



# NLEP Trainings: Need Assessment and Implementation Guide



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## FOREWORD

It gives me immense pleasure to publish this document on “NLEP Trainings: Need assessment and Implementation Guide” developed by the committee assigned by Central Leprosy Division.

NLEP was implemented under the vertical system up to 2005 and was integrated with the general health care system. Subsequent to its integration, there was shift in the strategies towards elimination of leprosy. This caused stagnation of the programme implementation due to lack of trained manpower. To address this gap between policies and implementation of NLEP it was felt that the training of the personnel is most essential to fulfill the emerging challenges for general health care staff.

Now, more than a decade after integration, the gap in Case Detection and Disability Prevention & Medical Rehabilitation activities can be viewed by recent trend of rising Grade II disabilities among newly diagnosed leprosy cases. Therefore, it is essential to guide the personnel through a systematic training conducted at various levels to improve implementation of the programme.

I am sure this document prepared by Central Leprosy Teaching and Research Institute, Chengalpattu (TN): an Apex Leprosy institute of Government of India; along with Regional Leprosy Training and Research Institutes (Raipur, Aska&Gouripur), Schieffelin Institute of Health Research & Leprosy Centre, Karigiri (TN) and The Leprosy Mission, Naini (UP) will stand as lighthouse to guide the stakeholders for conducting qualitative training which will facilitate the goal of *Leprosy Free India*.

(Dr. Neeraj Dhingra)

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## **PREFACE**

Even though, leprosy was declared in the year 2005 to be eliminated at the national level based on the programmatic criteria of prevalence below 1 per 10,000 population, a large number of districts in India continue to have high burden in terms of prevalence of the disease per se and occurrence of Grade II Disability. Besides, there are un-detected cases. Various interventions as envisaged under the National Leprosy Eradication Programme strategy are delivered through General Health Services. Efficient implementation of these interventions in a cost effective manner necessitates various levels of health functionaries to acquire specific skills. Therefore, it is incumbent upon the programme managers at the National, State and District levels to ensure the availability of adequately skilled manpower at various levels of the health care delivery system - Primary, Secondary & Tertiary.

The present document has been developed at the behest of Central Leprosy Division as a guide to program managers and trainers in training institutes as well as at state and district levels for adequate planning and implementation of training activities efficiently. This manual advocates a step by step approach in assessing the current situation as far trained manpower resource is concerned, gap and need assessment, mapping of the available resources in terms of infrastructure like training institutes and the trainers. It also prescribes the standard course curriculum for training of different categories of health care workers as also the skill requirement of the training faculty. There is a dedicated chapter aimed at guiding the programme managers in effective planning for training and implementation of those plans. A systematic approach for evaluation of the training activities has also been incorporated. This document is therefore expected to result in significant upstaging of the necessary skills of our health workforce and thus, more effective implementation of NLEP activities ultimately leading to the disease elimination in all communities.

I appreciate with gratitude the significant efforts of the experts who contributed to the development of this guide.

(Dr. Vineet K. Chadha)

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## ABBREVIATIONS

ANCDR	Annual New Case Detection Rate
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
AWW	Anganwadi Worker
BLCC	Block Leprosy Elimination Campaign
BLP	Bombay Leprosy Project
CHC	Community Health Centre
CLD	Central Leprosy Division
CLTRI	Central Leprosy Teaching and Research Institute, Chengalpattu
DFIT	Damien Foundation India Trust, Chennai
DLC	District Leprosy Consultant
DLO	District Leprosy Officer
DNT	District Nucleus Team
DPMR	Disability Prevention and Medical Rehabilitation
GLRI	German Leprosy Relief association (India), Chennai
GMLF	Gandhi Memorial Leprosy Foundation, Wardha
GOI	Government of India
HA	Health Assistant
HE	Health Educator
HI	Health Inspector
HSC	Health Sub-Center
ICDD	Intensive Case Detection Drive
ICMR	Indian Council of Medical Research
IEC	Information Education and Communication
JALMA	Japan Leprosy Mission of Asia, Agra
LQAS	Lot Quality Assurance Sampling
M and E	Monitoring and Evaluation
MB	Multi-Bacillary (Leprosy)
MDT	Multi-Drug Therapy
MLEC	Modified Leprosy Elimination Campaign
MO	Medical Officer
MOFHW	Ministry of Health and Family Welfare
MOSJ and E	Ministry of Social Justice and Empowerment

MPR	Monthly Performance Report
MPW	Multi-Purpose Worker
NGO	Non-Governmental Organization
NHM	National Health Mission
NLEP	National Leprosy Eradication Programme
NLRI	Netherlands Leprosy Relief-India, New Delhi
NMA	Non-Medical Attendant
NMS	Non-Medical Supervisor
NRHM	National Rural Health Mission
PAL	Person Affected with Leprosy
PB	Pauci Bacillary (Leprosy)
PHC	Primary Health Centre
PIP	Project Implementation Plan
PMW	Para-Medical Worker
PR	Prevalence Rate
PRI	Panchayati Raj Institutions
RCS	Re-Constructive Surgery
RLTRI	Regional Leprosy Training and Research Institutes
SAPEL	Special Action Projects for Elimination of Leprosy
SIHRLC	Schieffelin Institute of Health-Research and Leprosy Centre, Karigiri
SLC	State Leprosy Consultant
SLO	State Leprosy Officer
TL	The Lepra society, Secunderabad
TLM	The Leprosy Mission, Naini, Allahabad
TNA	Training Need Assessment
UT	Union Territory
VHSC	Village Health and Sanitation Committees
WHO	World Health Organization



## EXECUTIVE SUMMARY

The National Leprosy Control Programme since its inception in 1955; performed very well and updated the strategies with changing epidemiological pattern in the country. With the introduction of MDT in 1983, NLEP witnessed a dramatic reduction in leprosy burden in the country. The intensified active case detection activities such as MLEC, further revealed that large number of undetected cases remained in the community and needed to be brought them under treatment. Thereafter the programme was integrated into the general health care; and was expected to be implemented along with other national health programmes.

A rising proportion of Multi Bacillary and grade II deformity patients among the newly diagnosed cases as per recent NLEP status reports indicate a long delay in case detection and consequently the on-going transmission in the community. Therefore, it is essential to update the knowledge and skills of the health personnel to cope up with the changing trend of the disease and the programme strategies. Considering this emergent need as per recommendation of Technical Resource Group (TRG) constituted by Central Leprosy Division, a training need assessment was carried out by CLTRI as Nodal Agency with members co-opted from other training institutes followed by development of this guide as a managerial tool for strengthening of training activities under NLEP.

This guide is presented under five chapters as follows:-

- 1) **Situation Analysis:** This chapter discusses the past and present developments in NLEP, especially with regard to strategies evolved over a period of time to control this debilitating disease. The detailed analysis of sub-optimal case detection and the urgent thirst for assessment of training needs are also discussed under this heading.
- 2) **NLEP Training - Gap analysis:** The review of urgent training need assessment and the gaps in the existing training pattern are discussed in this chapter.
- 3) **Resource Mapping:** In this chapter the currently involved institutions in NLEP trainings are enlisted with mapping of the states to these institutes for execution and evaluation of training at various geographic areas. The document also provides the composition of

faculties of desired specialities as training team.

- 4) **Training Design:** This chapter contains details of the types of training, course contents for each level of personnel along with well elaboration upon duration and frequency of the training. The chapter also contains the comprehensive place, trainee and trainer matrix and training methodology.
- 5) **Course Curriculum:** Under this chapter the course curriculum at each level of the personnel is detailed including the educational objectives, course contents and training methodologies.
- 6) **Training implementation plan:** This chapter consists of the recommended plan of implementation of trainings at various levels towards factual articulation for improving the implementation of NLEP as per the desired quality.

This document is a complete set of detailed training strategies at various levels, the curriculum design, resource mapping and evaluation of the trainings in the context of current programme requirements. It also provides a supplement for role play sessions to be conducted during the training.

## CHAPTER: 1

### INTRODUCTION AND SITUATIONAL ANALYSIS

National Leprosy Control Programme (NLCP) was launched in the year 1955. Early case detection by active case finding through a vertical system with dapsone based chemotherapy were the main components of NLCP. The breakthrough discovery of effectiveness of Multi Drug Therapy (MDT) for leprosy in 1970s and subsequently its recommendations by WHO study group in national programmes in 1981; prepared the background for strategic shift in NLCP. Following the recommendations of high power committee under the chairmanship of Dr. M.S. Swaminathan; the National Leprosy Eradication Programme (NLEP) was launched in 1983. Sustained active case detection in campaign mode such as Modified Leprosy Elimination Campaign (MLEC) from 1997 to 2004 along with use of MDT brought down the prevalence of leprosy drastically.

In the year 2005, as India declared elimination of leprosy at the national level, the programme strategy was changed and NLEP was implemented through integration with primary health care system; and self-reporting was relied upon as the main source of case detection. The Prevalence Rate (PR) and the Annual New Case Detection Rate (ANCDR) have remained almost static since 2005 without much decline. Besides, there are a large number of undetected cases in the community. Further there has been a drastic rise in indices of late detection such as proportions of Multi Bacillary leprosy and grade II deformity among new cases. Large number of cases which are not reported to the health facility was also reiterated by many field campaigns such as Block Leprosy Control Campaign<sup>1</sup> (BLCC), Intensive Case Detection Drive (ICDD), Modified Leprosy Elimination Campaign (MLEC), Special Action Projects for Elimination of Leprosy (SAPEL), Population based surveys in Haryana and Uttar Pradesh<sup>2</sup> and the recently conducted national sample survey JALMA<sup>3</sup> study etc. Besides improved case notifications, these campaigns succeeded to get better result through creation of awareness and advocacy for generating community support. Therefore it was imperative to take immediate measures to detect large number of backlog cases and also to detect them in early stage of disease.

The Obstacles for suboptimal case detection are:-

- i. Inadequate level of awareness in the community about leprosy disease<sup>4</sup>.
- ii. Poor literacy status among the high risk individuals resulting into inadequate awareness and lower priority.

- iii. Sub-optimal level of training of staff resulting into insufficient confidence to correctly diagnose and classify the leprosy cases for further treatment.
- iv. Inadequate involvement of community, due to widely prevalent stigma.

However the gradual and sustained efforts for integration of NLEP into general health care system has not happened as expected due to lack of preparedness for integration at various levels. Also, sudden shift in case detection strategy to self-reporting mode drastically reduced case reporting to health facilities. This can be attributed to following factors:

1. Lack of trained man power to detect the hidden cases.
2. Overburdened staff unable to cope up with multiple responsibilities.
3. Inadequate motivation for the neglected disease like leprosy.
4. Lack of knowledge and skills, thereby Medical Officers did not have enough confidence to diagnose leprosy cases.
5. Insufficient Monitoring and Evaluation mechanism in the periphery leading to complacent attitude among health workers.
6. Very few cases being brought to CHC/PHC for confirmation by ASHA/ANM/PMW.
7. Lack of administrative commitment from the District Authorities providing low priority to the disease.
8. Slow insidious nature of the disease leading to late reporting/ late detection.
9. Grass root level (Village Leaders/Peer Group) political will was insufficient.
10. Associated high prevalence of stigma in society.

It can be noted that more than half of the above problems are undoubtedly, due to inappropriate training to bring out all the hidden cases for treatment.

Pre-course Learning Evaluation conducted during 2011-15 at RLTRI, Raipur observed that the baseline knowledge and skills in leprosy was very low among District and block level programme managers, PHC Medical Officers and physiotherapists.

While during the routine monitoring and evaluation by various institutes such as CLTRI, it is being observed that about 20 to 30% of PHCs are diagnosing and classifying the leprosy cases correctly, others are only referring the cases to Block PHCs and medical colleges.

WHO / ICMR Research Projects in Raipur, Chhattisgarh conducted during 2011-13 and post-training performance evaluation conducted at CLTRI clearly indicated that capacity building of Health Personnel improves early case detection and coordinated case management due to boosted commitment, accelerated involvement and strengthened capacity of health workforce to pass accurate information to the community.

There is a definite need for up gradation of the skills by means of designing and implementing strategic training curriculum towards yielding specific objective of early and optimal case detection and management.

The above discussion clearly demonstrate that urgent thrust is required for training of health workforce to bring out the large number of hidden cases for appropriate treatment thereby helping in achieving elimination, preventing disabilities and also increase awareness in the community by way of early voluntary reporting/ case detection; thereby, decreasing stigma and improving community health seeking behaviour.



## CHAPTER: 2

### NLEP TRAINING: THE GAP ANALYSIS

Regular updating the knowledge and skills of the programme functionaries are required for optimal implementation of NLEP guidelines. Therefore there is urgent need of training of all personnel involved in NLEP activities. The training should mainly focus upon detection and treatment of large number of undiagnosed cases of leprosy especially in early phase of disease and preventing disability.

Following are the gaps identified in the existing training pattern in NLEP at various levels.

1. Large gap in trainings: There was large gap in the existing training with respect to who needs to be trained, resource faculties for training, training contents, frequency and evaluation methods.
2. Non availability of adequately trained 'Trainers' across the country: It was realized that there is a scarcity of trained manpower, so as to function as trainers. Also the available trainers are severely under-utilized.
3. Insufficient set of designed curriculum for health personnel at each level: The standard curricula for each set of manpower was lacking. So also the training methodology, expected competencies and skills were not uniform.
4. The available training curricula differed across various levels: The training curricula were diverse across the country and not uniform. These curricula were though prepared according to NLEP mandate, it showed much variability for the concerned set of manpower to be trained.

Therefore it was felt imperative to prepare a comprehensive training document incorporating detailed, standardized and uniform contents.

5. Inadequate monitoring and evaluation of the NLEP trainings: It was observed that the monitoring of the NLEP trainings were not performed, resulting in lack of desired

competencies in the trained manpower. Therefore, it was felt that there is urgent need to monitor and evaluate the impact of all trainings conducted under NLEP.

Further due to frequent new appointments and transfers of health workforce especially MOs and NMS; the newly joined staffs are not exposed to training early in the posting leading to suboptimal performance.

## CHAPTER: 3

### RESOURCE MAPPING

The purpose of resource mapping is, to identify institutes and facilities to conduct quality training at the appropriate level. Also it is aimed at faculty resource identification, so as to enable selecting and listing out suitable faculties for appropriate trainings, for example, formation of training team. The above exercise is essential for improving not only the quality of the training but to ensure appropriate faculties for training purpose and to prevent inappropriate faculties dealing with multiple topics, which will compromise the quality of teaching and learning.

There is need for following actions for improving quality of trainings:

1. Decentralization of the training, sustaining the training up to district level will maintain uniformity without compromising the training quality.
2. Training should be based on basic issues such as demonstration of cardinal signs and symptoms and clinical management of leprosy.
3. State/region wise diversities should be dealt by the specific states if any without compromising the quality.
4. Formation and capacity strengthening of the core training team at predetermined focal point.

#### **I. Institutes that are currently engaged in training for anti-leprosy activities**

1. Central Leprosy Teaching and Research Institute (CLTRI), Chengalpattu (TN)
2. Regional Leprosy Training and Research Institute (RLTRI), Aska (Odisha)
3. Regional Leprosy Training and Research Institute (RLTRI), Gouripur (WB)
4. Regional Leprosy Training and Research Institute (RLTRI), Raipur (CG)
5. Schieffelin Institute of Health-Research and Leprosy Centre, Karigiri (TN)
6. The Leprosy Mission (TLM) Hospital, Naini, Allahabad (UP)
7. The Leprosy Mission Community Hospital, Shahdra, Delhi.

8. Bombay Leprosy Project (BLP), Mumbai (MS)
9. Gandhi Memorial Leprosy Foundation, Wardha(GMLF), (MS)
10. German Leprosy Relief Association- India (GLRI), Chennai (TN)
11. Netherlands Leprosy Relief-India (NLRI), New Delhi
12. Damien Foundation India Trust (DFIT), Chennai TN
13. Japan Leprosy Mission of Asia (JALMA), Agra (UP)
14. The Lepra Society, Secunderabad (TL)

Apart from these training institutes, states are conducting NLEP trainings using their resource persons.

## **II. Earmarking of the states for the training institutes:**

- a. The states can be earmarked to the GOI institutes for resource mapping each of the above mentioned NLEP partner institutions involved in the training. A central training team is recommended consisting of members from above mentioned Government institutions, Non-governmental organizations and also from Retired Central / State Govt. Officers, pooling the appropriate training faculties.

To further facilitate the training programme, above listed institutions can be assigned with states / UTs which are closer to them so that much inconvenience to the trainees could be avoided and also to save on travel expenditure.

- b. There is a need for validation of the training programme in terms of availability of the adequate facilities and appropriate faculties before the above institutions are assigned the job of training and to make necessary arrangements to make up the deficiencies in such institutions.

## **Role of Central and Regional Institutes of Government of India in NLEP trainings**

### **I. CLTRI, Chengalpattu (Tamil Nadu)**

1. Overall Coordination, Planning, Implementation and Evaluation of trainings in all States and UTs in consultation with the partner ILEP agencies in their allocated states.
2. Coordination, Planning, implementation and Evaluation of trainings at allocated States and UTs.
3. Coordination with RLTRIs, ROHFW, Regional Government institutes and ILEP agencies.

4. Annual assessment of training needs and preparation of annual calendar.
5. Standardizing, updating of training design and curriculum in consultation of respective stakeholders.
6. Communication with CLD in all policy and implementation matters.

**II. RLTRI, Raipur (Chhatisgarh)**

1. Coordination, Planning, implementation and Evaluation of trainings in allocated States and UTs in consultation with the partner ILEP agencies in their allocated states.
2. Coordination with ROHFW, Regional Government institutes and ILEP agencies.
3. To constitute a Core Training Team.

**III. RLTRI, Aska (Odisha)**

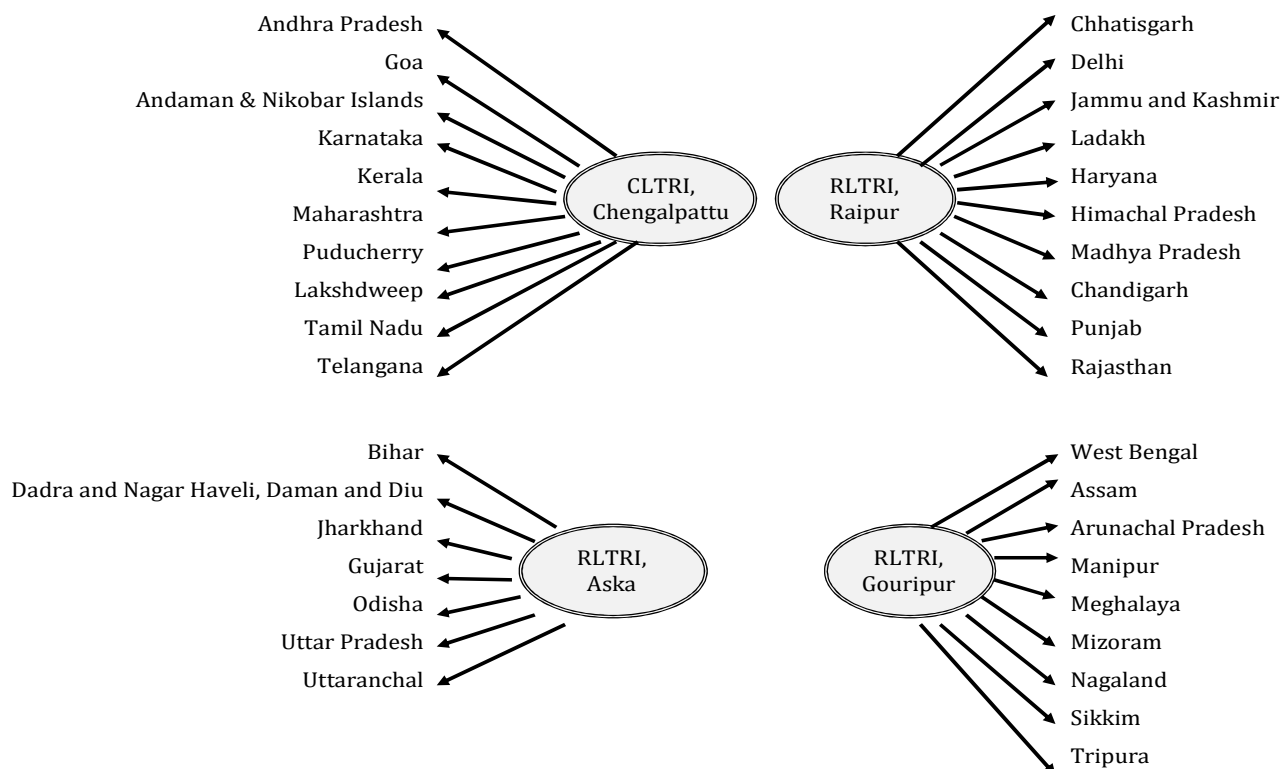
1. Coordination, Planning, implementation and Evaluation of trainings in allocated States and UTs in consultation with the partner ILEP agencies in their allocated states.
2. Coordination with ROHFW, Regional Government institutes and ILEP agencies.
3. To constitute a Core Training Team.

**IV. RLTRI, Gouripur (West Bengal)**

1. Coordination, Planning, implementation and Evaluation of trainings in allocated States and UTs in consultation with the partner ILEP agencies in their allocated states.
2. Coordination with ROHFW, Regional Government institutes and ILEP agencies.
3. To constitute a Core Training Team.



## State allocation to the Regional institutes.



### III. The composition of the Core Training Team:

The Core Training Teams at Center, State and District level need to be constituted with following member faculties.

- i. Epidemiologist
- ii. Clinician / Dermatologist
- iii. Orthopedic surgeon / General Surgeon/Ophthalmic Surgeon
- iv. Physiotherapist
- v. Field supervisor
- vi. Lab Technician
- vii. Orthotic Technician

The above member faculties of the Core Training Team require thorough training before incorporation into training programme as a 'Trainer'.

The training of 'Core Training Team' is one of the crucial components.

## CHAPTER: 4

### TRAINING DESIGN

Designing a proper training programme will avoid use of sub-optimal training methodologies and inappropriately trained health workforce. The training design should fulfil the anticipated future needs as well so as to tackle forthcoming future challenges well in advance. The training design should specifically explain the course contents, domain specific syllabi, types of training, frequency of training, place of training, its duration and methodology in detail.

#### **I. Training course contents:**

The training need to be specific to and in accordance with the pattern of work performed by the particular health personnel. Therefore, the training course contents are broadly divided into two domains; programme management and clinical case management with variable proportions; for programme managers and physicians/surgeons involved in the implementation of NLEP.

Following are two domains identified to categorize the training course contents;

1. Programme Management	2. Clinical Case Management
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#### **II. Level wise proportion of course syllabi in each domain**

Training programmes in NLEP should be carried out for officials at following four levels.

State level	District level	Block level	PHC level
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The level wise proportion of course contents recommended in each domain is as follows

Level	Contents	
	Programme management	Clinical case management
State level	70 %	30 %
District level	60 %	40 %
Block level	40 %	60 %
PHC	25%	75%

The state and district level trainings need to be institution based and the components such as Case finding, Treatment compliance, Recording and reporting and community participation need to be imparted at all levels including the block and PHC level trainings. The course

contents for training of each type of personnel should be according to the respective standard training manuals<sup>5-8</sup>.

### **III. Type of training:**

The training programmes designed for health personnel in NLEP are formulated into following two types.

- 1. Induction Training:** The induction training need to be provided to all the fresh recruits in the health service. Health personnel performing duties other than NLEP since past five years even if trained in NLEP previously need to be considered as fresh candidates and should be provided induction training.
- 2. Refresher Training:** The refresher training course is recommended for all the health personnel currently working in NLEP who had already undergone induction training. The refresher training is recommended every three years after induction training. The refresher training should be directed towards sensitization for newer strategies, reorienting and motivating the staff for better work performance.

### **IV. Duration of training:**

Training of various categories of staff was earlier conducted over varied durations ranging from 1 day to 3 months, sometimes up to 9 months. A thorough review of the training duration is required for optimization of the output with terms of available resources such as time, money and training material. At the District, Blocks and PHCs, the available workforce are already overburdened with responsibilities of multiple programmes; therefore shouldering the NLEP activities without affecting the concurrent assignments is important task to address.

Since their appointment, most of the health staff are already oriented to clinical aspects of leprosy and programme management (NLEP) at least once. Therefore long duration training in NLEP is not required at this juncture. To compensate for reduced duration; the frequency of training can be increased so as to maintain the updated knowledge of the staff.

The health personnel already trained and working in the programme require orientation to the programme management aspects. A refresher, in-service training course is the most appropriate for such staff.

The induction training has to be minimum of five days. It is decided to reduce the minimum training duration for medical officers to three days considering the availability of medical officers at PHCs and time to be spared by them for training. The specific training duration and teaching methodology is provided in detail under the course curriculum of each category of staff. In the training conducted for PHC level MOs, the participants may not be available for entire duration at one stretch. To avoid disruption of day to day functioning

(especially at PHC level) depending upon staff availability the course can be imparted in two phases:-

- i. Clinical Aspects and
- ii. Programme management aspects

Participant who complete both the phases will only be entitled to get the certification

The refresher training of two days which is meant for personnel already working in the programme, have undergone induction training in the past but those have not undergone any NLEP related training since last five years.

As ASHA is the important community based service provider, she also needs to be provided one day induction training and a half day refresher training every year.

Training of the specific staff for their respective duration needs to be incorporated into the training calendar of districts and states.

Table 1: Duration of training of each category of staff

Category of staff	Duration of training	
	Induction	Refresher
SLO, State NLEP Consultant, DLOs/DLCs/ State Regional Directors	5 days	2 days
Block MO/PHC MO	3 days	2 days
Para-medical supervisors(NMS/Pharmacist/HA/HE)	5 days	2 days
Para-medical workers (HW (M)/(F), NMA, Dresser, AWW)	5 days	2 days
Physiotherapist /Lab. Technician	5 days	2 days
Orthopaedic surgeons	5 days	2 days

#### V. **Frequency of training:**

The induction training should comprise of all the personnel involved in NLEP activities. It is noted that the state and district level personnel are mostly stable without much frequent turnover. Therefore once the induction training is completed, 1-2 refresher training programmes may be conducted at state and district levels every year. As the staff turnover at block and PHC level is high, there has to be regular training course every 6 months in a calendar year. This will provide the training opportunity for newly appointed staff and work can be adjusted with flexible training programme schedule.

## VI. Place-trainer-trainee matrix:

Table 2: Place –trainer-trainee matrix

<b>Place of training</b>	<b>Trainer</b>	<b>Whom to train?</b>
<b>State/Region:</b> Leprosy institutions (Govt. /NGOs)	Core faculties from leprosy institutions and concerned regional directors	SLO, State NLEP Consultant DLOs/DLCs/ State Regional directors / RCS Surgeons /Physiotherapist/Lab. Technicians
<b>District:</b> Leprosy institutes / Dist. Training Center	DLOs/DNTs, Leprosy Institutes	Block MO/PHC MO/NMS/Pharmacist/HA/HE
<b>Block:</b> GH/Block PHC/CHC	DLOs/DNTs, Block MO, PHC MO	HW (M)/(F), NMA, Dresser, ICDS, ASHA

DLC: Dist. Leprosy Consultant, MO: Med. Officer, HW: Health worker (Male/Female), NMA: Nonmedical attendant, NMS: Non-Medical Supervisor, HA: Health Assistant, HE: Health Educator.

**Table 3: Major institutes / centres engaged in training in anti-leprosy activities**

<b>Sr. No.</b>	<b>Name of the Institute</b>	<b>Type of training</b>
1.	Central Leprosy Teaching and Research Institute (CLTRI), Chengalpattu (TN)	SLO, State NLEP Consultant DLOs/DLCs/ State Regional directors / RCS Surgeons / MOs/Physiotherapist/Lab. Technicians
2.	Regional Leprosy Training and Research Institute (RLTRI), Aska (Odisha)	DLOs/DLCs/ MOs/Physiotherapist/Lab. Technicians
3.	Regional Leprosy Training and Research Institute (RLTRI), Gouripur (WB)	DLOs/DLCs/ MOs/Physiotherapist/Lab. Technicians
4.	Regional Leprosy Training and Research Institute (RLTRI), Raipur (CG)	SLO, State NLEP Consultant DLOs/DLCs/ State Regional directors / RCS Surgeons / MOs/Physiotherapist/Lab. Technicians
5.	All India Institute of Physical Medicine and Rehabilitation, Mumbai (MS)	Surgeons for RCS, Physiotherapists
6.	Schieffelin Institute of Health-Research and Leprosy Centre, Karigiri (TN)	Surgeons for RCS, Physiotherapists, Lab. Technicians
7.	The Leprosy Mission (TLM) Hospital, CNI Bhawan, 16 Pandit Pant Marg, New Delhi (including its branches)	RCS Surgeons / MOs/Physiotherapist/Lab. Technicians
8.	Bombay Leprosy Project (BLP), Mumbai	Lab. Technicians
9.	Gandhi Memorial Leprosy Foundation, Wardha (GMLF), (MS).	MOs, NMS/Pharmacist/HA/HE
10.	German Leprosy Relief Association- India (GLRI)D-375, 4th Floor, Near Vivekanand School, Anand Vihar, New Delhi (including its branches)	Surgeons for RCS, MOs, Lab. Technicians
11.	Netherlands Leprosy Relief-India (NLRI), B-4/57, Safdarjung Enclave, New Delhi (including its branches)	MOs, NMS/Pharmacist/HA/HE
12.	Damien Foundation India Trust (DFIT), 14, Venugopal Avenue, Spurtank Road, Chetpet, Chennai (including its branches)	Surgeons for RCS, MOs, NMS
13.	Japan Leprosy Mission of Asia (JALMA), Agra (UP)	MOs, Lab. Technician



14.	The Lepra Society, Plot No. 17, Krishnapuri Colony, West Marredpally Secunderabad, Telangana (including its branches)	MOs, NMS/Pharmacist/HA/HE
15.	Swiss Emmaus India, J-17 South City Gurgaon, Haryana (including its branches)	Surgeons for RCS, MOs, NMS
16.	Association for Leprosy Education, Rehabilitation and Treatment - India (Alert India), B-9, Mira Mansion SION (W), Mumbai	Surgeons/MOs/NMS/ HA/HE

**Major institutes/centres  
engaged in training in anti-  
leprosy activities**



**Sr. No. Name of the Institute**

1. Central Leprosy Teaching and Research Institute (CLTRI), Chengalpattu (TN)
2. Regional Leprosy Training and Research Institute (RLTRI), Aska (Odisha)
3. Regional Leprosy Training and Research Institute (RLTRI), Gouripur (WB)
4. Regional Leprosy Training and Research Institute (RLTRI), Raipur (CG)
5. All India Institute of Physical Medicine and Rehabilitation, Mumbai (MS)
6. Schieffelin Institute of Health-Research and Leprosy Centre, Karigiri (TN)

7. The Leprosy Mission (TLM) Hospital, CNI Bhawan, 16 Pandit Pant Marg, New Delhi
8. Bombay Leprosy Project (BLP), Mumbai
9. Gandhi Memorial Leprosy Foundation, Wardha (GMLF), (MS).
10. German Leprosy Relief Association- India (GLRI)D-375, Anand Vihar, New Delhi
11. Netherlands Leprosy Relief-India (NLRI), B-4/57, Safdarjung Enclave, New Delhi
12. Damien Foundation India Trust (DFIT), 14, Venugopal Avenue, Spurtank Road, Chetpet, Chennai
13. Japan Leprosy Mission of Asia (JALMA), Agra (UP)
14. The Lepa Society, Plot No. 17, Krishnapuri Colony, West Marredpally Secunderabad, Telangana
15. Swiss Emmaus India, J-17 South City, Gurgaon, Haryana
16. Association for Leprosy Education, Rehabilitation and Treatment - India (Alert India), SION (W), Mumbai

## **VII. Training methodology:**

The training course could be delivered through following teaching / learning methods;

**Table 4: Available training (teaching-learning) methods:**

Lecture - discussion	Problem solving exercise
Group discussion	Group work/assignment
Case demonstration and discussion	On-site /field based training
Role play	Quiz
Scenario discussion	Monitoring and coaching
On the job training	Reading i.e. through books and modules
Lecture demonstration	Conferences
Work based that is "e" learning	Academic programme

There are plenty of methods as listed above available for conducting a training out of which is felt that lecture demonstration cum field training will be most appropriate for our purpose. Other methods need to be decided as appropriate for the topic and the required skills to impart / learn the topic.

These teaching learning methods can be grouped into five key categories.

1. Didactic/ interactive methods e.g. lecture-demonstration/discussion using audio visual aids like PowerPoint presentation, pre-recorded videos, etc
2. Group participatory methods and Brain storming using NLEP training manuals<sup>4-7</sup> for MOs, LTs, Health Supervisors, Physio- Therapists/Technicians
3. Problem solving exercises e.g. calculating prog. indicators for own districts
4. Group assignments e.g. group discussion, scenario presentation
5. Competitive methods e.g. quiz

All the teaching-learning methods are incorporated according to the needs of the learner.

#### **VIII. No. of participants for each training programme:**

The training institutes are required to have minimum essential facilities to conduct the training with desired level of quality. For the training of programme managers viz. SLOs, DLOs, MOs and the technical staff viz. Physiotherapist and Lab. Technician the participants should not exceed 30, while the minimum participants need to be at least 10. Atleast, one training programme need to be organized every year for the surgeons of each state at an appropriate institution with the required facilities and scope for hands-on training.

The ratio of participants to resource personnel should not be below 4: 1 per day for training of technical and managerial staff, while the resource faculties need to be at least two per day for training of other staff. For the training of surgeons, the participants to resource personnel should not be more than 2:1, with active involvement of participants on hands-on operative training besides demonstrations. For example, the surgeons attending RCS training in the beginning can assist the operative procedure, while those already assisted the RCS surgeries can perform the surgery under the guidance of the trainer.

#### **IX. Essential Facilities required at the training institute:**

The facilities available in the institution imparting training programme determine the quality and impact of the training programme. Essential facilities required to be possessed by the training institutes are as follows:

1. **Patient pool:** The case demonstration for each category of staff requires essentially the leprosy patients for relevant understanding of the topic. The clinical aspects of leprosy should never be conducted without demonstration of a patient of leprosy. At least a few patients of following different types are required during the institutional training
  - i. Leprosy patients with varying clinical signs/ symptoms for disease classification (MB/PB)
  - ii. Leprosy patients with reactions (Lepra reaction, ENL)

- iii. Patients with plantar ulcers
- iv. Pre/post-operative patients of Re-Constructive Surgery for deformity, etc.

2. **Infrastructure and logistic facilities:** The minimum infrastructure facilities required to be available in the institution carrying out the training programmes, according to the training curriculum are as under:-

- i. Lecture-Demonstration hall with audio-visual projection facilities,
- ii. Physiotherapy unit with basic equipment,
- iii. Laboratory with skin smear facility etc.

**X. Involvement of Medical Colleges in NLEP Training:** Medical Colleges play a crucial role in diagnosis and management of various clinical conditions associated with leprosy including Re-Constructive Surgeries. Various departments such as Dermatology, Orthopaedics, General Surgery, Clinical Pathology, Physiotherapy, Community Medicine and clinical or community health nursing can be actively involved in the NLEP activities. The basic orientation of the medical college staff towards NLEP can be achieved by regular Continuing Medical Education Programmes. Dermatology or Community Medicine departments can be the important stakeholder in the advocacy of NLEP activities especially for organizing anti-leprosy fortnight activities in Medical Colleges.

Resource faculties from nearby Core Training Team can be good source of trainers. Once the faculties are trained, they can be utilized as the trainer at District/Block/PHC levels.

The undergraduate/post graduate/ paramedical students studying at medical institutions should be encouraged to undertake research in Leprosy/NLEP.

**Table 5: Proposed matrix for training of medical college faculty and students**

<b>Participants</b>	<b>Place of training (Trainer)</b>	<b>Duration</b>
Teaching faculties	Leprosy institutes/Dist. Nucleus Team (DNT) (Core Training Team)	1 day orientation
Post-graduate students (Dermatology)	Leprosy institutes/DNT (Core Training Team)	5 days

Post-graduate students (Other discipline)	Leprosy institutes/DNT (Core Training Team)	5 days
Internee	Leprosy institutes/DNT (Core Training Team)	5 days

- XI. Operational Research in NLEP:** It is also proposed to conduct one operational research/ implementation research training course each year at CLTRI, with the ultimate aim of recommending evidence-based solutions /interventions for improving health care services for persons affected with leprosy. For this purpose, applications for participation will be invited from professionals and other persons engaged in anti-leprosy activities. They will be asked to submit concept notes specifying the research questions that they would like to address and brief methodology proposed. Priority will be given where investigators of a given proposal belong to different streams-programme implementation, dermatology, surgery, orthopaedics, biostatistics and epidemiology.

The applications will be screened and priority research questions will be selected in consultation with CLD. For the selected proposals, two investigators/co-investigators will be invited for participation. A maximum of fifteen proposals will be selected for this purpose.

The training course will be conducted in three parts:-

1. Protocol development workshop for five days, where the training in operational research methodology will be undertaken and the detailed protocols for the selected proposals will be developed. The facilitators will comprise of faculties from CLTRI as well as from other reputed institutes undertaking operational research.
2. Mentorship for data collection for the period of 6-9 months, including onsite supervision.
3. 5 day workshop for data analysis and report writing. Certificate for participation in the course can be provided at submission for publication.

The participants will be encouraged to use secondary data as far possible and use the funds available with the parent institute for travel etc. However, the necessary support for funds to conduct the research when required will be explored through CLD.

## CHAPTER: 5

### CURRICULA FOR TRAINING OF STAFF IN NLEP

#### 5.1 Curriculum for Training of State Leprosy Officers

**Duration: 5 days**

Day	Sessions	Duration
1	Pre-test	30 min
	1. Critical appraisal of leprosy trend at national and regional level	90 min
	2. Programmatic management of leprosy	3 hours
2	1. Monitoring and evaluation of NLEP activities	4 hours
	2. IEC and counseling	1 hours
3	1. Field activity (Visit to health institutions, demonstration of field activities)	5 hours
4	1. Prevention of Disabilities	4 hours
	2. Community based Rehabilitation	2 hours
5	1. Presentation of the findings of field activity and group discussion	2 hour
	2. Special case detection activities	1 hour
	3. Management of referrals in NLEP	1 hour
	Post-test with discussion	1 hour

#### Detailed session wise curriculum for training of SLOs

##### DAY - 1 NLEP and Programme management

Educational Objectives	Session Contents and Skills	Methodology
Pre-test		<b>(30 min)</b>
<b>Critical appraisal of leprosy trend at national and regional level</b>		<b>(90 min)</b>
1. Describe epidemiological trend of leprosy at global, national and state level. 2. To critically appraise the national and regional leprosy situation. 3. To discuss NLEP strategies and activities.	1. NLEP objectives and strategies. 2. Indicators for assessment of burden of leprosy at global, national and state level. 3. Critical appraisal of national and regional leprosy trend. 4. Recent innovations in NLEP.	LECTURE DISCUSSION  (90 min)
<b>Programmatic management of leprosy</b>		<b>(3 hours)</b>

1. To demonstrate cardinal signs of leprosy	1. The common signs and symptoms of leprosy. 2. History taking, Sensory Testing and Voluntary Muscle Testing.	CASE DEMONSTRATION <b>(30 min)</b> SLIDE SHOW for differential diagnosis <b>(30 min)</b>
2. Lab diagnosis of leprosy 3. To describe surveillance of AMR in leprosy 4. To describe management of leprosy using MDT	3. Lab diagnosis of leprosy. 4. Operational aspects of AMR surveillance 5. Management of leprosy.	LECTURE DEMONSTRATION (Including demonstration of various MDT) <b>(1 hour)</b>
1. Diagnose and manage leprosy reactions 2. Enumerate conditions for referral of PAL with reaction	5. Clinical presentation of type 1 and type 2 leprosy reactions. 6. Management of lepra reactions 7. Monitoring of PAL with reaction/ neuritis and on steroid therapy. 8. Differentiate Relapse and Reaction 9. Indications for referral of PAL with reaction.	LECTURE DEMONSTRATION <b>(30 min)</b>
5. To ensure treatment compliance	10. Key messages for leprosy patients and their family members. 11. Defaulter retrieval mechanism.	ROLE PLAY Counseling of PAL and family members <b>(30 min)</b>
<b>PANEL DISCUSSION on unanswered questions</b>		<b>(15 min)</b>

## Day 2: Monitoring and evaluation of NLEP activities

**Duration: 4 hours**

<b>Supervision</b>		<b>(1 hours)</b>
<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
1. Describe principles and skills in supervision of NLEP activities. 2. Describe planning supervisory visit and preparation of check list	1. Principles and skills in supervision of NLEP activities. 2. Planning supervisory visit. 3. Preparation of supervisory checklist	LECTURE DISCUSSION supervision of activities in a health centre after preparing supervisory check list
<b>Monitoring and evaluation of NLEP activities</b>		<b>(3 hours)</b>
1. Describe monitoring and its process 2. Discuss monitoring the planned (in PIP) activities 3. Calculate, analyse and interpret indicators for monitoring the progress of programme and send feedback. 4. Use of USIS for improved monitoring	1. Definition and need for monitoring, records and reports in NLEP 2. Monitoring of NLEP activities at district level and block level. 3. Calculation of values for the main indicators based on sample from district register and State reports and its interpretation 4. MDT and inventory management 5. Computerized information system including "NIKUSHTH".	LECTURE DISCUSSION monitoring, Recording and reporting and USIS GROUP WORK for calculation of indicators on the basis of sample from district register and its presentation Demonstrate NIKUSHTH (Hands On)



**Day 2: IEC and Counseling****Duration: 1 hour**

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
1. To identify the IEC needs and appropriate channels for target groups to disseminate leprosy related messages 2. Prepare Annual action Plan for IEC and its implementation To plan SLAC in their area	1. Communication process and its components 2. Situational analysis for IEC needs 3. Selection of appropriate mode of communication as per target group 4. Various types of leprosy IEC activities 5. Annual action plan for IEC activities	LECTURE DISCUSSION <b>(30 min)</b>
3. Discuss role of health care facility in combating leprosy stigma and discrimination	6. Key messages to generate awareness regarding leprosy linkages with NRHM for implementation of IEC activities	GROUP DISCUSSION <b>(15 min)</b>
4. Discuss the modalities of counselling leprosy patient at various stages of treatment	7. Counselling at the start of MDT(add components of counselling: about disease, MDT effects, reaction identification, identification of early signs of disability) 8. Counselling on treatment completion 9. Counselling of PAL family	ROLE PLAY (Annex.5) <b>(15 min)</b>

**Day 3: Field visit****Duration: 5 hours**

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
1. To supervise, monitor and evaluate NLEP activities in the field area. 2. Provide practical field training in planning, implementation and evaluation of specific activities such as school survey, house-to-house survey etc. 3. To impart training on implementation issues in activities for reducing stigma and discrimination of people affected with leprosy. 4. To review the implementation and assess difficulties in social welfare measures for PAL.	1. Visit to PHC/ Health Center for monitoring and evaluation of NLEP activities. 2. Community based survey for case detection. 3. IEC and stigma reduction activities for prevention and control of leprosy. 4. Discussion with the stakeholders in difficulties for implementation of social welfare measures for persons affected with leprosy.	FIELD VISIT  (Visit to a Centre conducting NLEP activities e.g. DLO, organization of special activity e.g. School health Education programme, visit to leprosy colony, house-to-house visit for case detection activities etc.)  (Discussion with DLO/SLO for operational issues in rehabilitation of PAL)  A checklist can be used for this task.

**Day 4: Prevention of Disability**

**Duration: 4 hours**

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
1. To assess the disabilities among PAL 2. Assessment risk and respective management of disabilities	1. Impairment, deformity and disability. 2. Voluntary muscle testing and sensory testing 3. WHO Grading of deformities and EHF score 4. Management of deformities	LECTURE DEMONSTRATION <b>(1 hour)</b> CASE DEMONSTRATION <b>(1 hour)</b>
3. Describe prevention management of contractures 4. Describe prevention and management of ulcers	5. Management of stiffness 6. Care of paralysed muscles 7. Prevention and management of ulcers 8. Different types of foot-wares. 9. Self-Care Practices	ONSITE LECTURE DEMONSTRATION (Physiotherapy and foot-ware unit) <b>(1 hour)</b>
5. Describe criteria of selection of PAL for RCS 6. Role of RCS for PAL	8. Criteria for selection of PAL for RCS 9. Over view of common reconstructive surgeries, pre/post operative care	CASE DEMONSTRATION <b>(1 hour)</b>

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
<b>Community Based Rehabilitation</b>		<b>(2 hours)</b>
1. To discuss various rehabilitative needs for PAL. 2. To describe procedure of organizing rehabilitation programme for leprosy affected in the community 3. To discuss methods of integrating and coordinating with organizations providing rehabilitative services for other debilitating diseases for benefit of PAL	1. Rehabilitation and its types 2. Assessment of rehabilitative needs of the PAL 3. Organization of rehabilitation services for disabled 4. Facilities available for Community based rehabilitation of leprosy affected persons under health system and other ministries like Ministry of Social Justice and Empowerment/NGOs/ Civil bodies 5. Procedure of coordination with other organizations providing specialized services for rehabilitation of PAL and with those for other debilitating diseases 6. Social welfare schemes for LAPs and their families.	LECTURE DISCUSSION: Rehabilitation programme and facilities available for disabled people

**Day 5: Specific issues in NLEP**

**Duration: 4 hours**

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
<b>Presentation of the findings of field activity and group discussion</b>		<b>(2 hours)</b>
<b>Special Case detection activities</b>		<b>(1 hour)</b>
1. To discuss health seeking behavior of the community and methods to address barriers for self-reporting for treatment and enhance utilization of public health care services. 2. To discuss appropriate use of active and passive case finding	1. Health seeking behavior of the community 2. Methods to address barriers for self reporting and enhance utilization of services 3. Advantages / disadvantages of passive versus active case finding and their appropriate use 4. Block leprosy awareness campaign 5. Vulnerability mapping and planning and implementation of active case detection	1. GROUP DISCUSSION for health seeking behaviour of the community and active passive case finding, quality of care and facilities required to maintain quality services at all the three levels of health system

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
<b>Management of referrals in NLEP</b>		<b>(1 hour)</b>
1. Discuss referral system, concept of quality of leprosy services, maintenance of good quality leprosy services in the state	1. Quality of care and patient's perspective and facilities required for PAL at primary, secondary and tertiary level 2. Referral and cross notification to ensure treatment compliance	LECTURE DISCUSSION <b>(1 hour)</b>
Post-test with discussion		<b>(1 hour)</b>

## 5.2 Curriculum for Training of District Leprosy Officers

**Duration: 5 days**

Day	Sessions	Duration
1	Pre-test	30 min
	1. NLEP and Leprosy Situational analysis	2 hours
	2. Clinical management of leprosy	4 hours
2	1. Prevention of Disability	4 hours
	2. Management of Lepra reactions	2 hours
	3. Rehabilitation of LAPs	2 hours
3	1. Field activity (special activities)	4 hours
	2. Supervision	2 hours
4	1. Monitoring and evaluation of NLEP activities	4 hours
	2. Effective implementation of IEC	2 hours
5	1. Decentralized Planning	4 hours
	2. Discussion on specific issues	2 hours
	Post-test with discussion	1 hour

### Detailed session wise curriculum for training of DLOs

#### DAY - 1 NLEP and Leprosy Situational analysis

**Duration: 2 hours**

Educational Objectives	Session Contents and Skills	Methodology
Pre-test		<b>(30 min)</b>
1. Describe epidemiological status, new paradigm shift under the programme and convergence of programme activities with NRHM.	1. Evolution of NLEP and Current programme objectives and strategies. 2. Epidemiological situation of leprosy and factors affecting it.	<b>LECTURE DISCUSSION (45 min)</b>
2. Describe the Strategies adopted and their implications in 'Reducing the burden of Leprosy in the community'.	3. Institutional mechanism available under NRHM that can be utilized to provide services to people affected with leprosy. 4. Operational innovations in NLEP.	<b>GROUP DISCUSSION (1 hour)</b> Presentation by 2-3 participants in their settings Innovative problem solving initiatives (if any)
<b>Self-activity listing of unanswered questions</b>		<b>(15 min)</b>

**DAY 1: Clinical management of leprosy****Duration: 4 hours**

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
1. To demonstrate cardinal signs of leprosy	1. The common signs and symptoms of leprosy. 2. Examination / Assessment of treatment need of PAL- History taking, General physical examination, examination of skin lesion, nerve examination including Sensory Testing, Voluntary Muscle Testing	CASE DEMONSTRATION <b>(30 min)</b> SLIDE SHOW for differential diagnosis <b>(30 min)</b>
2. To discuss role of laboratories in management of leprosy 3. To describe surveillance of AMR in leprosy 4. To describe management of leprosy using MDT	3. Role of laboratories in the management of leprosy. 4. Operational aspects of AMR surveillance 5. Management of leprosy.	LECTURE DEMONSTRATION (Including demonstration of various MDTs) <b>(45 min.)</b>
5. To define various types of patients for registration. 6. To address routine case management issues.	5. Definition of "New" case, other cases and "Defaulter" issues. 6. Case management in difficult situations e.g. Pregnancy, TB, HIV etc. 7. Indications for referral, process of accompanied MDT etc.	LECTURE DISCUSSION <b>(30 min)</b> PROBLEM SOLVING EXERCISES <b>(15 min)</b>
7. To ensure treatment compliance	8. Key messages to be communicated to a person affected by leprosy and family members at different stages. 9. Defaulter retrieval mechanism	ROLE PLAY Counseling of PAL and family members <b>(30 min)</b>
7. Diagnose and manage leprosy reactions 8. Enumerate conditions for referral of PAL with reaction	10. Clinical presentation of type 1 and type 2 leprosy reactions 11. Features of severe lepra reactions 12. Treatment of reactions 13. Monitoring of PAL with reaction/ neuritis and on steroid therapy 14. Differentiate Relapse and Reaction	LECTURE DEMONSTRATION <b>(30 min)</b>  SCENARIO DISCUSSION / QUIZ <b>(30 min)</b>
<b>PANEL DISCUSSION on unanswered questions</b>		<b>(15 min)</b>

**Day 2: Monitoring of NLEP activities****Duration: 4 hours**

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
<b>Supervision (1 hour)</b>		
1. Describe principles and skills in supervision of NLEP activities.	1. Principles and skills in supervision of NLEP activities. 2. Planning supervisory visit. 3. Preparation of supervisory checklist	LECTURE DISCUSSION supervision of activities in a health centre after

2. Describe planning supervisory visit and preparation of check list		preparing supervisory check list
<b>Monitoring and evaluation of NLEP activities</b>		<b>(3 hours)</b>
1. Describe monitoring and its process 2. Discuss monitoring the planned (in PIP) activities 3. Calculate, analyse and interpret indicators for monitoring the progress of programme and send feedback. 4. Effective presentation of analyzed data 5. Use of USIS for improved monitoring	1. Definition and need for monitoring, records and reports in NLEP 2. Monitoring of programme activities or progress of programme, calculation and interpretation of indicators 3. Calculation of values for the main indicators based on sample from district register and State reports and interpretation of performance of the programme 4. MDT and inventory management 5. Conduction of meeting and providing feedback 6. Computerized information system	1. LECTURE DISCUSSION monitoring, Recording and reporting and USIS (ULF) GROUP WORK for calculation of indicators on the basis of sample from district register and its presentation

## Day 2: IEC AND COUNSELLING

**Duration: 1 hour**

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
1. Discuss role of health care facility in combating stigma and discrimination due to leprosy	1. Key messages to generate awareness regarding leprosy linkages with NRHM for implementation of IEC activities	LECTURE DISCUSSION <b>(30 min)</b>
2. Discuss the modalities of counselling leprosy patient at various stages of treatment	2. Counselling at the start of MDT 3. Counselling on treatment completion 4. Counselling of PAL family	ROLE PLAY (Annex.5) <b>(30 min)</b>

## Day 3: Field visit

**Duration: 5 hours**

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
1. To supervise, monitor and evaluate NLEP activities in the field area. 2. Provide practical field training in planning, implementation and evaluation of specific activities such as school survey, house-to-house survey etc. 3. To impart training on community involvement in reducing stigma and discrimination of people affected with leprosy.	1. Visit to PHC/ Health Center for monitoring and evaluation of NLEP activities. 2. Community based survey for case detection. 3. IEC and stigma reduction activities for prevention and control of leprosy.	FIELD VISIT  (Visit to a Centre conducting NLEP activities e.g. DLO, organization of special activity e.g. School health Education programme, visit to leprosy colony, house-to-house visit for case detection activities etc.)

**Day 4: Prevention of Disability****Duration: 4 hours**

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
1. To assess the disabilities among PAL 2. Assessment risk and respective management of disabilities	1. Impairment, deformity and disability. 2. Voluntary muscle testing and sensory testing 3. WHO Grading of deformities and EHF score 4. Management of deformities	LECTURE DEMONSTRATION <b>(1 hour)</b> CASE DEMONSTRATION <b>(1 hour)</b>
3. Describe prevention and management of contractures 4. Describe prevention and management of ulcers	5. Management of stiffness 6. Care of paralysed muscles 7. Prevention and management of ulcers 8. Different types of MCR foot-wares	ONSITE LECTURE DEMONSTRATION (physiotherapy and foot-ware unit) <b>(1 hour)</b>
5. Describe criteria of selection of PAL for RCS 6. Role of RCS for PAL	8. Criteria for selection of PAL for RCS 9. Over view of common reconstructive surgeries, pre/post operative care	CASE DEMONSTRATION <b>(1 hour)</b>

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
<b>Community Based Rehabilitation</b>		<b>Duration: 2 hours</b>
1. To discuss various rehabilitative needs for PAL. 2. To describe procedure of organizing rehabilitation programme for leprosy affected in the community 3. To discuss methods of integrating and coordinating with organizations providing rehabilitative services for other debilitating diseases for benefit of PAL	1. Rehabilitation and its types 2. Assessment of rehabilitative needs of the PAL 3. Organization of rehabilitation services for disabled 4. Facilities available for Community based rehabilitation of LAPs under health system and other ministries like MOSJ and E / NGOs/ Civil bodies 5. Procedure of coordination with other organizations providing specialized services for rehabilitation of PAL. 6. Social welfare schemes for LAPs	LECTURE DISCUSSION: Rehabilitation programme and facilities available for disabled people

**Day 5: Specific issues in NLEP****Duration: 4 hours**

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
<b>Presentation of the findings of field activity and group discussion</b>		<b>(2 hours)</b>
<b>Special Case detection activities</b>		<b>(1 hour)</b>
1. To discuss health seeking behavior of the community	1. Health seeking behavior of the community	1. GROUP DISCUSSION for health seeking

and methods to address barriers for self reporting for treatment and enhance utilization of public health care services. 2. To discuss appropriate use of active and passive case finding	2. Methods to address barriers for self reporting and enhance utilization of health services 3. Advantages / disadvantages of passive versus active case finding 4. Block leprosy awareness campaign 5. Vulnerability mapping, planning and implementation of active case detection	behaviour of the community and active passive case finding, quality of care and facilities required to maintain quality services at all the three levels of health system
<b>Management of referrals in NLEP</b>		<b>(1 hour)</b>
1. Discuss referral system, concept of quality of leprosy services, maintenance of good quality leprosy services in the state	1. Quality of care and patient's perspective and facilities required for PAL at all level 2. Referral and cross notification to ensure treatment compliance	LECTURE DISCUSSION
Post-test with discussion		<b>(1 hour)</b>

### 5.3 CURRICULUM FOR TRAINING OF MEDICAL OFFICERS

**Duration: 3 days**

Day	Sessions	Duration
1	Pre-test	30 min
	1. Epidemiology of leprosy	(1 hour)
	2. Pathogenesis and diagnosis of leprosy	(2 hours)
	3. NLEP, programmatic management PAL	(2 hours)
2	1. Lepra reactions and its management	(1 hour)
	2. Disability Prevention and Medical Rehabilitation	(2 hours)
	3. Supervision of NLEP activities in PHC	(2 hours)
	4. Management of MDT stock and supplies	
3	1. Planning, supervision and monitoring of NLEP activities in the jurisdiction area	(2 hours)
	2. Recording and reporting	(1 hour)
	3. Coordination at various levels (Intra and Inter-sectoral coordination)	(2 hours)
	Post-test with discussion	1 hour



## DETAILED SESSION WISE CURRICULUM FOR TRAINING OF MEDICAL OFFICERS

### DAY – 1 Epidemiology of leprosy

Duration: 45 min

Educational Objectives	Session Contents and Skills	Methodology
Pre-test		30 min
1. Describe epidemiology of leprosy.	1. Epidemiology of leprosy. 2. Epidemiological trend of leprosy and factors affecting it.	LECTURE DISCUSSION <b>(45 min)</b>
<b>Pathogenesis and diagnosis of leprosy</b>		<b>(2 hours)</b>
Educational Objectives	Session Contents and Skills	Methodology
1. Describe the pathogenesis of leprosy.	1. Characteristics of <i>M. leprae</i> . 2. Pathogenesis of leprosy	LECTURE DISCUSSION <b>(30 min)</b>
1. To demonstrate cardinal signs of leprosy. 2. Describe diagnosis and WHO classification of leprosy 3. Differential diagnosis of leprosy. 4. Describe the slit smear technique for the diagnosis of leprosy. 5. To describe role of MOs in AMR surveillance	1. The common signs and symptoms of leprosy. 2. Examination / Assessment of treatment need of PAL- History taking, General physical examination, examination of skin lesion, examination of nerve 3. Differential diagnosis of leprosy 4. Demonstration of slit skin smear technique, staining and observation of <i>M. leprae</i> under microscope 5. Operational aspects of AMR surveillance	LECTURE DISCUSSION <b>(30 min)</b> CASE DEMONSTRATION <b>(30 min)</b>  ONSITE DEMONSTRATION <b>(30 min)</b>
<b>NLEP, Programmatic Management and counseling of PAL</b>		<b>(2 hours)</b>
1. To discuss history and current strategies of NLEP 2. To discuss patient counseling at the start of treatment 3. To describe management of leprosy using MDT	1. Evolution of NLEP and Current programme strategies. 2. Counseling of patient at the start of treatment 3. Demonstration of various MDT	LECTURE DISCUSSION <b>(45 min)</b> ROLE PLAY <b>(30 min)</b> DEMONSTRATION OF MDT <b>(30 min)</b>
<b>Self activity listing of unanswered questions</b>		<b>(15 min)</b>

### DAY 2: Lepra reactions and its management

Duration: 1 hour

Educational Objectives	Session Contents and Skills	Methodology
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1. Describe high risk PAL for development of reactions	1. Features of PAL at risk of developing reactions	LECTURE DEMONSTRATION <b>(45 min)</b> SCENARIO DISCUSSION / QUIZ <b>(30 min)</b>
2. Diagnose and manage leprosy reactions	2. Clinical presentation of leprosy reactions	
3. Enumerate conditions for referral of PAL with reaction	3. Features of severe reactions	
	4. Treatment of reactions	
	5. Monitoring of PAL with reaction/ neuritis	
	6. Differentiating Relapse and Reaction	
	7. Indications for referral of PAL with reaction	

**Disability Prevention and medical rehabilitation** **Duration: 2 hours**

1. To assess the disabilities among PAL	1. Definition of impairment, Deformity and disability.	LECTURE DEMONSTRATION <b>(45 min)</b>
2. Assessment risk and respective management of disabilities	2. Voluntary Muscle Testing and Sensory Testing	
	3. Grading of the disability	
	4. Management of PAL according to risk of disabilities	

3. Describe prevention and management of contractures	5. prevention and management of contractures	ONSITE LECTURE DEMONSTRATION AT PHYSIOTHERAPY and FOOT-WARE UNIT <b>(60 min)</b>
4. Describe prevention and management of ulcers	6. Care of paralysed muscles	
5. Describe criteria of selection of PAL for RCS	7. Prevention and management of ulcers	
6. To describe home-based self-care POD activities	8. Self-care in leprosy	
	9. Different types of MCR foot-wares.	

**Supervision of NLEP activities in PHC** **Duration: 2 hours**

1. Describe principles, and procedure of supervision	1. Principles, skills and procedure for supervision	LECTURE DISCUSSION
2. Enlist and explain supervisory skills	2. Plan a supervisory cycle and visit	
3. Describe steps in planning a supervisory visit	3. Preparation of supervisory checklist	
4. Prepare supervisory check list		

5. Discuss management of MDT stock and supplies	1. Inventory management techniques	LECTURE DISCUSSION
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**PANEL DISCUSSION on unanswered questions** **(15 min)**

**DAY - 3 Planning and implementation of special activities** **Duration: 2 hours**

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
1. To identify high risk individuals	1. Principles of identification of high risks in programme settings	LECTURE DISCUSSION <b>(60 min)</b>
2. Describe stepwise planning special activities	2. Preparation of implementation checklist	
3. Discuss implementation of special activities at PHC level	3. Community involvement and community based organization in	GROUP PRESENTATION <b>(60 min)</b>

	conduction of special activities at PHC level	
<b>Recording and reporting in NLEP</b>		<b>(2 hours)</b>
1. To discuss various Records to be assessed by MOs 2. To discuss various Reporting formats used at PHC level	1. Suspect register, patient card, treatment register, drug stock record, lepra reactions, referral slips and referral registers, disability register, prednisolone register etc. 2. Monthly reporting format (MPR)	LECTURE DISCUSSION  GROUP EXERCISE (on model MPR)
3. <b>Discuss co-ordination at various levels (Intra and Inter-sectoral)</b>	3. Coordination of NLEP activities with DNT 4. Inter-sectoral coordination of NLEP activities with PRI including Village Health and Sanitation committee etc.	LECTURE DISCUSSION <b>(30 min)</b>
Post-test with discussion		<b>(1 hour)</b>

#### 5.4 CURRICULUM OF TRAINING PROGRAMME FOR SURGEONS

Duration: 5 days

Day	Session	Duration
1	Pre-test	30 min
	Epidemiology of leprosy and National Leprosy Eradication Programme with special emphasis on DPMR activities.	1 hour
	Anatomy and physiology of musculoskeletal system of upper limb, lower limb and facial muscles	2 hours
	Voluntary muscle testing.	1 hour
	Pre-operative physiotherapy for muscular strengthening.	30 min
2	Differential diagnosis and management of neuritis in a patient of leprosy.	1 hours
	Nerve conduction techniques in leprosy.	1 hour
	Orthotic procedures and prescription of appropriate Orthosis in leprosy.	1 hour
	Preparation of splints and plasters for patients affected by of leprosy.	1 hour
	Common surgical procedures in leprosy.	1 hour
3	Assessment of PAL for RCS in upper limb	1 hour
	Various RCS procedures in upper limb.	2 hours
	Post-operative management of leprosy patients.	1 hour
4	Assessment of PAL for RCS in lower limb	1 hour
	Various RCS procedures in lower limb.	2 hours
	Post-operative management of leprosy patients.	1 hour
5	Surgical procedures in restoration of facial muscle functions.	1 hour 30 min
	Management of various ulcers in leprosy patients.	1 hour 30 min
	Organization of prevention of disability (POD) camp	1 hour
	Post-test with discussion	30 min

\*Demonstration of major RCS and hands on training have to be provided, the day wise curriculum may be adjusted accordingly.

\*\*Either of the following methods can be employed for case demonstration of surgical procedures in leprosy in the order of preference.

1. Real time demonstration of surgical procedure in leprosy.
2. Demonstration of surgical procedure in pre-recorded video.
3. Case demonstration in Post-operative of leprosy patient.

## DETAIL CURRICULUM OF TRAINING PROGRAMME FOR SURGEONS

### DAY 1

Educational objectives	Session contents and skills	Methodology
Pre-test		30 min
1. To describe the epidemiology of leprosy. 2. To describe activities under NLEP with special emphasis on DPMR activities.	1. Burden of disease with respect to prevalence of leprosy at global, national and state level. 2. The interaction of agent host and environmental factors in causation of leprosy. 3. Clinical symptoms Classification and management of leprosy. 4. National Leprosy Eradication Programme. 5. DPMR activities in NLEP	LECTURE DISCUSSION (1 hour)
To describe the anatomy and physiology musculo-skeletal system of upper limb, lower limb and facial muscles	1. The origin insertion, nerve supply and action of the muscles at various joints. 2. Motor and sensory nerve supply of the upper limb. 3. Neuro-muscular function and applied anatomy. 4. Various deformities of upper limb seen in leprosy. 5. Innervations and actions of muscles supplied by cranial nerves V <sup>th</sup> and VII <sup>th</sup> .	LECTURE DEMONSTRATION (1 hour) CASE DEMONSTRATION for various deformities in leprosy. (1 hour)
To describe the voluntary muscle testing and sensory testing.	Voluntary muscles testing and sensory testing in leprosy.	CASE DEMONSTRATION (1 hour)
To assess and improve pre-operative muscular strengthening.	Pre-operative physiotherapy techniques for muscular strengthening.	LECTURE DEMONSTRATION (30 min)

### DAY 2

Educational objectives	Session contents and skills	Methodology
To describe differential diagnosis and management of neuritis in a patient of leprosy.	1. Differential diagnosis of neuritis in leprosy patients. 2. Management of neuritis.	LECTURE DEMONSTRATION (1 hour)
To describe various nerve conduction techniques in leprosy.	Nerve conduction studies in leprosy	LECTURE DEMONSTRATION (1 hour)
To describe various orthotic procedures and prescription of appropriate orthosis in leprosy.	1. Orthosis and prothesis. 2. Nerve biopsy 3. Various orthotic procedures in leprosy. 4. Prescription of orthosis.	LECTURE DEMONSTRATION (1 hour)

To demonstrate the preparation of splints and plasters for patients affected by of leprosy.	<ol style="list-style-type: none"> <li>1. Various splints used in leprosy.</li> <li>2. Applications of these splints and plaster casts in the deformities cases of leprosy.</li> </ol>	LECTURE DEMONSTRATION (1 hour)
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### DAY 3

<b>Educational objectives</b>	<b>Session contents and skills</b>	<b>Methodology</b>
Assessment of PAL for RCS in upper limb	<ol style="list-style-type: none"> <li>1. Surgical treatment options for restoration of upper limb functions in leprosy.</li> <li>2. Differential diagnosis of upper limb deformities in leprosy.</li> </ol>	1 hour
Various RCS procedures in upper limb.	Upper limb correction surgery	2 hours
Post-operative management of leprosy patients.	<ol style="list-style-type: none"> <li>1. Common post-operative complications in leprosy and its management.</li> <li>2. Prevention of post-op complications in leprosy.</li> </ol>	1 hour

### DAY 4

<b>Educational objectives</b>	<b>Session contents and skills</b>	<b>Methodology</b>
1. Assessment of PAL for RCS in lower limb	<ol style="list-style-type: none"> <li>1. Surgical treatment options for restoration of lower limb functions in leprosy.</li> <li>2. Differential diagnosis of lower limb deformities in leprosy.</li> </ol>	LECTURE DISCUSSION (30 min) CASE DEMONSTRATION (1 hour)
2. Various RCS procedures in lower limb.	Upper limb correction surgery	
3. Post-operative management of leprosy patients.	<ol style="list-style-type: none"> <li>3. Common post-operative complications in leprosy and its management.</li> <li>4. Prevention of post-op complications in leprosy.</li> </ol>	LECTURE DISCUSSION (30 min) CASE DEMONSTRATION (1 hour)
4. To describe the post-operative management of leprosy patients.	<ol style="list-style-type: none"> <li>5. Common post-operative complications in leprosy and its management.</li> <li>6. Prevention of post-op complications in leprosy.</li> </ol>	LECTURE DISCUSSION (1 hour)

### DAY 5

<b>Educational objectives</b>	<b>Session contents and skills</b>	<b>Methodology</b>
To describe and demonstrate surgical procedures in restoration of facial muscle functions.	<ol style="list-style-type: none"> <li>1. Surgical procedures for restoration of facial muscle functions in leprosy patients.</li> <li>2. Differential diagnosis of facial conditions in leprosy.</li> </ol>	LECTURE DISCUSSION (30 min) CASE DEMONSTRATION (1 hour)

1. To describe management of various ulcers in leprosy patients.	1. Various types of ulcers in leprosy patients. 2. Surgical management of these ulcers. 3. Physiotherapy techniques in management of ulcers.	CASE DEMONSTRATION (1 hour) DISCUSSION (1 hour)
2. To describe common surgical procedures in leprosy.	1. Skin biopsy. 2. Management of nerve abscess. 3. Various limb amputations.	LECTURE DISCUSSION (1 hour) CASE DEMONSTRATION (30 min)
3. Organization of prevention of disability (POD) camp	Practical exercise for various aspects of arrangement of POD camps.	LECTURE DISCUSSION (1 hour)
Post-test with discussion		1 hour

### 5.5. CURRICULUM FOR TRAINING OF PHYSIOTHERAPIST

**Duration 5 days**

Day	Session	Duration
1	Pre-test	30 min
	1. Epidemiology of leprosy.	1 hour
	2. Anatomy of upper limb.	1 hour 30 min
	3. Anatomy of lower limb.2	1 hour 30 min
2	1. Need of physiotherapy in leprosy	1 hour
	2. To describe the voluntary muscle testing	1 hour
	3. To evaluate the preoperative muscular strength and requirement of physiotherapy.	1 hour
	4. To describe neuro-paralytic conditions of face among leprosy patients.	1 hour
	5. Group discussion on specific issues of participants	30 min
3	1. To describe the physiotherapy modalities in leprosy patients.	1 hour 30 min
	2. To describe the role of electrotherapy in leprosy.	1 hour 30 min
	3. To describe the post-operative physiotherapy applications for leprosy patients.	1 hour
	4. Group discussion on specific issues of participants	30 min
4	To demonstrate the preparation of splints and plasters for patients affected by of leprosy.	1 hour 30 min
	To describe the role of physiotherapy in leprosy patients of lepra reactions and neuritis.	1 hour 30 min
	To describe management of various ulcers in leprosy patients.	1 hour 30 min
5	1. To describe components of health education and counselling to the patients of leprosy.	2 hours
	2. To describe criteria selection of patient for surgical intervention.	1 hour 30 min
	3. To describe the pre-operative and post operative management of leprosy patient.	
	4. Preparation for prevention of disability (POD) camp	1 hour

	Post-test with discussion	1 hour
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## CURRICULUM FOR TRAINING PROGRAMME FOR PHYSIOTHERAPIST

### DAY 1

Educational objectives	Session contents and skills	Methodology
Pre-test		30 min
1. To describe the epidemiology of leprosy.	1. Burden of disease with respect to prevalence of leprosy at global, national and state level. 2. The interaction of agent host and environmental factors in causation of leprosy. 3. Clinical symptoms Classification and management of leprosy. 4. National Leprosy Eradication Programme.	LECTURE DISCUSSION (1 hour)
2. To describe the anatomy of upper limb.	1. The origin insertion, nerve supply and action of the muscles at various joints of upper limb. 2. Bones of upper limb, with special reference to small bones of hand. 3. Motor and sensory nerve supply of the upper limb. 4. Various deformities of upper limb seen in leprosy.	LECTURE DEMONSTRATION (1 hour) CASE DEMONSTRATION for various deformities in leprosy. (30 min)
3. To describe the anatomy of lower limb.	1. The origin insertion, nerve supply and action of the muscles at various joints of lower limb. 2. Bones of upper limb, with special reference to maintenance of arches of foot. 3. Motor and sensory nerve supply of the lower limb. 4. Various deformities of lower limb seen in leprosy.	LECTURE DEMONSTRATION (1 hour) CASE DEMONSTRATION for various deformities in leprosy. (30 min)

### DAY 2

Educational objectives	Session contents and skills	Methodology
1. To describe the need of physiotherapy in leprosy	1. The role of physiotherapy in adjuvant treatment in leprosy and care of patients affected with leprosy. 2. DPMR activities in NLEP.	LECTURE DISCUSSION (1 Hour)
2. To describe the sensory testing and voluntary muscle testing	1. Sensory testing 2. Voluntary muscles testing in leprosy.	LECTURE DEMONSTRATION (1 hour)
3. To evaluate the preoperative muscular strength and requirement of physiotherapy	Pre-operative muscular strengthening techniques.	LECTURE DEMONSTRATION (1 hour)

4. To describe neuro-paralytic conditions of face among leprosy patients.	Innervations and actions of muscles supplied by cranial nerves V <sup>th</sup> and VII <sup>th</sup> .	LECTURE DISCUSSION (1 hour)
Group discussion on specific issues of participants.		30 min.

### DAY 3

<b>Educational objectives</b>	<b>Session contents and skills</b>	<b>Methodology</b>
1. To describe the physiotherapy modalities in leprosy patients.	Physiotherapy modalities in Leprosy a. Wax bath b. Massage c. Exercises d. Splinting e. Electro-therapy f. Nerve simulative therapy etc.	LECTURE DISCUSSION (1 hour) DEMONSTRATION (1 hour)
2. To describe the post-operative physiotherapy applications for leprosy patients.	Selection and use of physiotherapy modalities in post-operative patients.	LECTURE DISCUSSION (1 hour)
3. To demonstrate various exercises for POD	Various self exercises for Prevention of deformities	DEMONSTRATION (1 hour)

### DAY 4

<b>Educational objectives</b>	<b>Session contents and skills</b>	<b>Methodology</b>
1. To demonstrate the preparation of splints and plasters for patients affected by of leprosy.	1. Various splints used in leprosy. 2. Applications of these splints and plaster casts in the deformities cases of leprosy.	LECTURE DEMONSTRATION (1 hour) DEMONSTRATION (30 min)
2. To describe the role of physiotherapy in leprosy patients of lepra reactions and neuritis.	3. Role of physiotherapy techniques in leprosy patients with lepra reactions. 4. Physiotherapy applications in leprosy patients of neuritis.	LECTURE DISCUSSION (1 hour) DEMONSTRATION (30 min)
3. To describe management of various ulcers in leprosy patients.	5. Various types of ulcers in leprosy patients. 6. Management of ulcers by physiotherapy. 7. Surgical management of these ulcers.	CASE DEMONSTRATION (1 hour) DEMONSTRATION (30 min)

### DAY 5

<b>Educational objectives</b>	<b>Session contents and skills</b>	<b>Methodology</b>
1. To describe components of health education and	1. Basic concepts of health education.	LECTURE DISCUSSION (1 hour)



counselling to the patients of leprosy.	2. Components of counselling specific to leprosy. 3. Home based self care and ulcer care practices.	DEMONSTRATION (1 hour)
2. To describe criteria selection of patient for surgical intervention 3. To describe the pre-operative and post operative management of leprosy patient.	4. Criteria for patient selection for Re-constructive-surgery (RCS) 5. Components of pre-operative and post operative care of patients for RCS. 6. Various RCS procedures in leprosy patients.	LECTUREDISCUSSION (1 hour) DEMONSTRATION (30 min)
4. Preparation for prevention of disability (POD) camp	7. Practical exercise for various aspects of arrangement of POD camps.	LECTUREDISCUSSION (1 hour)
Post-test with discussion		1 hour

## 5.6 CURRICULUM FOR TRAINING OF LABORATORY TECHNICIANS

**Duration: 5 days**

Day	Sessions	Duration
1	Pre-test	30 min
	To describe the common manifestation in Leprosy	2 hours
	To describe National Leprosy Eradication Programme	2 hours
2	To discuss the skin smears in NLEP	1 hours
	To demonstrate slit skin smear technique.	4 hours
	To calculate various indices in slit skin smear	2 hours
3	To describe role of LTs in AMR surveillance	
	To demonstrate slit skin smear technique.	4 hours
	To discuss Bacteriological characteristics of <i>M. leprae</i>	1 hour
4	To describe management of laboratory wastes.	1 hour
	To demonstrate slit skin smear technique.	4 hours
	To discuss preparation of various stains and reagents for slit skin smear for diagnosis leprosy.	1 hour
5	To discuss applications molecular biology techniques in NLEP	1 hour
	To demonstrate slit skin smear technique.	4 hours
	To demonstrate the various aspects in maintenance of quality of skin smears.	2 hours
	Post-test with discussion	1 hour

## **DETAILED SESSION WISE CURRICULUM FOR LABORATORY TECHNICIAN**

### **Day - 1**

<b>Educational Objectives</b>	<b>Session Contents</b>	<b>Methodology</b>
Pre-test		30 min
1. To describe the common manifestation in Leprosy	1. Common Signs and Symptoms of Leprosy 2. Natural history and pathogenesis of leprosy 3. Examination of Skin lesion nerve examination	LECTURE DISCUSSION (1 hour)  CASE DEMONSTRATION (1 hour)
2. To describe National Leprosy Eradication Programme	4. Evaluation of NLEP and current Programme strategies. 5. Epidemiological situation of leprosy and factors affecting it	LECTURE DISCUSSION (2 hours)
3. To discuss the skin smears in NLEP	7. To discuss the skin smears in the management of leprosy.	LECTURE DISCUSSION (1 hour)

### **Day-2**

<b>Educational Objectives</b>	<b>Session Contents</b>	<b>Methodology</b>
To demonstrate slit skin smear technique.	Sample collection, making smear, staining, examination and reporting of the slit skin smear	Hands on training (4 hours)
To calculate various indices in slit skin smear	Calculation of BI and MI	LECTURE – DISCUSSION (1 hour)
To describe role of LTs in AMR surveillance	Specimen collection and transportation for AMR Surveillance	Lecture, Demonstration (1 hour)

### **Day 3**

<b>Educational Objectives</b>	<b>Session Contents</b>	<b>Methodology</b>
To demonstrate slit skin smear technique.	Sample collection, making smear, staining, examination and reporting of the slit skin smear	Hands on training (4 hours)
To discuss Bacteriological characteristics of <i>M. Leprae</i>	Bacteriology of <i>M. leprae</i>	LECTURE – DISCUSSION (1 hours)
To describe management of laboratory wastes.	Principles and practice of management of various laboratory wastes	LECTURE – DISCUSSION (1 hours)

### **Day 4**

<b>Educational Objectives</b>	<b>Session Contents</b>	<b>Methodology</b>
To demonstrate slit skin smear technique.	Sample collection, making smear, staining, examination and reporting of the slit skin smear	Hands on training (4 hours)
To discuss preparation of various stains and reagents for	Characteristics of good quality stains and reagents	LECTURE – DISCUSSION

slit skin smear for diagnosis leprosy	Preparation of stains and reagents	(1 hour)
To discuss molecular biology techniques in NLEP	Isolation of genetic material of <i>M.leprae</i> . Sequencing and identification of organism.	LECTURE – DEMONSTRATION (1 hours)

### **Day 5**

<b>Educational Objectives</b>	<b>Session Contents</b>	<b>Methodology</b>
To demonstrate slit skin smear technique.	Sample collection, making smear, staining, examination and reporting of the slit skin smear	Hands on training (4 hours)
To demonstrate the various aspects in maintenance of quality of skin smears.	Quality assurance of skin smears in leprosy	LECTURE – DISCUSSION (1 hours)
Post test with discussion		1 hour

## **5.7 CURRICULUM FOR TRAINING OF HEALTH SUPERVISORS (NMS/HE/HI/NMA/HA etc.)**

**Duration: 5 days**

<b>Day</b>	<b>Sessions</b>	<b>Duration</b>
1	Pre-test	30 min
	1. Epidemiology of leprosy	3 hours
	2. National Leprosy Eradication Programme	2 hours
	3. Roles and responsibilities of health supervisors	
2	1. Supervision and monitoring of NLEP activities	3 hours
	2. Organization, conduction/supervision of IEC activities	2 hours
3	1. Field activities	5 hours
4	1. Case detection and treatment compliance activities in leprosy	2 hours
	2. Supervision of DPMR activities in the jurisdiction area	3 hours
5	1. Recording and reporting in NLEP	2 hours
	2. Inter sectoral coordination	1 hour
	3. Management of special activities in NLEP	1 hour
	Post-test with discussion	30 min

**DETAILED CURRICULUM FOR TRAINING OF HEALTH SUPERVISORS  
(NMS/HE/HI/NMA/HA etc.)**

**DAY 1: Epidemiology and NLEP**

**Duration: 5 hours**

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
Pre-test		30 min
1. To describe Epidemiological pattern of leprosy.	1. Incidence and prevalence of leprosy especially at local (state/district /block) level.	LECTURE DISCUSSION (1 hour)
2. To demonstrate clinical manifestations, diagnosis and classification of leprosy 3. Differential diagnosis of skin lesions	1. Cardinal signs and symptoms of leprosy. 2. General physical examination, examination of skin lesion, Sensory Testing, Voluntary Muscle Testing. 3. Clinical diagnosis, classification and differential diagnosis of leprosy 4. Applications of skin smears in leprosy	CASE DEMONSTRATION (30 min) SLIDE SHOW for differential diagnosis (30 min)
4. Case management of leprosy in NLEP 5. Management of lepra reactions	1. Clinical management of leprosy. 2. Management of lepra reactions.	LECTURE DEMONSTRATION (demonstration of MDT)(1 hour)
6. To discuss specific issues in implementation of NLEP.	1. Strategies and innovative interventions for area specific issues in NLEP.	GROUP DISCUSSION (30 min) Presentation by 2-3 participants in their setting Innovative initiatives (if any)
<b>Roles and responsibilities of Health Supervisors</b>		
To discuss job responsibilities of Health Supervisor in NLEP	1. Overall supervision of NLEP activities in the jurisdiction. 2. Ensure appropriate patient management in the field of work. 3. Maintaining records and timely reporting. 4. Coordination with VHSC, PRI etc.	LECTURE DISCUSSION (1 hour)

**DAY – 2. Supervision and monitoring of NLEP activities**

**Duration: 3 hours**

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
1. To discuss supervision of various activities in NLEP. 2. To prepare supervisory checklist.	1. Principles, skills and procedures for effective supervision. 2. Supervision of case detection, treatment compliance and rehabilitation activities.	LECTURE DISCUSSION (1 hour)

3. To discuss various Records to be assessed by PHC MO	3. Suspect register, patient card, treatment register, drug stock record, lepra-reactions, referral slips and referral registers, disability register, prednisolone register etc.	LECTURE DISCUSSION (1 hour)
4. To discuss various Reporting formats used at PHC level	4. Preparation of Monthly Reporting Format (MPR) 5. Calculation and interpretation of various programme indicators	

**DAY - 2. Organization, conduction/supervision of IEC activities (2 hours)**

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
1. To discuss IEC activity in the community and for leprosy affected persons.	Specific messages and channels for communications. Utilization of media for specific IEC.	LECTURE DISCUSSION (1 hour)
2. General principles for IEC organization and conduction.	Patient counseling and IEC.	ROLE PLAY (1hour) GROUP DISCUSSION

**Day 3: Field visit**

**Duration: 5 hours**

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
1. To supervise, monitor and evaluate NLEP activities in the field area. 2. Provide practical field training in planning and implementation of specific activities such as school survey, house-to-house survey etc. 3. To impart training on implementation of social welfare measures for PAL.	1. Visit to PHC/ Health Center for monitoring and supervision of NLEP activities. 2. Community based survey for early case detection. 3. IEC and stigma reduction activities for prevention and control of leprosy.	FIELD VISIT  (Visit to a Centre conducting NLEP activities e.g. DLO, organization of special activity e.g. School health Education programme, visit to leprosy colony, house-to-house visit for case detection activities etc.)

**DAY - 4 Case detection and treatment compliance activities in leprosy**

**(2 hours)**

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
1. To describe various case detection modalities in leprosy	1. Organization and conduction of health survey in high risk areas e.g. Migrants, Tribal, Brick kiln worker colonies etc. 2. Organization of survey in congregation areas e.g. schools, Prisons etc. 3. Conduction of household contact surveys e.g. for new MB and Child cases.	LECTURE DISCUSSION (1 hour)

2. To ensure treatment compliance	4. Key messages to be communicated to a person affected by leprosy and family members at different stages. 5. Defaulter retrieval mechanism. 6. Referral mechanism in NLEP.	LECTURE DISCUSSION (1 hour)
GROUP DISCUSSION on case detection and treatment compliance(1 hour)		

**DAY – 4 Supervision of DPMR activities in the jurisdiction area (3 hours)**

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
To supervise DPMR services under NLEP	1. DPMR services in NLEP.	LECTURE-DISCUSSION (1 hour)
Community based rehabilitation		1 hour
1. To discuss various rehabilitative needs for PAL. 2. To describe procedure of organizing rehabilitation programme for leprosy affected in the community 3. To discuss methods of integrating and coordinating with organizations providing rehabilitative services for other debilitating diseases for benefit of PAL	2. Rehabilitation and its types 3. Assessment of rehabilitative needs of the PAL 4. Organization of rehabilitation services for disabled 5. Facilities available for Community based rehabilitation of leprosy affected persons under health system and other ministries like MOSJ and E /other NGOs/ Civil bodies 6. Procedure of coordination with other organizations providing specialized services for rehabilitation of PAL and with those for other debilitating diseases. 7. Social welfare schemes for LAPs	LECTURE DISCUSSION: Rehabilitation programme and facilities available for disabled people

**DAY 5 Management of specific issues in NLEP (4 hours)**

<b>Recording and reporting in NLEP</b>		
<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
1. To discuss various Records to be assessed by PHC MO 2. To discuss various Reporting formats used at PHC level	1. Suspect register, patient card, treatment register, drug stock record, lepra-reactions, referral slips and referral registers, disability register, prednisolone register etc. 2. Monthly reporting format (MPR)	LECTURE DISCUSSION (1 hour) GROUP EXERCISE (on model MPR) (1 hour)
<b>Inter-sectoral coordination</b>		
1. Discuss co-ordination at various levels (Intra and Inter-sectoral)	1. Coordination of NLEP activities with DNT 2. Inter-sectoral coordination of NLEP activities with PRI including Village Health and Sanitation committee etc.	LECTURE DISCUSSION (1hour)
<b>Management of special activities in NLEP</b>		

1. To describe preparing PIP. 2. To discuss planning and implementation of special activities in NLEP.	1. Preparation of annual action plan and PIP. 2. Vulnerability mapping and planning and implementation of active case detection	LECTURE DISCUSSION (1hour)
Post -Test with discussion		30 min

**5.8 CURRICULUM FOR TRAINING OF HEALTH WORKER AT PHC/HSC (ANM/MPW/Jr.HA etc.)**  
**Duration: 5 days**

Day	Sessions	Duration
1	Pre-test	30 min
	1. Epidemiology of leprosy	3 hours
	2. National Leprosy Eradication Programme	2 hours
2	1. IEC and counseling	2hours
	2. Case detection and treatment compliance activities in leprosy	3 hours
3	2. Field activities	5 hours
4	1. Providing DPMR services in the jurisdiction area	3 hours
	2. Social rehabilitation	2 hours
5	4. Management of specific issues in NLEP	4 hours
	Post-test with discussion	30 min

**Detailed Curriculum for Training of Health workers at PHC/HSC(ANM/MPW/Jr. HA etc.)**

**DAY 1: Epidemiology of leprosy and introduction to NLEP (5 hours)**

Educational Objectives	Session Contents and Skills	Methodology
Pre-test		(30 min)
1. To describe Epidemiological importance of leprosy. 2. To describe NLEP strategies to eliminate leprosy.	1. Situational update of leprosy especially at local level. 2. NLEP strategies to eliminate leprosy.	LECTURE DISCUSSION (1 hour)
3. To describe clinical manifestations, diagnosis and classification of leprosy. 4. To differentiate conditions resembling leprosy.	3. The common signs and symptoms of leprosy. 4. General physical examination, examination of skin lesion, Sensory Testing, Voluntary Muscle Testing. 5. Clinical diagnosis, classification and differential diagnosis of leprosy 6. Identification of suspects of leprosy.	CASE DEMONSTRATION (1 hour) SLIDE SHOW for differential diagnosis (1 hour)

5. Case management of leprosy in NLEP 6. Identification and referral for lepra reactions	7. Clinical management of leprosy. 8. Identification of lepra reactions and referral.	LECTURE DEMONSTRATION (with demonstration of MDT) <b>(1 hour)</b>
7. To discuss specific issues in implementation of NLEP.	9. Strategies and innovative interventions for area specific issues in NLEP.	GROUP DISCUSSION <b>(30 min)</b> Presentation by 2-3 participants in their settings in innovative problem-solving initiatives
<b>Roles and responsibilities of Health Supervisors</b>		
8. To discuss job responsibilities of Health worker in NLEP	10. Impart Health Education to community. 11. Suspect leprosy cases and refer them to PHC. 12. Ensure MDT compliance and assist health supervisor in retrieval of absentee/defaulters. 13. Updation of patient cards and treatment register. 14. Assist PAL in self care practices, monitor them and refer them to PHC when ever required.	LECTURE DISCUSSION <b>(1 hour)</b>

**DAY – 2. IEC and Patient counseling**

**Duration: 2 hours**

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
1. Discuss role of health care facility in combating stigma and discrimination due to leprosy	1. Key messages to generate awareness regarding leprosy linkages with NRHM for implementation of IEC activities. 2. Contents, channels and feedback in patient counselling.	LECTURE DISCUSSION <b>(1 hour)</b>
2. Discuss the modalities of counselling leprosy patient at various stages of treatment	3. Counselling at the start of MDT 4. Counselling on treatment completion 5. Counselling of PAL family	ROLE PLAY (Annex.5) <b>(1 hour)</b>

**DAY – 2 Case detection and treatment compliance activities in leprosy**

**3 hours**

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
1. To describe various case detection modalities in leprosy	1. Organization and conduction of health survey in high risk areas e.g. Migrants, Tribal, Brick kiln worker colonies etc. 2. Organization of survey in congregation areas e.g. schools, Prisons etc.	LECTURE DISCUSSION <b>(1 hour)</b>



	3. Conduction of household contact surveys e.g. for new MB and Child cases.	
2. To ensure treatment compliance	4. Key messages to be communicated to a person affected by leprosy and family members at different stages. 5. Defaulter retrieval mechanism. 6. Referral mechanism in NLEP.	LECTURE DISCUSSION <b>(1 hour)</b>
GROUP DISCUSSION on case detection and treatment compliance		<b>(1 hour)</b>

### Day 3: Field visit

**Duration: 5 hours**

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
1. To supervise, monitor and evaluate NLEP activities in the field area. 2. Provide practical field training in planning and implementation of specific activities such as school survey, house-to-house survey etc. 3. To impart training on implementation of social welfare measures for PAL.	1. Visit to PHC/ Health Center for monitoring and evaluation of NLEP activities. 2. Community based survey for early case detection. 3. IEC and stigma reduction activities for prevention and control of leprosy.	<b>FIELD VISIT</b> (Visit to a Centre conducting NLEP activities e.g. DLO, organization of special activity e.g. School health Education programme, visit to leprosy colony, house-to-house visit for case detection activities etc.)

### DAY - 4 Providing DPMR services in the jurisdiction area

**3 hours**

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
1. To discuss DPMR services under NLEP.	1. Various DPMR services under NLEP.	LECTURE-DISCUSSION <b>(1 hour)</b>
<b>Community based rehabilitation</b>		<b>2 hours</b>
2. To discuss various rehabilitative needs for PAL. 3. To describe procedure of organizing rehabilitation programme for leprosy affected in the community 4. To discuss methods of integrating and coordinating with organizations providing rehabilitative services for other debilitating	2. Rehabilitation and its types 3. Assessment of rehabilitative needs of the PAL 4. Organization of rehabilitation services for disabled 5. Facilities available for Community based rehabilitation of leprosy affected persons under health system and other ministries like MOSJ and E /other NGOs/ Civil bodies 6. Procedure of coordination with other organizations providing specialized services for rehabilitation of PAL and with those for other debilitating diseases	LECTURE DISCUSSION: Rehabilitation programme and facilities available for disabled people

diseases for benefit of PAL		
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### **Social Rehabilitation of leprosy patients**

**2 hours**

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
5. To discuss referrals and cross notification in NLEP	7. Appropriate referrals of various cases at PHC under NLEP.	LECTURE-DISCUSSION <b>(1 hour)</b>
6. To discuss various social welfare schemes for leprosy patients.	8. Centrally sponsored schemes for leprosy patients. 9. State specific social security schemes.	LECTURE-DISCUSSION <b>(1 hour)</b>

### **DAY 5 Management of specific issues in NLEP**

<b>Recording and reporting in NLEP</b>		<b>2 hours</b>
<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
1. To enlist various Records to be assessed by PHC MO 2. To discuss various Reporting formats used at PHC level	1. Suspect register, patient card, treatment register, drug stock record, lepra-reactions, referral slips and referral registers, disability register, prednisolone register etc. 2. Monthly reporting format (MPR)	LECTURE DISCUSSION (1 hour) GROUP EXERCISE (on model MPR) <b>(1 hour)</b>
<b>Inter-sectoral coordination</b>		<b>1 hour</b>
1. Discuss co-ordination at various levels (Intra and Inter-sectoral)	1. Coordination of NLEP activities with DNT 2. Inter-sectoral coordination of NLEP activities with PRI including Village Health and Sanitation committee etc.	LECTURE DISCUSSION <b>(1hour)</b>
<b>Management of special activities in NLEP</b>		<b>1 hour</b>
1. To describe assist supervisor in planning and implementation of NLEP activities. 2. To discuss planning and implementation of special activities in NLEP.	1. Preparation of annual action plan and PIP etc. 2. Vulnerability mapping and planning & implementation of active case detection	LECTURE DISCUSSION <b>(1 hour)</b>
Post -Test with discussion		<b>30 min</b>

## 5.9 CURRICULUM FOR TRAINING OF ASHAs

**Duration: 2 days**

Day	Sessions	Duration
1	Pre-test	30 min
	1. What is leprosy and NLEP?	3 hours
	2. Common symptoms of leprosy and lepra reactions	
	3. Treatment of leprosy and maintaining compliance	
	4. Prevention of Disability (Self-care and physiotherapy)	
	5. Social schemes for leprosy patients	
6. Role of ASHA in NLEP		
2	1. Reduction of Stigma and prevention of discrimination against leprosy (Do's Don'ts)	1 hours
	2. Conduction of household survey with emphasis on interpersonal communication	2 hours
	3. Facilitating community perception by appropriate communication	1 hours
	Post-test with discussion	30 min

### Detailed session wise curriculum for training of ASHAs

#### DAY – 1 Programmatic management of leprosy

Educational Objectives	Session Contents and Skills	Methodology
Pre-test		<b>30 min</b>
Orientation on programmatic management of leprosy.	1. What is leprosy and NLEP?	PICTORIAL PRESENTATION <b>(1 hour)</b> and CASE DEMONSTRATION <b>(2 hours)</b>
	2. Common symptoms of leprosy and lepra reactions	
	3. Treatment of leprosy and maintaining compliance	
	4. Prevention of Disability (Self-care and physiotherapy)	
	5. Social welfare schemes for leprosy patients and their families	
	6. Role of ASHA in NLEP	
<b>Self-activity listing of unanswered questions</b>		<b>(30 min)</b>

## DAY – 2 Communication with the community

<b>Educational Objectives</b>	<b>Session Contents and Skills</b>	<b>Methodology</b>
Reduction of stigma and discrimination against leprosy	What is stigma and discrimination? Communicating with community for reduction of stigma and prevention of discrimination against leprosy.	LECTURE DISCUSSION <b>(1 hour)</b>
Conduction of household survey with emphasis on interpersonal communication	Planning and organization of house-to-house survey. Identification and management of suspects	GROUP DISCUSSION & ROLE PLAY <b>(2 hours)</b>
Facilitating community perception by appropriate communication	Frequently asked questions	ROLE PLAY <b>(1 hour)</b>
Post test		<b>(30 min)</b>

## CHAPTER: 6 TRAINING EVALUATION

It is imperative to evaluate the short term effects and long term gains of any training programme to update the knowledge and expected performance up-gradation with respect to the changing programme strategies. This is especially important for the National Leprosy Eradication Programme addressing a chronic disease (leprosy) having wide spread stigma prevalent in the community.

The most widely used training evaluation method is the one provided by Donand Kirkpatric in 1959 and 1998 to assess the effects and impact of training programme at four different levels. These levels are arranged in the order of improvement in the desired work output by the individual due to training.

Level	Component	Objective measure
I	Reaction	Participants satisfaction
II	Learning	Change in knowledge, skills and attitudes of the participants
III	Behaviour	Measuring the behavioural change in the participant
IV	Results	Assessing the impact of the training

Assessment of performance of training programme in reference to NLEP

### **Level-I: REACTION**

The assessment of immediate effect of the training programme that need to be evaluated during or immediately after the training session.

This will be ensured by providing a session evaluation checklist after each session in the training.

This can be implemented at two levels

- Immediately after each session separately
- At the end of the day separately for each session / combined as per the objectives of the day's schedule

### Model session evaluation sheet

Date and Time of the session :
Topic / Title:
Faculty:

**A. Objective evaluation:**

Questions	Response				
	Very poor (1)	Poor (2)	Average (3)	Good (4)	Very good (5)
<b>Topic</b>					
The topic was relevant to me					
The topic was relevant to its contents					
<b>The presenter</b>					
Appropriate knowledge of the presenter					
Clarity in the presentation					
<b>The contents</b>					
The contents of the presentation was appropriate					
The contents were adequately covered					
<b>Participant interaction</b>					
Aroused interest of the participant					
Allowed participant questions					

**B. Qualitative evaluation:**

Enlist two best things of the session, you like most?

.....  
 .....

Enlist two important things you suggest for improvement?

.....  
 .....

**C. Overall evaluation**

Grade the overall performance of the presentation on 1-5 scale as above.

Very poor	Poor	Average	Good	Very good
1	2	3	4	5

The evaluation is to be used for assessment of the session for further improvement.

**Level-II: LEARNING**

This type of evaluation is commonly performed by pre/post-test evaluation. A framed set of questions are put forth to the participants before they are exposed to any of the course content. This is pre-test evaluation. Pre-test evaluation provides valuable information about the status of knowledge and attitudes of the participants before attending the training programme. Then they are exposed to the training as per the schedule. At the end of the course, the same set of questions are provided again to the participants and their scores are

tallied to assess the performance of the training programme with respect to the knowledge and perception/attitudes of the participant.

Following is the checklist for pre/post-test evaluation of the training programme to assess the performance of the programme.

1. The pre/post-test evaluation is to be done for assessment of the training programme and should never be viewed as the performance of the participant.
2. The pre/post test questions should be alike and it should not differ, so as to evaluate the performance of individual trainee based on their performance before and after the training programme.
3. The pre/post test questions should contain proportional representation of the course contents. Such questions can be derived from the curriculum contents as provided in the training design component of this document.
4. The pre/post test questions should preferably be in the form of multiple choice questions (MCQ). These questions should be pretested and validated for quality and contents. Item analysis should be performed for the set of questions being used in the questionnaire.
5. The pre/post test questions should be based on the contents taught in the session, however some logical interpretations out of the didactic sessions can be expected but number of such questions should be only a few.
6. The questions in the pre/post-test questionnaire need to be updated frequently. 10% revision of the questions according to the operational programme modifications being done time to time can be adjusted in the course contents as well as in the evaluation formats.

Many times it is felt that the participants should learn everything. Unfortunately it is not possible to learn everything! Knowledge of human body and medicine, understanding of traditions and ways of behaving in a society, skills in administration and in educational methods are all relevant to health care staff. Learning all that is known in all of these fields would be beyond the scope of the most able student in the largest course. Therefore, the choice has to be made about what details should be left out of the course. It is simply not possible to learn everything that is known about medical sciences and health care. So some selection is essential.

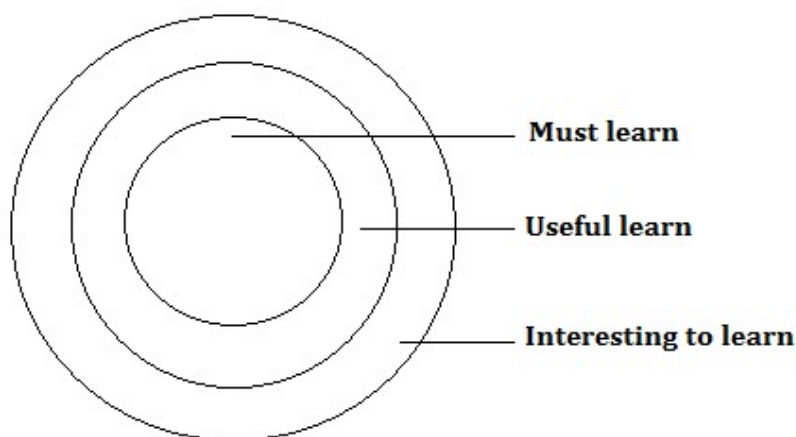
The content evaluation of any session need to be designed based upon:

1. Work profile of the participant in the implementation of the programme.
2. The expected level of improvement from the participant

To fulfil the above needs, the technical content evaluation sheet require to be covering the must know, desirable to know and nice to know topics in appropriate proportions.

The contents of any training session should address the need of the participants. 70% proportion of the content evaluation sheet should contain the basic programme expectation from the participant, which is the most important expected gain from the participant.

Proportionate Contents of the evaluation sheet



### **Level-III: BEHAVIOUR**

To assess the behaviour change in the participants of the training programme, they should be allowed to work in their specified location and position. The performance of the worker in the field after the training programme can also be assessed by an assessment questionnaire. Such evaluation should be preferably carried out after 6-12 months of the training programme. The behaviour change assessment can only be performed with the cooperation from the supervisor of the person to be evaluated. To avoid subjective bias in the assessment of the behaviour change in the training participant supervisors of the trainee can be blinded by the exact questions of evaluation. But the assessment of effectiveness of the training programme should invariably include the supervisor's perception about the individual's performance before and after the training programme in a positive manner.

Such evaluation can be performed based on several activities of the health personnel such as case finding activities, treatment compliance, DPMR activities etc.

Behavioural performance assessment can be done in two stages.

**Stage 1. Self-assessment of the performance:** In this evaluation the individual is asked to assess his/her own performance with respect to contribution to various components of the programme. E.g. case finding, ensuring treatment compliance, stigma reduction in the community, patient education for self-care etc. this set of activities are pre designed into as



per known enlisted components of the programme individual contribution to this activity is asked to note.

**Stage 2. Assessment by the supervisor:** The assessment of the performance of an individual with respect to the self-assessment of the contribution towards various programme components. To avoid subjective bias the performance of several other individuals (employees) also can be asked.

The common observations between the self-assessment and supervisor's assessment are enlisted and graded for further evaluation.

The pre and post training behavioural change can be noted and assessed for further evaluation of training. The requirement of training of an individual can be assessed based on the performance, weaker areas need to be identified and improved subsequently.

#### **Level-IV: RESULT**

The ultimate impact of the training programme can also be assessed in the form of several indicators. This type of evaluation should be carried out every 6-12 months. Performance of the trainees field area can be assessed by various indicators such as number of cases detected before the training and 6-12 months after the training, proportion grade II deformities among newly detected cases, proportion of child cases among new cases detected, proportion of MB among new cases. Initially these cases may increase due to detection of more cases due to training of the individual but eventually over a period of 12-24 months the number of cases detected should decrease. Service components also will be increased such as number of special activities conducted, number of RCS performed, number of training of subordinate staff etc. the implementation of innovative approaches for addressing specific field level problems required to be identified and appraised accordingly.

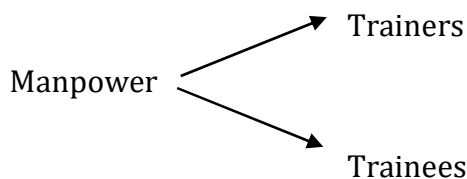
The government of India institutions such as CLTRI and RLTRI will assess the level III and level IV performance, while level I and level II performance need to be assessed at the respective training sites. The formats for the evaluation at the institution level should be in consultation with the training team as listed above.

**CHAPTER: 7**  
**TRAINING NEEDS ASSESSMENT**  
**IMPLEMENTATION PLAN**

**IDENTIFICATION OF RESOURCES:**

The resource mapping need to be done based on the available resources. The trained manpower will be categorized at the regional level to be made available for the training at various levels. There will be mapping of trainers and required trainees to be trained. The trainees to be trained will be derived from input received from State Leprosy Officers of each state. Based on the feedback of the state the number and type of training will be decided.

The committee proposed development of core training team to be pooled from database of national trainers, trainers available at Govt. of India Leprosy Institutes (CLTRI & RLTRIs) and those from the office of the regional directors. Also the involvement of medical colleges in the states should be considered based on the available expertise resources.



**Institutional mapping for training implementation**

<b>Level of training</b>	<b>Core Trainers</b>	<b>Trainees</b>	<b>Institutes (Venue)</b>
State/Regional	National Trainers + GOI Leprosy Institutes + SRD	SLO, DLO, DLC, RCS surgeons, Lab., Tech., Physio. Tech. and specialists	GOI Leprosy institutes State Training Cell Medical Colleges
District	SLO, SLC, DLO, DLC	BMO, MO, NMS, Pharmacists, HI, HE	Dist. Training Cell Dist. HFW officer
Block	DLO, DLC, Block MO	PMW ASHA	Block PHC

**TRAINING IMPLEMENTATION PLAN**

The implementation of trainings according to training needs assessment will be performed with following steps.

1. **Formation of resource database (Resource Mapping)**
2. **Standard training manuals**
3. **Preparation of training calendars**
4. **Training evaluation (Immediate / Long term)**

**1. Formation of Database:**

**Information required from state:** The information required for resource mapping will be acquired from the states for further planning and implementation.

The resource mapping include institutions for conduction of institutional training, the expert manpower as faculties and the facilities such as hospital / patients, instruments and equipments, AV aids, IEC material etc.

**a. Institutional framework available with the state**

Institutions in the state	Facilities available (Hospital /patients, AV aids, IEC material, equipment etc)	Type of activities performed (Training, Clinical, RCS, Other ....)	Address
<b>National level institutes with leprosy training component</b>			
1.			
2.			
<b>State/Regional Level Institutes</b>			
1.			
2.			
<b>NGO Institutes</b>			
1.			
2.			
<b>District level institutes (training cell)</b>			
1.			
2.			

**b. Manpower resource (Trainers) (Database)**

The resources will be mapped based on members required for national level pool of trainers with representation from each state/region (National trainers). State / Regional and District level trainers need to be identified by the states and mapped as follows.

Level	Number available	Designation, Qualification and Topic of expertise	Contact details	Contribution to NLEP
<b>State level trainers</b>				
1. .... (SLO)				
2. .... (SLC)				
3. .... (Any other resource)				
<b>District level trainers (No. of Dist.....)</b>				
1. .... (DLO)				
2. .... (DLCs)				

3. .... (Any other resource)				
Blocks level trainers (Total No. of Blocks:.....)				
1. Block MOs				
2. Other MOs				
3. .... (Any other resource)				

**c. Mapping of the trainees**

The mapping of the trainers required to imparted training will be prepared by the state according to training need assessment. The training requirements need to be prepared separately for freshers and for Re-freshers. The state has to maintain database on training status of each of the SLO, SLC, Similar database should be maintained at district and block level for example for each MO PHC, etc as per the format below. A consolidated database with online accessibility at the respective levels need to be maintained and updated regularly may be developed as one of the modules under *Nikushth*.

Level	Designation	Office	Contact No.	Training status, year and duration of last training
<b>State</b>				
• SLO				
• SLC				
• DLO				
• DLC				
• RCS surgeons				
• Lab., Tech				
• Physio. Tech.				
• Other Specialists .....				
<b>District</b>				
• BMO				
• MO PHC				
• NMS				
• Pharmacists				
• HI				
• HE				
• Any other(.....)				
<b>Block</b>				
• PMW				
• ASHA				
• Any other				

## **2. Standard training material:**

The standard training manuals for key functionaries updated in 2019 have been provided to respective SLOs for further distribution. The modification in terms of translation into local language and other requirements at local level need to be done only in concurrence with CLTRI/CLD.

Following standardized training manuals to be used for all training activities under NLEP and are freely available on CLD/CLTRI's websites.

1. Training manual for medical officers
2. Training manual for health supervisors
3. Training manual for physiotherapists
4. Training manual for laboratory technicians

The faculty power point presentations and evaluation formats required to be sent to CLTRI for standardization. The presentations need to be simple understandable language and with short titles. Relevant and appropriate literature material may be used as recommended by the Central Leprosy Division. The guidelines and resource material is available on the websites of CLD ([www.nlep.nic.in](http://www.nlep.nic.in)) as well as CLTRI ([www.cltri.gov.in](http://www.cltri.gov.in)). Following training material need to be sent to CLTRI for standardization:

- I. Faculty Presentations
- II. Pre / Post Test Questionnaire

## **3. Preparation of Annual Training calendars for different levels of healthcare workers**

Based on the available resources and required manpower to be trained, a training calendar should be prepared by the state under intimation to the Central Leprosy Division and CLTRI. The training calendar may be displayed at all relevant websites and be disseminated in sufficient numbers at appropriate levels.

### **Template for preparation of training calendar**

Level	Training schedule				
	Frequency of training	Topic	Trainer/s	Methodology	Resources required
State					
SLO	6 Monthly (Dates to				
SLC					
DLO					

DLC	be provided)				
RCS surgeons					
Lab., Tech					
Physio. Tech.					
Other Specialists .....					
District					
BMO	Quarterly (Dates to be provided)				
MO PHC					
NMS					
Pharmacists					
HI					
HE					
Any other (.....)					
Block					
PMW	Monthly / Once in two months				
ASHA					
Any other					

#### 4. Training evaluation

##### **Immediate outcome (Effect of training):**

The immediate outcome consists of effect of training on short term performance on the basis of cognitive assessment. Where ever possible there should be incorporation of evaluation of skills for the technical activities, such as evaluation of skill of collection and examination of slit skin smear for leprosy. The pre test should be conducted for assessment of baseline knowledge and focus required on some specific subject/topic. The same questionnaire tool should be used for subsequent assessment at the end of the training. The percentage learning gain (% difference between pre-test and post-test scores) to be assessed at the end of the activity based on the pre-test and post test questionnaire.

##### **Follow up assessment (Impact of training):**

The impact of training need to be assessed based on the post training performance into the trainees own workplace. This assessment can be assessed every 2-5 years.

Some templates for indicator based assessment of impact of training are provided as follows.

<b>Trainee</b>	<b>Indicator</b>	<b>Mode of evaluation</b>
SLO	<ol style="list-style-type: none"> <li>1. Training: Whether participated as faculty in training programme in last 6 months?</li> <li>2. PIP: Compilation of pending PIP in last 6 months?</li> <li>3. Monitoring: Carried out monitoring of districts in last 6 months?</li> <li>4. Performance indicator: Improvement in early case detection/DPMR/RCS in last 6 months?</li> <li>5. Novel initiative: Significant initiative/innovation for management of PAL?</li> </ol>	20% weightage to each achievement

Impact assessment template cont'd

<b>Trainee</b>	<b>Indicator</b>	<b>Mode of evaluation</b>
SLC	<ol style="list-style-type: none"> <li>1. Training: Whether participated as faculty in training programme in last 6 months?</li> <li>2. NLEP managerial issues: Whether assisted SLO in managerial issues in NLEP in last 6 months?</li> <li>3. Monitoring: Whether significant improvement in NGO services in last 6 months?</li> <li>4. Performance indicator: Improvement in Case detection/DPMR/RCS in last 6 months?</li> <li>5. Novel initiative: Significant initiative for implementation of NLEP?</li> </ol>	20% weightage to each achievement
DLO	<ol style="list-style-type: none"> <li>1. Training: Whether participated in training programme in last 6 months?</li> <li>2. PIP: Whether significant achievement in PIP in last 6 months?</li> <li>3. Monitoring: Monitored at least five health facilities in last 6 months?</li> <li>4. Performance indicator: Improvement in Case detection/DPMR/RCS in last 6 months?</li> <li>5. Novel initiative: Significant initiative for implementation of NLEP?</li> </ol>	20% weightage to each achievement
DLC	<ol style="list-style-type: none"> <li>1. Training: Whether participated in training programme in last 6 months?</li> <li>2. NLEP managerial issues: Whether assisted DLO in managerial issues in NLEP in last 6 months?</li> <li>3. Monitoring:</li> </ol>	20% weightage to each achievement

	<p>Whether carried out monitoring of districts in last 6 months?</p> <p>4. Performance indicator: Improvement in Case detection/DPMR/RCS in last 6 months?</p> <p>5. Novel initiative: Significant initiative for management of PAL?</p>	
RCS surgeons	<p>1. No. of major RCS performed in last 6 months?</p> <p>2. No. of minor RCS performed in last 6 months?</p>	50% weightage to each achievement
<b>Trainee</b>	<b>Indicator</b>	<b>Mode of evaluation</b>
Lab., Tech	1. No. of SSS performed in last 6 months?	50% weightage to each achievement
Physio. Tech.	<p>1. No. of minor DPMR cases assessed?</p> <p>2. No. of leprosy patients provided physiotherapy?</p>	50% weightage to each achievement
MO	<p>1. Training tasks: Whether organized training programme in last 6 months?</p> <p>2. Clinical tasks: No. of leprosy suspects examined in last 6 months?</p> <p>3. Managerial tasks: Monitored at HSC in last 6 months?</p> <p>4. Performance indicator: Improvement in Case detection/DPMR/RCS in last 6 months?</p> <p>5. Novel initiative: Significant initiative for implementation of NLEP?</p>	20% weightage to each achievement
NMS	<p>1. No of supervisory visits to the HSC in last 6 months?</p> <p>2. No. of active survey conducted in last 6 months?</p> <p>3. No. of suspects examined in last 6 months?</p> <p>4. No. of visits to patient under treatment / RFT cases in last 6 months?</p> <p>5. No. of visits to NGO facilities in last 6 months?</p>	20% weightage to each achievement
PMW	<p>1. No. of suspected leprosy cases identified in last 6 months?</p> <p>2. No. of IEC sessions conducted in last 6 months?</p> <p>3. Proportion of cases completing treatment in time?</p> <p>4. No. of RFT cases ensured DPMR and RCS services in last 6 month?</p> <p>5. No. of active case detection surveys conducted in last 6 months?</p>	20% weightage to each achievement
ASHA	<p>1. No. of community based IEC activities conducted in past 3 months?</p> <p>2. No. of suspected persons brought to PHC for evaluation?</p> <p>3. No. of RFT cases brought to PHC for DPMR/RCS services?</p> <p>4. Proportion of patients completed treatment in time?</p> <p>5. No. of RFT cases demonstrated self care practice?</p>	20% weightage to each achievement



**CHAPTER: 8**  
**REFERENCES**

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## ANNEXURE: 1

### ROLE PLAY: Patient counselling at the time of diagnosis\*

It is observed that examination of a person to detect leprosy, even though it is thought to be aware by all, needs to be demonstrated during the training to bring the quality and completeness of examination of patient especially during case detection activity.

Also it is felt imperative to demonstrate the advice and counseling that is to be imparted to the patient for improving treatment compliance and acceptance of the cure because unlike other diseases the sign and symptoms remains in most of the cases even after the treatment is completed. This technique can be most effectively imparted through a session of role play (a virtual demonstration of educating patients about the course of the management).

First, all participants assign a patient and a health worker's role, then help to build these characters:

- Divide the participants into two groups.
- Seat each group in a semi-circle around an empty chair.
- Then instruct the participants that they are to build a character of a new leprosy patient – imagine a person sitting in the empty place (give examples such as: they have to collect details such as age, family situation, working situation (but don't give too much information); it is important that the character is their own creation).
- Whatever a participant says must be accepted by the others, there is to be no discussion or argument, so whatever is said about the person is accepted ... (like the rules for brainstorming).
- When you feel that enough information has been given, stop the exercise.
- Now tell the participants that one member of the group must be willing to become that person.

After the character of the patient has been built, invite one member of the group to impart health education to the patient.

Instruct the other members of the group (the patient-elect and the observers) to leave the room for about 5 minutes to allow the health educator to prepare the interview with the patient.

Give two handouts:

- I. A list with points of attention to the health educator to help his/her memory.
- II. A checklist to the observers of the health education session.

- I. A list with points of attention to the health educator to help his/her memory

It is necessary to provide the patient with the following information:

1. Where to get answers about leprosy
  2. That leprosy is not infectious to others once treatment has started
  3. That leprosy can be treated
  4. That treatment for leprosy is free
  5. That treatment is for 6 or 12 months
  6. On tablets to be taken at home
  7. On side-effects
  8. On when to get the next blister pack
  9. That arrangements for collection of blister packs may be adjusted to suit his/her situation
  10. That skin patches take time to disappear
  11. About the major reaction symptoms and the need to report to the clinic if they arise
  12. That complications can occur and that the patient should come to the clinic or to the referral clinic (and where is it)
  13. That treatment is available if new disabilities occur
  14. That existing disabilities might or might not improve
  15. That in case of disability the patient may have to adapt[?or alter] his/ her lifestyle
- The patient should be encouraged to lead a normal life.

\*Adapted from: Facilitator guide - Workshop for health service managers in charge of leprosy control programme from global strategy to national action 2007. Regional Office for South-East Asia, World Health House, Indraprastha Estate, New Delhi, India<sup>9</sup>.

## ANNEXURE: 2

### Checklist for observers of the patient education session

Please tick mark the most appropriate box in the table as you observe the health education session.

<b>Content/method</b>	<b>Very poor</b>	<b>Poor</b>	<b>Good</b>	<b>Very good</b>
Messages are clear				
Communication is spontaneous				
Listening by the educator				
Sharing emotions				
Information on where to get answers about leprosy				
Information that leprosy can be treated				
Information that treatment is for 6 or 12 months				
Information on side-effects				
Information on tablets to be taken at home				
Information on when to get the next blister pack				
Information that treatment for leprosy is free				
Information that leprosy is not infectious to others once treatment has started				
Information that skin patches take time to disappear				
Information about the major symptoms of reaction and the need to report to the clinic if they arise				
Information that treatment is available if new disabilities occur				
Information that existing disabilities might or might not improve				
Information that complications can occur and the specific action to be taken				
Encourages the patient to lead a normal life				

At the end of the session, the completed form should be handed over to the facilitator.

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