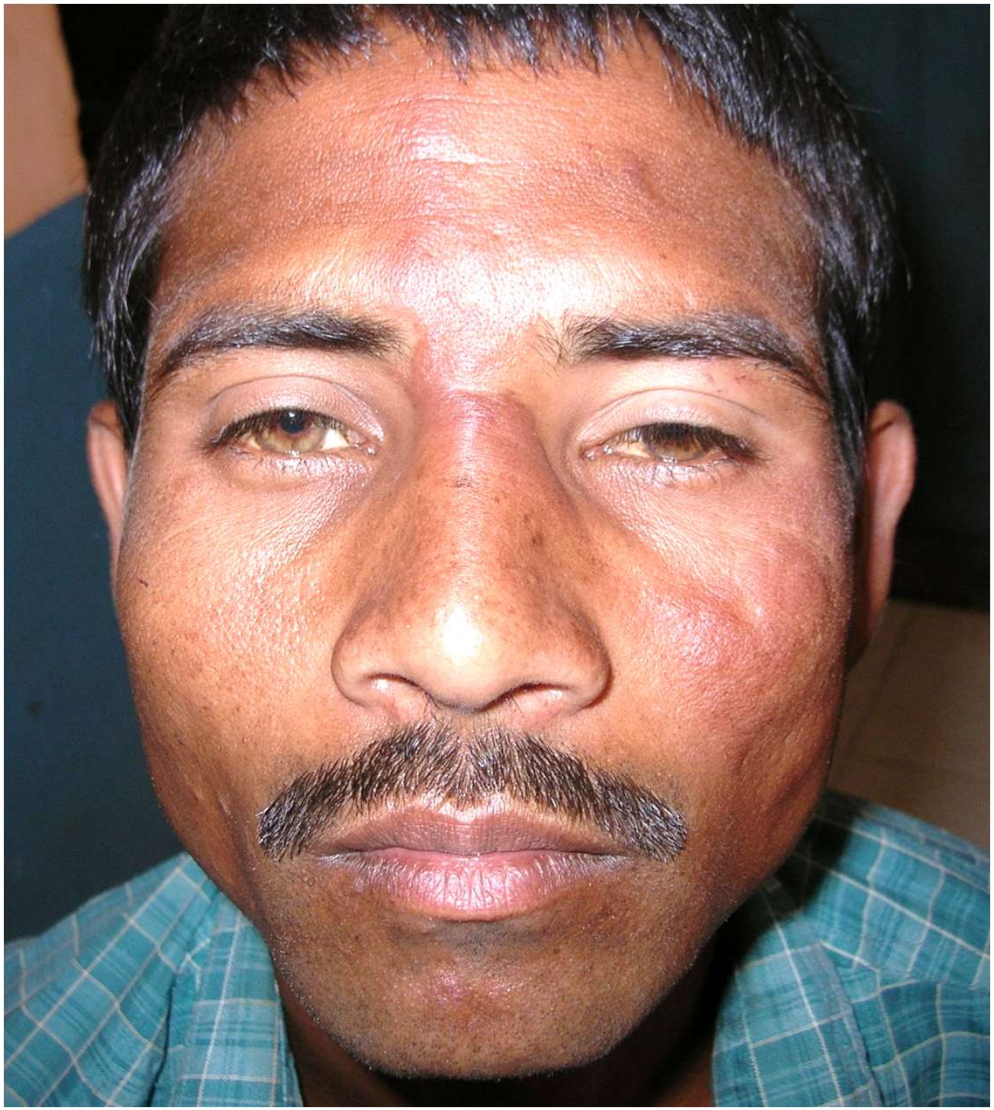


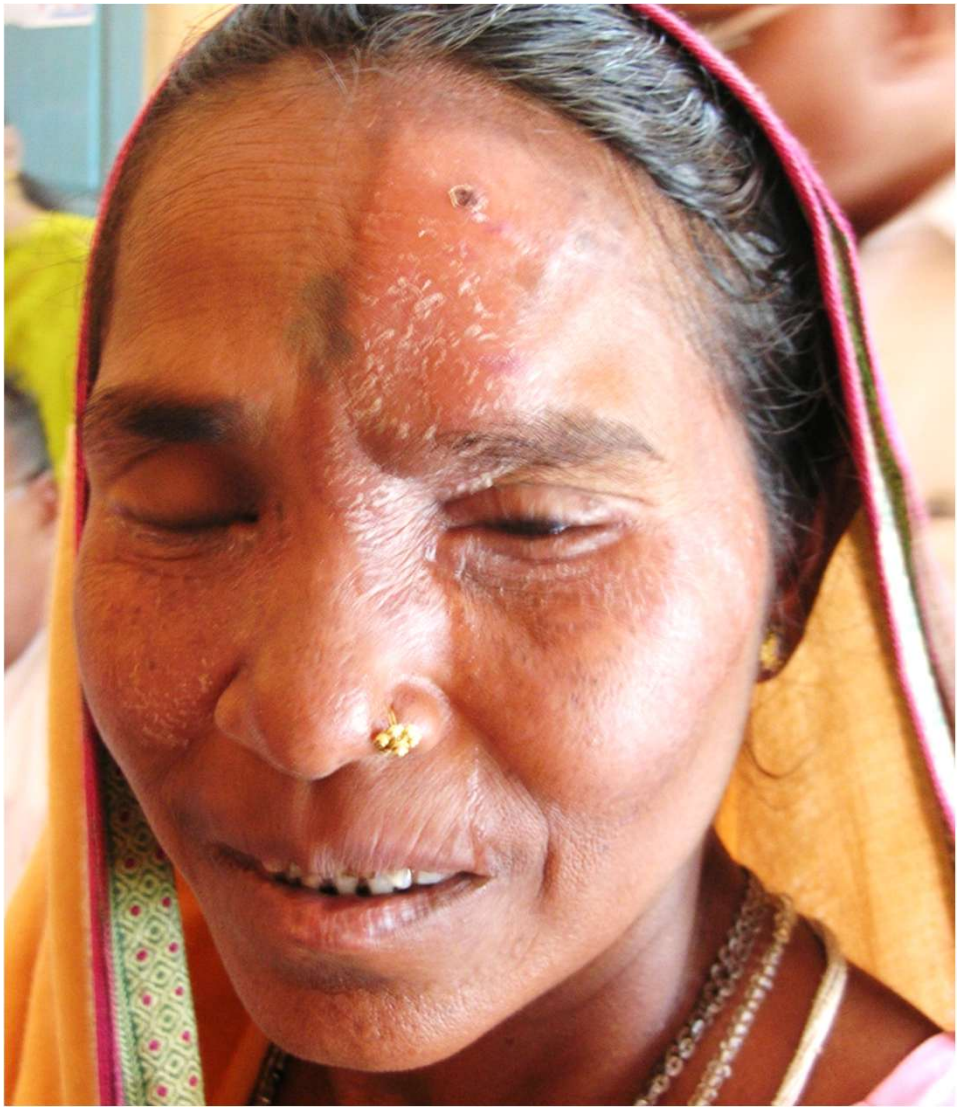
**Table 8: Criteria for referral to Tertiary care centre for specialized services**

| Criteria for referral | Specialized services |
|---|---|
| 1. Difficult to diagnose by clinical / skin smear | Skin / nerve biopsy |
| 2. Suspected relapse – clinical / bacteriological | Drug sensitivity test (MDT) |
| 3. Chronic / recurrent reaction / Steroid dependent | Alternate drugs |
| 4. Neuritis / NFI not responding to steroid therapy | Nerve release surgery |
| 5. 'Dapsone' syndrome / Intolerance to MDT | Alternate drug (Anti-leprosy) |
| 6. Chronic / infected non-healing plantar ulcer | Septic / skin graft surgery |
| 7. Neuropathic joint / Disorganized foot | Foot Orthosis (Mould shoes) |
| 8. Red eye / Impaired vision due to leprosy | Ophthalmic care |
| 9. Deformities of hand / foot / eye / face | Reconstructive surgery |
| 10. Psycho-social / Economic problems | Counselling / Rehabilitation |

# Differentiate……

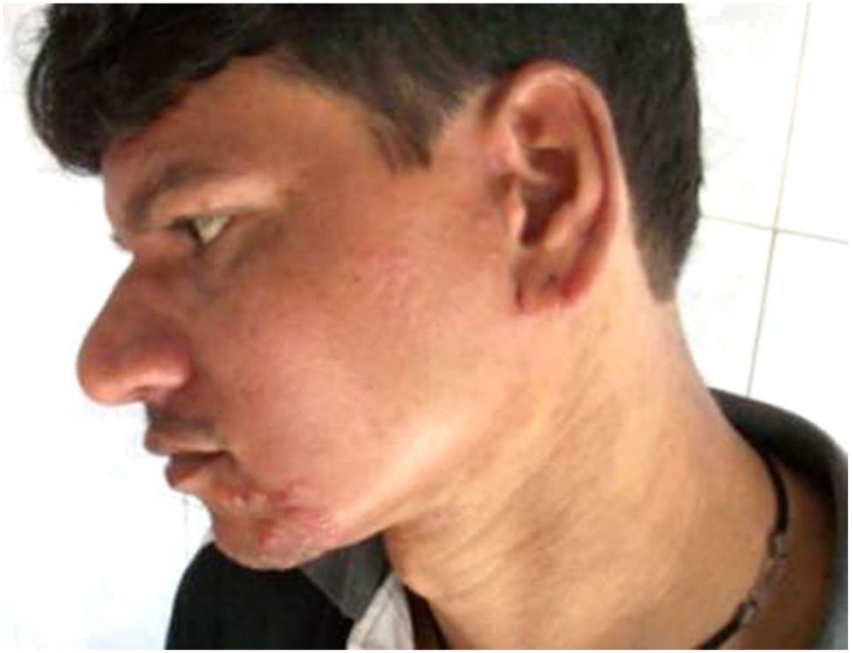


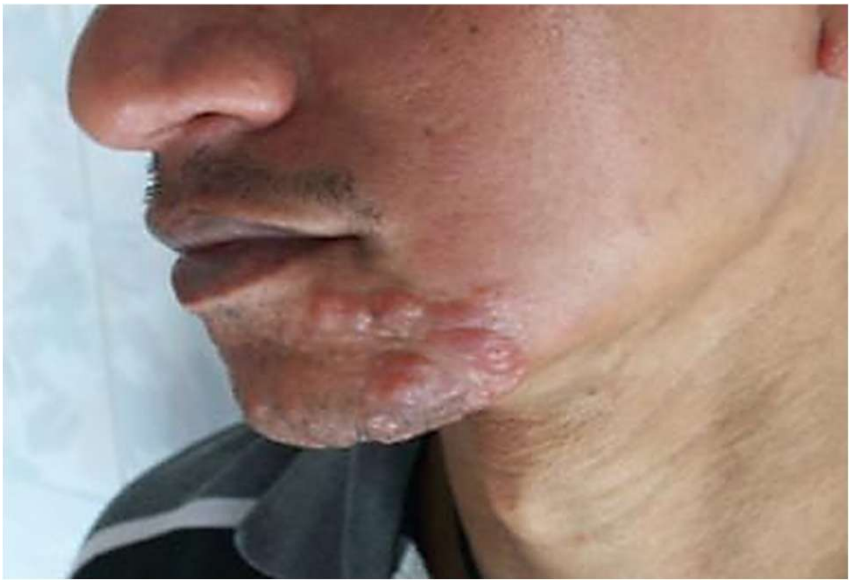
Difficult to diagnose

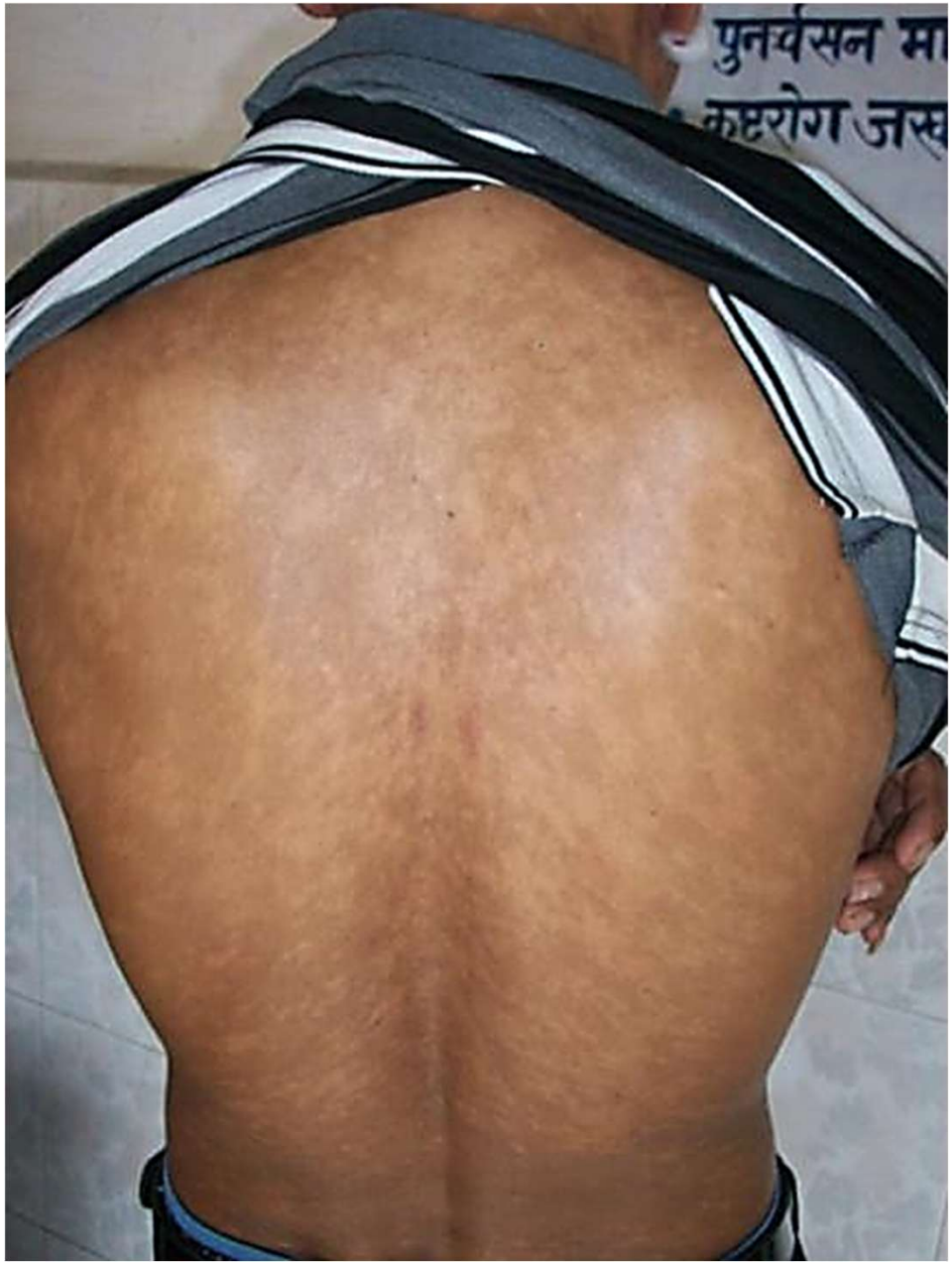


Lepra-reaction

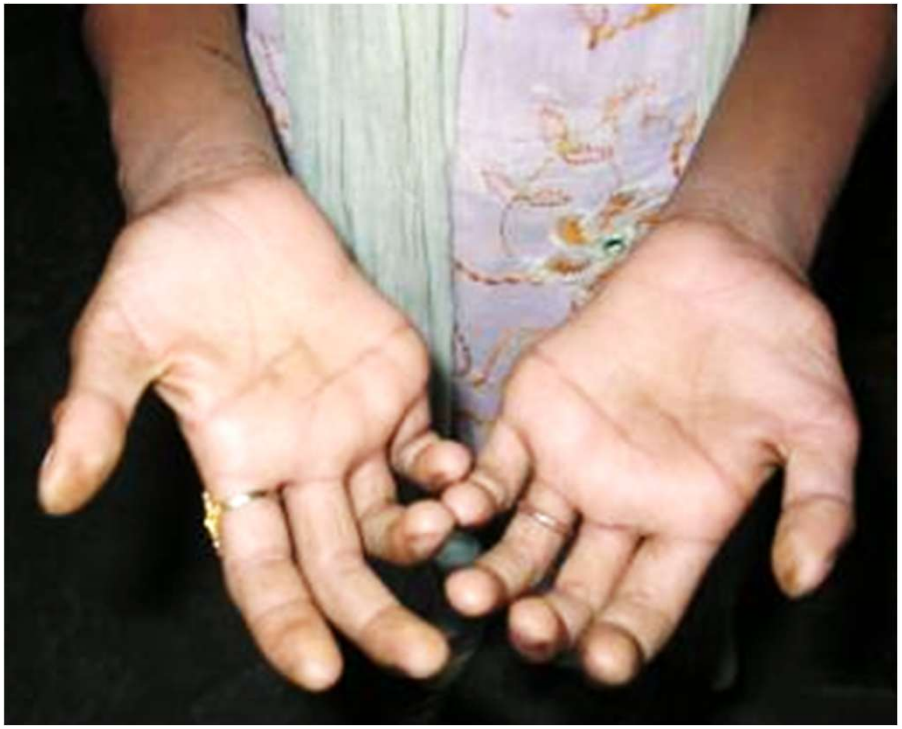
# Is it leprosy ?

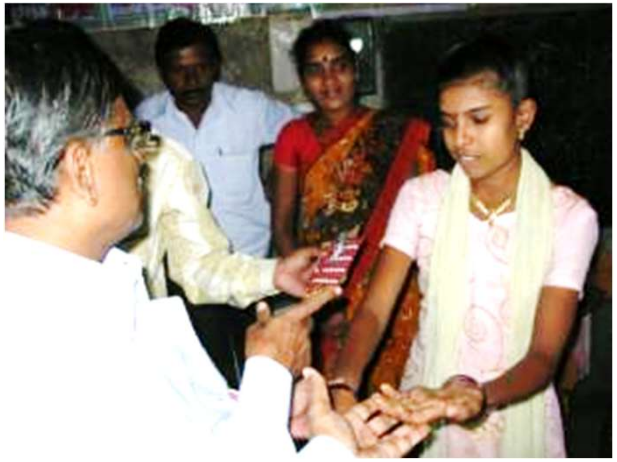




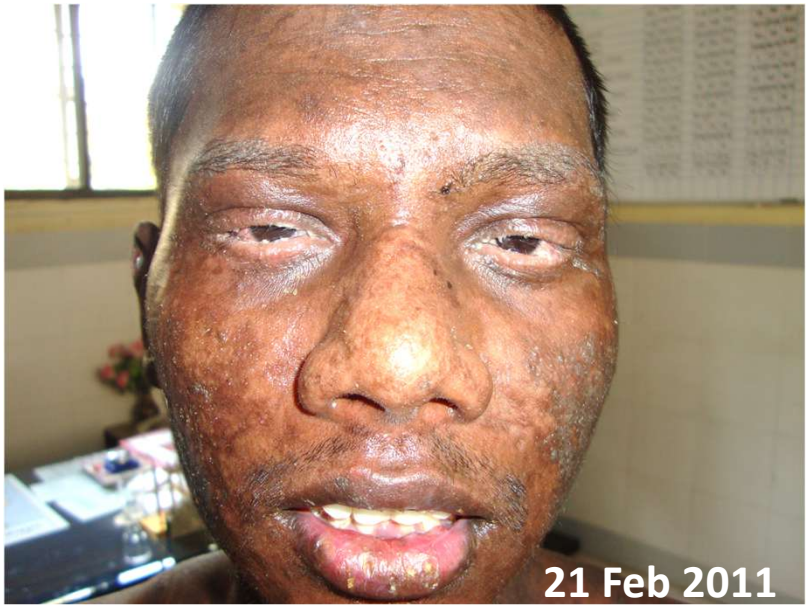


# Community response to IEC

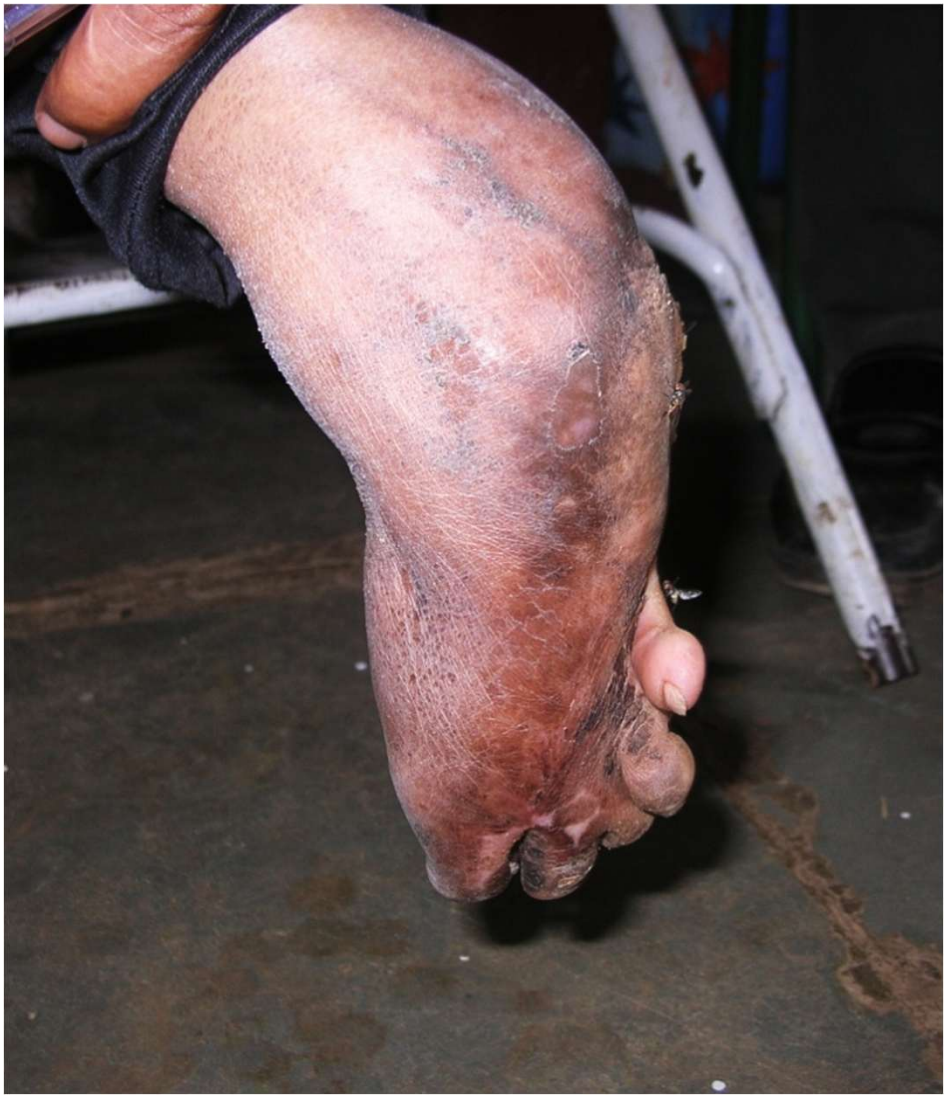


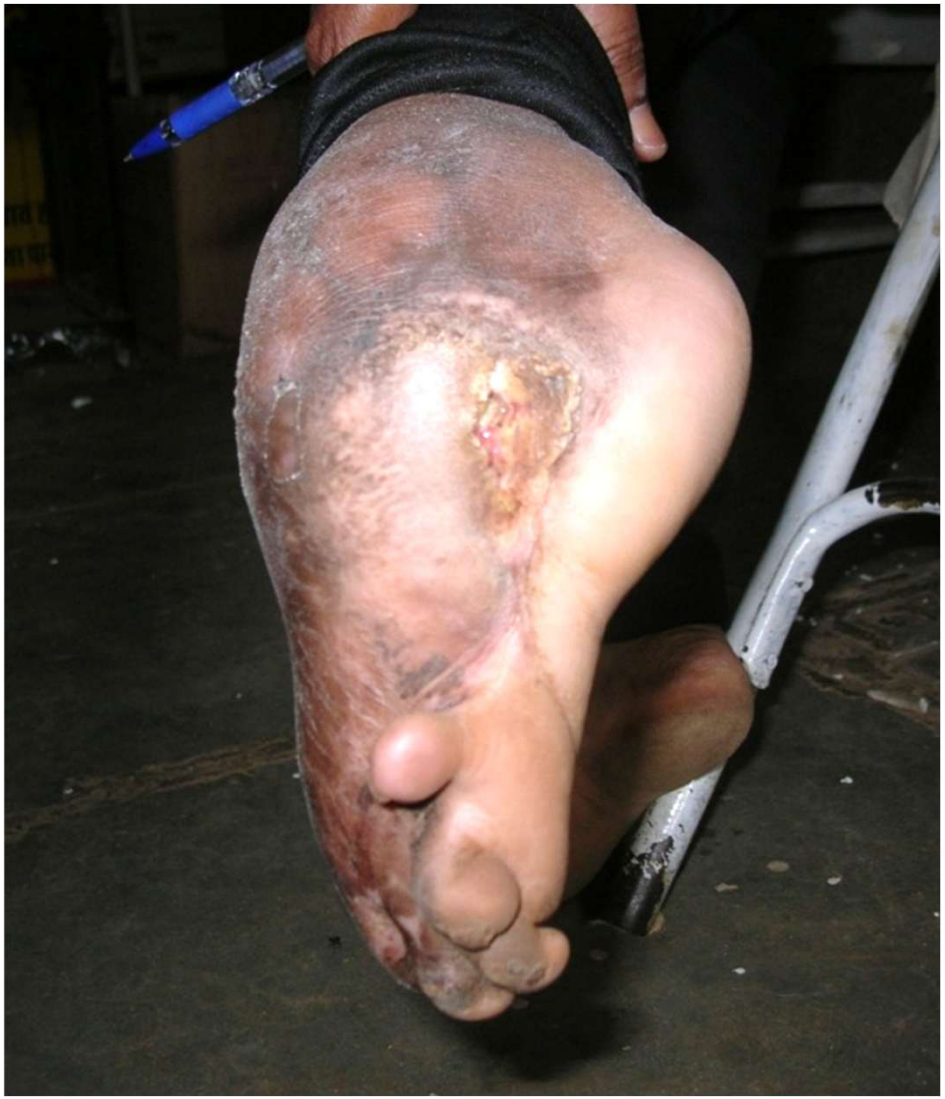


# Dapsone sensitivity case managed at Civil Hospital Nashik (Student, *TLM vocational training center, Nashik*)

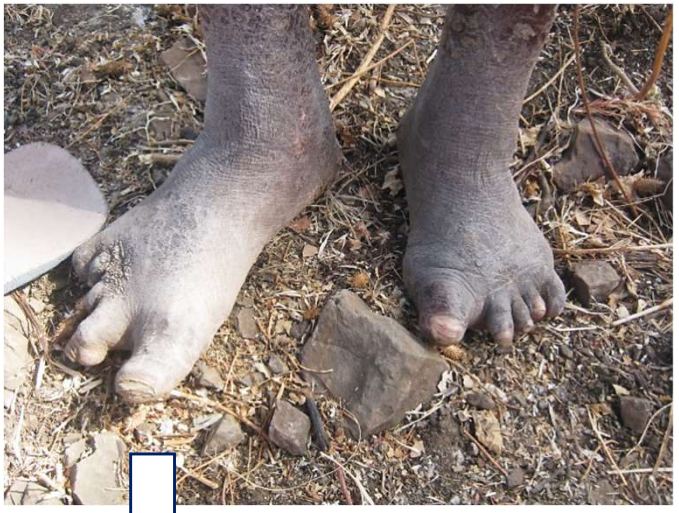


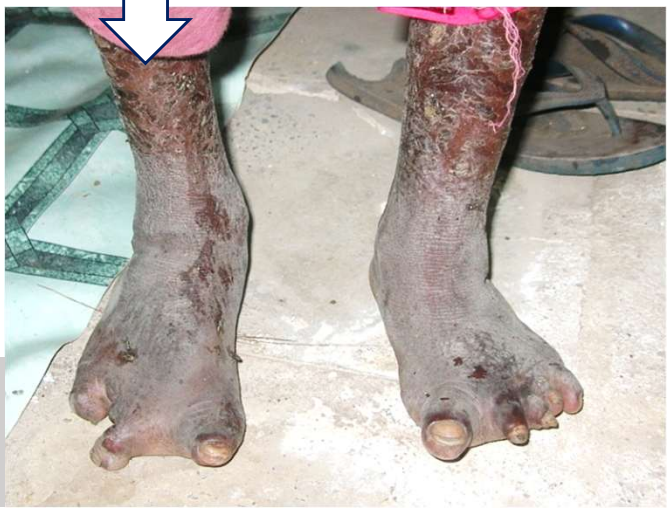




"Society just does not recognize that there has been a cure for leprosy for more than 60 years. I have traveled around the world. Why is it that I cannot go back to my hometown? Between my wife and I, we have close to 50 relatives . . . . the majority of them do not even know that I exist."

Yasuji Hirasawa, Japan





**Makes the difference….!**

persons, review may be done after two years, if needed or desired by the affected person, in view of likely worsening of deformities in some persons.

**SECTION I:**

**16. Leprosy Cured Persons with disabilities**

**16.1.** Definition- "**leprosy cured person**" means a person who has been cured of leprosy but is suffering from-

(i) loss of sensation in hands or feet as well as loss of sensation and paresis in the eye and eye-lid but with no manifest deformity;
(ii) manifest deformity and paresis but having sufficient mobility in their hands and feet to enable them to engage in normal economic activity;
(iii) extreme physical deformity as well as advanced age which prevents him/her from undertaking any gainful occupation, and the expression "leprosy cured" shall construed accordingly.

**16.2.** WHO grading of disability in Leprosy:

Highest grade for each eye or hand or foot = 2. Maximum EHF sum score = 12. (E= Eyes, H= Hands, F= Feet)

| Grade | Eyes | Hands | Feet |
|---|---|---|---|
| 0 | No eye problem due to leprosy; no evidence of visual loss | No anaesthesia, no visible deformity or damage | No anaesthesia, no visible deformity or damage |
| 1 | Eye problem due to leprosy present, but vision not severely affected as a result of these (vision: 6/60 or better; can count fingers at 6 metres). | Anaesthesia present, but no visible deformity or damage | Anaesthesia present, but no visible deformity or damage |
| 2 | Severe visual impairment (vision worse than 6/60, inability to count fingers at 6 metres). Also includes lagophthalmos, iridocyclitis and corneal opacities | Visible deformity or damage present (such as cracks/wounds, claw fingers, wrist drop, contractures, amputation etc.) | Visible deformity or damage present (such as cracks/wounds, claw toes, foot drop, contractures, amputation etc.) |

**16.3.** For sensory testing of hands and feet, light touch (just enough to indent the skin very slightly) of the tip of ball point pen is recommended.

**16.4.** For testing loss of corneal sensation, light touch of the clean cotton wisp from the lateral side is recommended. It is also to be noted whether blinking of the eyes is normal or not.

**16.5.** Muscle power is tested clinically by Voluntary Muscle testing of commonly examined peripheral nerves and graded as per the Medical Research Council, London Scale.

EHF (Eyes, Hands, Feet) Grade Score is calculated.

Higher the Score, greater the Disability. Maximum EHF Score possible is 12.

EHF Score is 0-1, then % of Disability is up to 20%.

EHF Score is 2-3, then % of Disability is 20% to 40%.

EHF Score is 4-5 then % of Disability is 41% to 60%.

EHF Score is 6-7 then % of Disability is 61% to 70%.

EHF Score is 8-9 then % of Disability is 71% to 80%.

EHF Score is 10-11 then % of Disability is 81% to 90%.

EHF Score is 12 then % of Disability is 91 to 100%.

On the baseline data persons with **EHF score > 40** are eligible for **'Disability Certificate'** is a beneficiary, so the target.

**16.6.** In a leprosy cured person with involvement of dominant upper extremity (mostly right hand), additional 10% weightage is to be given. Total permanent physical impairment/disability % will not exceed 100%. In a leprosy cured


कुष्ठ रुग्णांसाठी शासकीय योजना
राष्ट्रीय कुष्ठरोग निर्मुलन कार्यक्रम
कुष्ठ रुग्णांसाठी लाभाच्या शासकीय योजना
बस व रेल्वे प्रवास सवलत
संजय गांधी निराधार अनुदान योजना
पंतप्रधान आवास योजना
दिव्यांग प्रमाणपत्र
अंत्योदय अन्न योजना
रुग्णांनी आपली पात्रता तपासून वरील योजनांचा लाभ घ्यावा !
आपल्या जवळच्या आरोग्य केंद्राशी संपर्क साधा
सार्वजनिक आरोग्य विभाग
महाराष्ट्र शासन
/MahaArogyaIECBureau @MahaHealthIEC /mahahealthiec /MahaHealthIEC | राज्य आरोग्य शिक्षण व संपर्क विभाग, पुणे.

# Disability and Deformity

## Life time care:

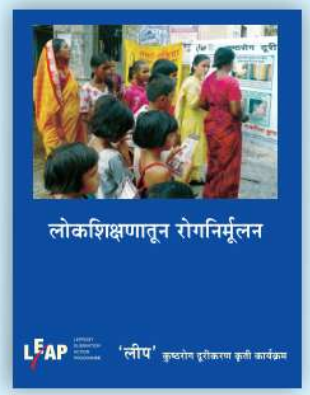
- Anesthetic parts
- Joints mobility
- Muscle strength
- Functional adaptation
- Cosmetic

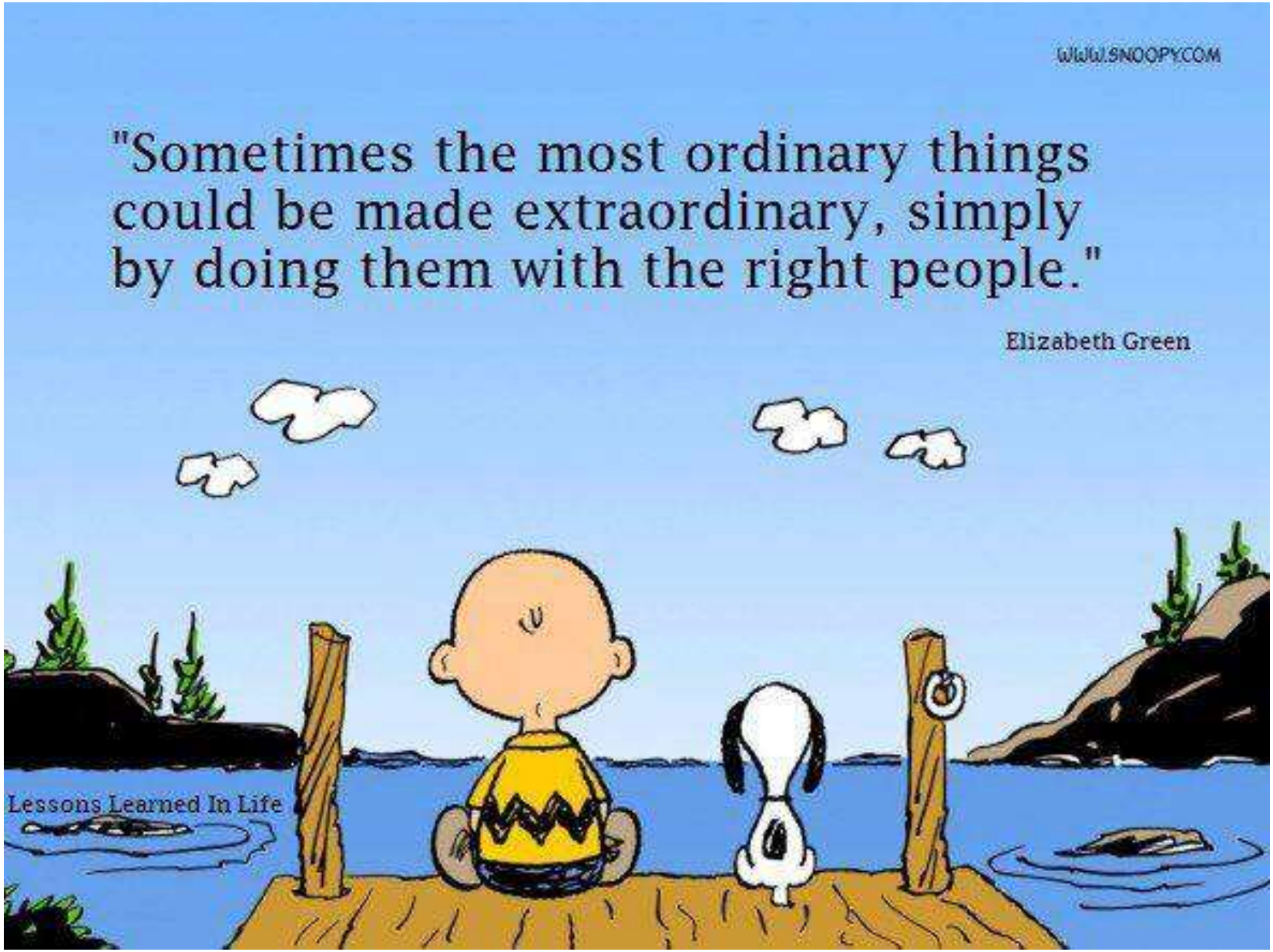
## Self care practices

## RCS


Happiness comes when you believe in what you are doing, know what you are doing, and love what you are doing.
PLYWOOD
BLOCK BOARD
DOORS






# Thanks...!

*Due acknowledgments to Mr. S. Kingsley, Dr. Waman Bhatki and Dr. Arvind Mahulkar*