

NLEP- Monitoring and Evaluation tools for implementation of New Paradigms during 11th Plan period

The New Paradigms under NLEP was circulated on 10th August 2007, in which the importance of the Monitoring and Supervision of the Programme was discussed. The significance of the Prevalence, Incidence, P.D. ratio etc. were also discussed in another note circulated vide letter No. M.12014/9/2007-Lep. (Coordn.) dated : 7th November 2007. In this guidelines various epidemiological indicators and other programme assessment tools are detailed for implementation at all levels.

A. Epidemiological Indicators

I. Main Indicators

1 Annual New Case Detection Rate (ANCDR)

ANCDR will be the main indicator for NLEP monitoring which is to be calculated as below –

$$\text{ANCDR} = \frac{\text{No. of new cases detected during the year} \times 100,000}{\text{Population as on 31st March}}$$

The indicator is to be assessed in 31st March every year. However Quarterly ANCDR in June, September and December each year also to be worked out as per guidelines issued vide No. M. 12014/9/2007-Lep. (Coordn.) dt. 10th August 2007 for periodic assessment at different levels. To have useful information from this indicator, the definition of New case should be strictly followed, which is “A case with signs of leprosy, who have never received treatment before”.

2. Treatment Completion Rate (TCR)

Details guidelines on TCR estimation was circulated vide letter No. M.12014/9/2007-Lep. (Coordn.) dated : 30th July 2007. Under NLEP, TCR is to be calculated at district level for PB/MB, Male/Female and Urban/Rural areas separately, every year in the months of May-June. The TCR for the year 2006-07 is being worked out by the states and report has started coming in. calculation of TCR is done as below :

$$\text{PB TCR} = \frac{\text{Number of new PB cases who completed MDT in 9 months} \times 100}{\text{Number of new PB cases who started MDT}}$$

$$\text{MB TCR} = \frac{\text{Number of New MB cases who completed MDT in 18 months} \times 100}{\text{Number of new MB cases who started MDT}}$$

Similar calculation procedure is followed for male / female and Urban/Rural cases also.

3. Prevalence Rate (PR)

As indicated in various recent guidelines, the Prevalence Rate is not a good indicator for use, after the elimination of leprosy has been achieved as a public health problem at the National level. However the PR value may be continued to be assessed upto the state level for some more time or till all states achieve elimination.

The prevalence rate is to be calculated as a point prevalence as on 31st March instead of monthly as below :-

$$\text{PR} = \frac{\text{No. of balance new cases under treatment as on 31}^{\text{st}} \text{ March} \times 10,000}{\text{Population as on 31}^{\text{st}} \text{ March}}$$

II. Additional Epidemiological Indicators

1. Proportion of grade II disability

The proportion of grade II disability amongst new cases detected in a year, gives a rough indication of how early on average, leprosy cases are coming forward for diagnosis. This is calculated as below :-

$$\% \text{ grade II disability} = \frac{\text{No. of Grade II disabled cases detected in a year} \times 100}{\text{New cases detected in a year}}$$

2. Proportion of female cases

The proportion of female cases amongst new cases detected in a year gives an indication whether the women have adequate access to diagnostic services. The ratio of 2 males to every 1 female is commonly seen. Very low proportion of female cases need proper measures as needed. The indicator is calculated as below :-

$$\% \text{ female cases} = \frac{\text{No. of female cases detected in a year} \times 100}{\text{New cases detected in a year}}$$

3. Proportion of MB cases

The proportion of MB cases is an useful guide to the proportion of cases at risk of complications. Towards the end, in a well run programme, MB proportion is expected to be much higher. The indicator is calculated as :-

$$\% \text{ MB cases} = \frac{\text{No. of MB cases detected in a year} \times 100}{\text{New cases detected in a year}}$$

4. Proportion of child cases

The proportion of child cases (under 15 years of age) among new cases when monitored over several years may show a trend. If the transmission of leprosy is being reduced in an area, it is expected that the proportion of children affected will decrease. The indicator is calculated as :

$$\% \text{ child cases} = \frac{\text{No. of child cases detected in a year} \times 100}{\text{New cases detected in a year}}$$

All the above indicators are to be calculated on yearly basis as on 31st March. Monthly recording of actual number of new cases detected, MB, Child, Grade II disability and female cases is important to observe any sudden changes occurring that need investigation, for corrective action during the year.

B. Quality of services Indicators

Additional indicators that are to be used for assessment of quality of services being provided under the programme are as given below :-

1. Proportion of Defaulters

While calculating the treatment completion rate, the defaulters are not separately calculated for reasons of defaulting. When the treatment completion rate is low, the proportion of patient who default from taking treatment need to be ascertained. The reasons like Died, left the area and stopped taking treatment for non completion of treatment in time should be calculated in exactly the same way as the cure rate. The indicator is to be calculated as below :-

$$\% \text{ Defaulters} = \frac{\text{Number of cases defaulted from taking treatment} \times 100}{\text{Number of cases started treatment during the year}}$$

2. Number of relapses reported during the year

Relapse cases occur sporadically and are generally not part of any defined cohort, so these figures are difficult to analyze. Relapse cases are now to be recorded and referred for confirmation from primary and secondary level institutions. Relapse cases, both suspected and confirmed are to be reported through the monthly progress reports. If high numbers are reported from any particular area, further investigations must be carried out.

3. Proportion of new cases correctly diagnosed

This accuracy of diagnosis should be assessed through regular supervision. If there is any suggestion of significant over diagnosis, a sample of the new cases should be validated within three months of the diagnosis being made. The indicator should be calculated as below :-

$$\text{\% of new cases correctly diagnosed} = \frac{\text{No. of correctly diagnosed} \times 100}{\text{No. of new cases validated}}$$

Wherever problem is identified after validation, additional training and supervision are needed.

4. Proportion of cases with new disabilities

This indicator is a measure of how well new nerve damage is detected and treated by the programme. Under the Disability Prevention and Medical Rehabilitation plan cases who develop new or additional disability are to be recorded and reported through the monthly progress reports. This indicator should be calculated as below :

$$\text{\% cases with new disabilities} = \frac{\text{No. of cases developed new disability} \times 100}{\text{No. of cases put under MDT during the year}}$$

C. Programme monitoring tools

Certain other informations are required to be collected routinely to assess the process of programme implementation. These may be –

1. Availability of district Nucleus component, their competence and monthly performance. A monthly report should be submitted by the District Nucleus to the State Leprosy Officer in suggested format given as **Annexure – I**.
2. Availability of adequate quantity of the MDT at peripheral institutions, districts and state stores. Two months stock should be available at each level. MPRs should reflect actual stock position and show “Patient month BCP” status. Indent should be on monthly basis from PHC/Block PHC/District and Quarterly from the state level.
3. Expenditure pattern indicates work performance. SoE should be submitted monthly. The expenditure of districts should be monitored on quarterly basis and needed action be taken urgently.
4. Number of institutions providing RCS services – Govt. and NGO.
5. Number of major RCS operations conducted monthly in Govt. and NGO institutions.

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Monthly Reporting form for District Nucleus Team(To submit to State Leprosy Office by 10th of next month)

Name of State : _____

Name of District: _____

I. District Nucleus consist of :		Sanctioned	In position	On leave	
				From	To
	DLO				
	MO				
	NMS				
	NMA				
	H.E.				
	P.T.				
	Driver				

II. Names of Health Centre / Hospitals visited during the month. (Govt.+NGO)	Problem detected	Action taken
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

III No. of New leprosy validated cases wise	Total new cases detected during last 3 months	No. validated	Results			
			Not a case	Wrong typing	Reregistered	Current diagnosis
1.						
2.						
3.						
4.						
5.						

IV. Group meetings attended			
Place of meeting	No. of participants	Type of group participated	Topic discussed

V. Other IEC works done

VI. Training courses organized				
Category of staff	Places	Period	No. of participants	Other guest faculty

VII. MDT Drug Management

Type of MDT	No. of BCP available in			No. of patient under treatment (end of month)	Patient month BCP
	PHC	District stock	Total		
MB(A)					
MB(C)					
PB(A)					
PB (C)					

VIII. Record compilation and Reporting

- (i) Names of PHCs not sending report in time.
- (ii) Name of PHCs not sending correct informations.
- (iii) Action taken to correct the deficiency.
- (iv) Report collected by D.N. from which institutions.

IX. Fund position

- (i) Balance of fund available beginning of the month : Rs.
- (ii) Amount received during the month : Rs.
- (iii) Amount spent during the month : Rs.
- (iv) Fund required now to carry out approved activities : Rs.
- (v) SoE for the month submitted or not :
- (vi) Any difficulty faced :

X. Any other special activities carried out during the month

Signature of Team I/C