

National Leprosy Eradication Program (NLEP)

Leprosy

Leprosy is an airborne disease caused by *Mycobacterium leprae* that predominantly affects the skin and peripheral nerves, resulting in neuropathy and associated long-term consequences, including deformities and disabilities. The disease is associated with stigma, especially when deformities are present. Despite the elimination of leprosy as a public health problem (defined as achieving a point prevalence of below 1 per 10 000 population) globally in 2000 and in India by 2005, leprosy cases continue to occur. Over 675 new leprosy cases were reported in 2019-20. Therefore, guidance on early diagnosis and treatment of leprosy is essential for reducing the burden of this disease. Leprosy is classified as Paucibacillary (PB) or Multibacillary (MB), based on the number of skin lesions, presence of nerve involvement and identification of bacilli on slit-skin smear. The standard treatment for leprosy involves the use of multiple (two or three) drugs; the duration of treatment, dose and number of antibiotics depend on the type of leprosy (PB or MB) and age of the patient (adult or child).

Clinical Features

- Skin patches, sensory loss, and motor loss are the clinical features of leprosy.

There are three cardinal signs of leprosy.

- 1. Hypo-pigmented anaesthetic skin patch
- 2. Enlarged thickened nerve
- 3. Demonstration of acid fast bacilli in skin smear

At least one of the three cardinal signs must be present to make diagnosis of leprosy





FIGURE 2: Reduced plaque infiltration after treatment with oral



About NLEP

- 1955 - National Leprosy Control Program with Dapsone monotherapy .
- 1982 introduction of Multi Drug Therapy with Rifampicin, Clofazimine and Dapsone
- 1983 National Leprosy Eradication Program
- 2005 India achieved elimination of leprosy in December (i.e. less than 1 case per 10,000 population)

Aim

- Early case detection,
- Treatment with multidrug therapy (MDT),
- Disability Prevention and Medical Rehabilitation
- Intensified Health Education and Public Awareness Campaign to reduce Social Stigma attached to disease

Major activities under NLEP

- Early detection and treatment of leprosy is the major step to prevent transmission of disease in the community and to prevent visible deformities
- Disability Prevention and Medical Rehabilitation –Reconstructive surgery for deformities,provision of Micro cellular rubber (MCR) chappals, aids & appliances like wheel chairs, crutches, goggles etc .These services are provided free of cost
- Trainings - Medical officers , Health Workers ,Para Medical workers, ASHA workers ,
- Sensitization-, Sensitisation- Para Medical workers, Anganawadi workers, Tribal Promoters, , Educated youngsters of high risk communities like shima tribal settlements tribal population etc

Objectives of IEC initiatives are

- To create general awareness about leprosy- signs, symptoms, cause, deformities and free treatment availability in health institutions
- Encourage voluntary reporting to health centers for diagnosis and treatment
- Reduction in stigma
- Special focus on target groups – slums, coastal regions & tribal population

Need for a change and Rationale for intervention

Even though the number of Leprosy cases detected has been decreasing in the state, child cases, deformities and Multi bacillary cases were above the National average . leprosy cases invulnerable population like tribal population is a concern. We are at a constant threat of the disease due to exposure to large scales of influx of migrant labourers from high prevalent state like Assam, West Bengal, Bihar and Jharkhand.

These conditions necessitates an intensive **state specific** case detection programme for finding the hidden cases and augment case detection to attain **Sustainable Development Goal in Leprosy**. **Aswamedham** was introduced in october 2016 to attain sustainable development goals by 2030

OBJECTIVES UNDER Sustainable Development Goal Leprosy 2030

ASWAMEDHAM

(10 Objective of this campaign is to reduce prevalence rate (PR) to less than 0.1/10,000 population at different levels ie district, block and Panchayath

- (2) Reduce Child cases of leprosy from 1.17/million to < 0.6/million.
- (3) Rate of child case with zero disability to be sustained
- (4) Grade 2 deformity from 1.2/million to < 1/million

Target population

- All school children of the state (3 – 17 years) with special focus on tribal schools and hostels
- Contacts of all Leprosy affected person registered since 2 yrs for Pauci Bacillary cases & 5yrs for Multi Bacillary cases.
- Tribal population.
- Coastal & Urban slums
- Migrant labourers

Strategies

- Early case detection & treatment
- Awareness Campaign & IEC
- Training for different categories.
- Specific group approach to underserved population.
- School & Anganwadi level Campaign.

Leprosy Case Detection Campaign (LCDC)

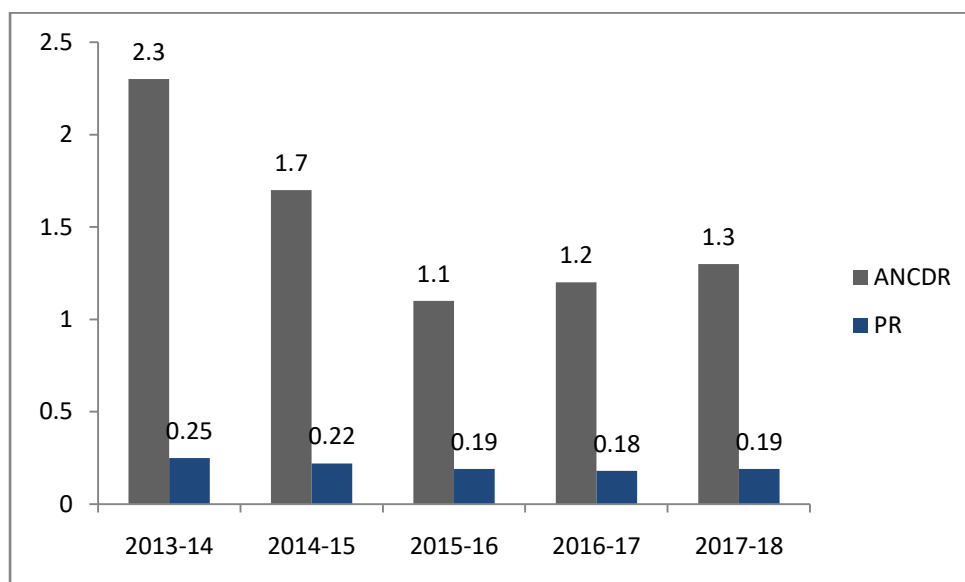
- Various committees are formed at each level i.e., National, State, District, Block to plan & implement the LCDC.
- Intensive IEC activities, through various media are conducted during and before the LCDC.
- Focused training of all health workers at District to sub district.
- House to house visits by team encompassing one Accredited Social Health Activist (ASHA) and male volunteer i.e. Field Level Worker (FLW), willn conduct hous to house survey to identify leprosy cases

- Supervision of house to house search activities are done through identified field supervisors.
- Continuous, systematic collection and compilation of reports is being done through the formats designed for this purpose which are filled by search teams and supervisors.
- After the completion of the campaign the post LCDC evaluation also carried out through independent evaluators.

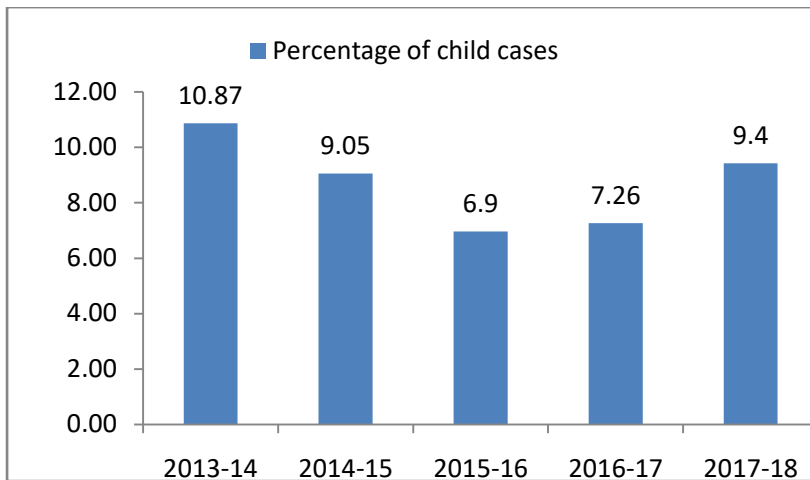
Reasons for LCDC in Kerala

Leprosy Case detection campaign is very much essential in Kerala because of following reasons,

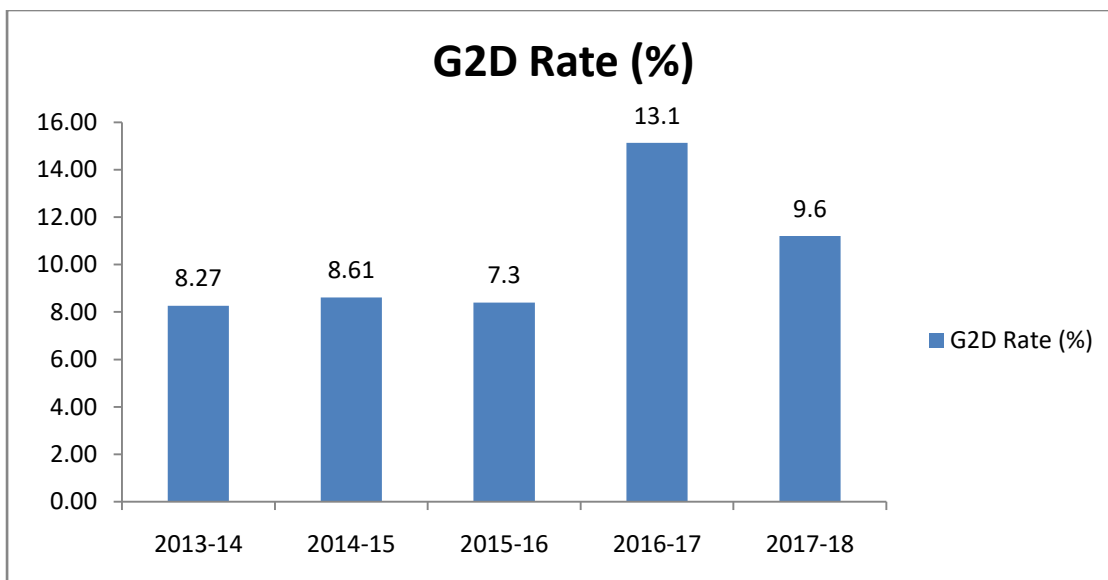
1. The two important indicators of National Leprosy Eradication Programme – Annual New Case Detection Rate (ANCDR) and Prevalence rate(PR) are remaining since last 5 years



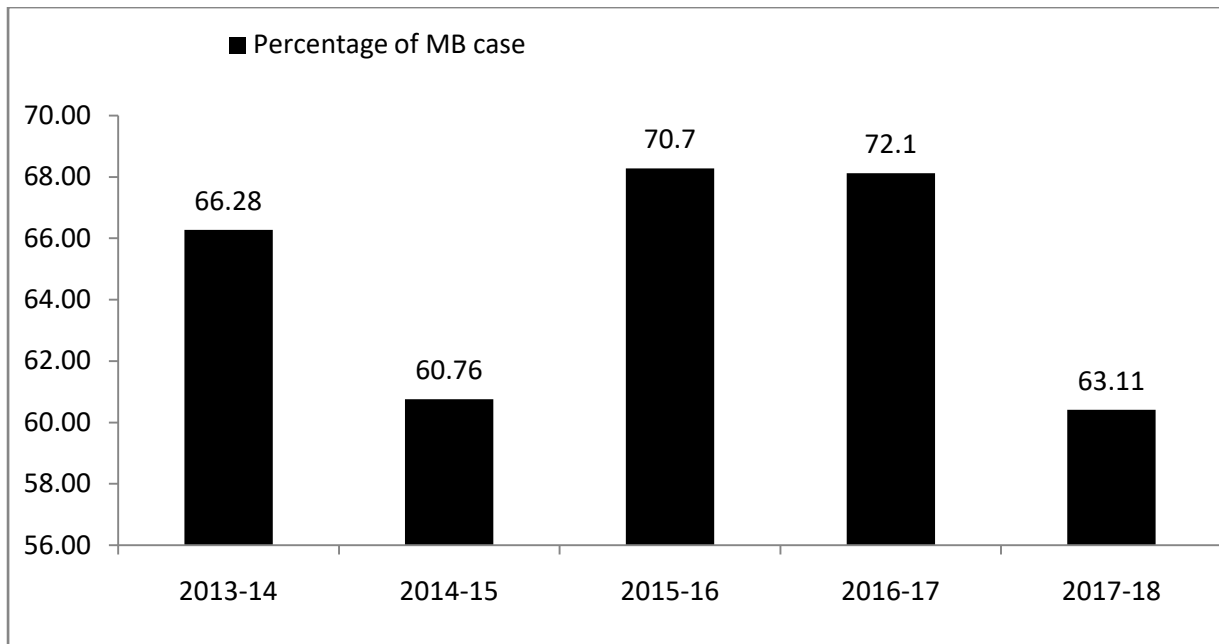
2. High percentage of Child cases are being detected through school screening in 2016-17 and 2017-18 which shows that active transmission of the disease is still there in the community.



- High % of Grade 2 deformity among new cases detected (visible deformity) which indicate that the cases are being detected late in the community and there may be several cases which are lying undetected or hidden



- Reporting of high percentage of highly infectious Multi Bacillary cases again shows early case detection and treatment is not taking place.



Hence it is clear that there are cases occurring in the community and detection is less. Hence it is essential to go for early case detection of hidden cases in the community and treatment by an active case detection campaign. This will interrupt transmission of the disease in the community and expedite achievement of eradication status at district and sub district level in the coming years.

Central Leprosy Division had selected 8 districts Trivandrum, Ernakulam, Thrissur, Palakkad, Malappuram, Kozhikode, Kannur and Kasargod for the implementation of LCDC in 2018. From **April 29 to May 12th 2019 in 6 districts - Kollam, Pathanamthitta, Alappuzha, Idukki, Kottayam and Wayanad.** The campaign was conducted two weeks from 5th December 2018. The result of the campaign was successful. 194 new leprosy cases were detected and treatment was

Under During 2020-21 the entire public health system concentrate on COVID 19 containment activities .Yet we are able to implement 3 anti leprosy programme

a. Active Case Detection and Regular Surveillance’ (ACD & RS)

During 2020-2021 Central Leprosy Division introduced a new programme named **Active Case Detection and Regular Surveillance’ (ACD & RS)** for augmenting early case detection. In Kerala it was named as Aswamedham 3.0 : Under this programme whole population is examined with in a time span of 6 months by a male & female volunteer called Male and Female Front Line worker(FLW) comprising of ASHA , Field staff and selected volunteers from community. The FLW will visit houses either jointly or separately and educate about common signs of leprosy and also explain about the importance of campaign. They will examine the people and refer the suspected cases to PHC. They will be paid a remuneration of Rs 1000/- after completing the survey. Survey is carried out by

observing Covid19 guidelines. This programme get good response from public. Final report of the programme is awaiting, as it complete by the end of March 2021.

b.Eradication of Leprosy through Self Reporting and Awareness (ELSA)

ELSA is an unparallel and novel programme to the path of eradication of Leprosy formulated and is being implemented by State Health Service Department. Effective utilization of information technology for revealing the real facts regarding leprosy among the society and there by motivating them to attend themselves to clinic for diagnosis and treatment is the core strategy of the programme. It got much relevance in the COVID-19 scenario as active case detection of leprosy become almost come to halt. ELSA aim to develop awareness among public by effectively utilizing information technology and hence enable them to assess the lesions similar to leprosy on their body and prompt them to seek the help of Asha worker, Health worker or the service from nearby hospital. Another feature of this programme is it enable to ensure the service of dermatologist through e-sanjeevani Tele consultation platform and also the diagnosis and treatment of disease .High profile media centered intervention that effectively utilizing information that effectively utilizing information technology can make tremendous change in the awareness level of community by piercing into the mind of lakhs of people who never show an interest to listen the fact about leprosy.

c. Sparsh leprosy awareness campaign (SLAC)

Sparsh leprosy awareness campaign (SLAC) with Antileprosy day on 30th January 2021 was conducted for a fortnight from January 30th to February 12th, 2021.The focus of SLAC this year is to make the community aware about the importance of early detection of leprosy followed by complete treatment in order to prevent physical disabilities. District level inauguration was conducted in all 14 districts. The activities conducted during this year are,

1. Appeal from President of Grama Panchayath /PRI members to remove stigma and discrimination against person affected with leprosy.
2. Involve “SAPNA”, though appropriate activities, in teaching community about common myths related to leprosy.
3. Hold Questions and Answers session based on FAQ already provided
4. Suitably involve persons affected by leprosy in SLACs.
5. Displayed IEC posters at high visibility places.
6. At Block, District and State level; run three short films (TVCs) through multimedia devices in all meetings, and other relevant gatherings.

7. Encourage the community to take a pledge, not to discriminate against persons affected with leprosy.

All the activities are conducted strictly following the norms of COVID appropriate behavior including use of masks, adequate physical/social distancing and hygiene etc. SLACs was conducted through virtual modes also.