

Zero Leprosy Best Practices

Best Practice: *Involvement of General Health Care (GHC) Staff in Implementation of Leprosy Post-Exposure Prophylaxis (LPEP) Feasibility Project in Dadra and Nagar Haveli (DNH), India*

Subthemes

- PEP / people at risk
 - Preparation phase and implementation phase

Target Audience(s)

- Policy leaders
- Program managers
- Health staff
- Donors
- Other partners such as NTD NGOs

Contributors

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Key Messages

Leprosy post-exposure prophylaxis (LPEP) is an innovative intervention, implemented in Dadra and Nagar Haveli (DNH) in India from April 2015 to June 2018. Local General Health Care (GHC) staff, state leprosy officer (SLO), medical officers (MOs), and community volunteers who were accredited social health activists (ASHAs) were involved from the beginning and throughout the project to help ensure sustainability of project activities and buy-in/ownership of GHC staff for scale up.

Key Informant / Date Submitted

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August 2019

Description of the Best Practice

Introduction

Dadra and Nagar Haveli (DNH), a union territory (UT) located in the western part of India, had a population of 409,016 (March 2015), a leprosy prevalence rate (PR) of 5/10,000 population, and an annual new case detection rate (ANCDR) of 78/100,000 population. These indicators had remained static for the past decade, despite DNH having a good health system and one of the best-run health programs in India. The child proportion among new cases was 26%, which is much higher than India's average of 9%, although only two persons with disability grade 2 had been detected in the 5 years

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preceding 2015. The stagnant number of new cases along with high proportion in children indicated continued transmission of disease, a grave concern for the Govt. of DNH.

India was inspired by the success of chemoprophylaxis in Bangladesh and Indonesia, and so in 2012-2013 several dialogues and a consultation process were initiated by NLR India with partners such as German Leprosy Relief Association (GLRA), Erasmus University Medical Center, Rotterdam (Erasmus MC), Novartis Foundation, and the Ministry of Health (MoH) of the Government of India to test the feasibility of implementing leprosy post-exposure prophylaxis (LPEP) in DNH. Also, the Govt. of DNH was very keen to implement LPEP considering its well-functioning health system but poor indicators from its leprosy program. The project was launched in March 2013 with technical support from NLR International Office/India Program, GLRA, and EurMC, in partnership with the MoH, Govt. of India. Under LPEP, a few project staff (4 research assistants and 1 project supervisor) were hired. All project field activities were performed by government GHC staff, which included MOs and ASHAs (community volunteers). The well-managed and motivated GHC staff along with the apparent lack of stigma against persons affected by leprosy were instrumental in driving the project forward.

Objectives and Methodology

The main goal of implementing this practice through the GHC staff was to demonstrate a sustainable model with regard to adequate coverage of contacts of leprosy patients, the community's acceptance of the intervention, and ownership of local health authorities and GHC staff since the project's conceptualization.

Methodology used

Since conceptualization of the project, several advocacy meetings on LPEP were carried out with government officials and relevant stakeholders, followed by signing of a memorandum of understanding (MoU) between NLR India and the Govt. of DNH. A pool of trainers and supervisors was developed for regular monitoring and on-job supervision of activities, followed by training of several categories of GHC staff. The role of the project staff hired was confined to the review of data collection, data entry, and monitoring and supervision. All new leprosy cases registered from April 2013 until March 2018 and their contacts (household contacts, neighbors, and classmates of leprosy cases who were students) were listed and screened. Informed consent was taken from index cases and their contacts. Contacts falling under the exclusion criteria included those having signs and symptoms of leprosy or tuberculosis (TB), children under 2 years of age, pregnant women, persons with a history of liver or renal disorders, or those who had taken rifampicin in the previous 2 years.

Was the design based on evidence?

NLR's policy of working with the government takes sustainability into consideration in all its interventions. The support to National Leprosy Eradication Program (NLEP), Govt. of India, generated evidence (unpublished) that the involvement of GHC staff, if they were both motivated and committed, was feasible. Other evidence of this kind could not be traced in the literature.

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Implementation of Practice

Activities that were carried out included the following:

- Training of GHC staff such as auxiliary nurse midwives (ANMs) on operational guidelines of PEP, standard operating procedures, and leprosy
- Enlisting of index cases and their contacts at their houses by ANMs
- Screening of contacts by health supervisors assisted by ANMs and paramedical workers
- Administration of supervised single-dose rifampicin (SDR) to eligible contacts at their houses by ANMs
- Referral of suspected cases of leprosy or TB by ANMs/health supervisors to primary health centres (PHCs)
- Confirmation of suspected cases by MOs
- Supervision and monitoring by project staff

Were persons affected by leprosy participating in the design and practice itself?

Persons affected by leprosy were involved in the perception, acceptability, and cost-effectiveness studies. They were also involved as spokespersons for sharing their experiences at the trainings, facilitating contact tracing, and organizing village-level meetings.

Key implementers and collaborators

The key implementers were the GHC staff from the Govt. of DNH and community volunteers. The SLO and local MOs were involved in monitoring and supervision of the project. The collaborators were NLR India, GLRA India, NLR Amsterdam, and Erasmus MC, including persons affected by leprosy. Central Leprosy Division (CLD), Govt. of India, and the Indian Council of Medical Research (ICMR), MoH, were involved in monitoring the project progress. NLR Amsterdam coordinated the project internationally, and Novartis Foundation was the funding agency.

Resource implications

Since the project was implemented by GHC staff, no major expenditure was incurred. Rifampicin was purchased by the local Govt. of DNH. Expenses incurred under project funding pertained to human resources, mobility support, printing, trainings, and travel for monitoring and supervision.

Results—Outputs and Outcomes

What were the concrete results achieved with regard to outputs and outcomes?

Under the LPEP, 300 ASHAs, 134 ANMs, and 74 PHC staff, including 17 MOs and 5 project staff, were trained on LPEP implementation. Refresher trainings were carried out every year until 2018.

SDR was administered to 30,295 eligible contacts of 1662 index cases reported from April 2013 to March 2018, with a compliance rate of 99% among leprosy patients and 98.6% among contacts (see #6 below, **Further Readings**). The perception study (see #5 below, **Further Readings**) showed that participants were mostly positive and sometimes very positive about the possibility of preventing leprosy among

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household contacts, neighbors, and other close contacts through SDR. Based on the success of this project, the Govt. of India rolled out LPEP nationally in October 2018. Since the second half of 2018, the Govt. of DNH had already taken over LPEP as part of routine NLEP.

Were data management processes of the best practice consistent and transparent to draw conclusions?

Since the Govt. of DNH was fully involved since conceptualization of project, the involvement of the GHC system was not a challenge. At the time of monitoring and supervisory visits, stakeholders observed that the project was fully integrated in GHC system since activities were carried out by GHC staff and ASHAs.

Was an assessment of the practice carried out?

Mid-term and end evaluations were conducted and meetings were organized, which were attended by staff of NLR Amsterdam, Novartis Foundation international office, NLR India, CLD, WHO, Directorate of Health Services (DHS), organization of persons affected by leprosy, and relevant stakeholders. During field visits, stakeholders observed the activities, interacted with GHC staff and beneficiaries, and reviewed documentations, etc. The findings were very positive, and every stakeholder appreciated the work of GHC staff.

Is the project completed or are some results still to be expected?

The project was completed in June 2018 and no further results were expected, as the project demonstrated the feasibility of its implementation through GHC systems. There was an indication that the new case detection rate and proportion of children among new cases had declined, however these findings could not be solely attributed to the effectiveness of the LPEP.

Lessons Learned

What worked really well?

Advocacies with CLD and DHS had led to a smooth involvement of the GHC system and staff. The Govt. of DNH committed to rifampicin procurement, supply, and distribution. The acceptance of PEP by persons affected by leprosy, contacts, and the community was around 90%, resulting in less stigma and misconceptions about leprosy and PEP.

Initially, the GHC staff considered LPEP as additional work; however, they realized that the impact of LPEP would ultimately reduce their workloads if more people could be prevented from getting leprosy and would benefit the community and Govt. in the long run.

What did not work?

The LPEP project was a success story. There was hardly any major incident or event that might be considered a failure. However, additional work was needed to develop effective and locally relevant information, education, and communication (IEC) methods and materials that could take into account the community's feedback on the IEC prototype materials. There should be proper sensitization of local

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stakeholders such as chiefs of villages, religious/community leaders, teachers, media personnel, and local influencers, etc., to improve the understanding and wider support from these stakeholders.

Replicability and Scalability

Has the practice been implemented in more than one setting?

Yes, the MoH, Govt. of India, had recently accepted LPEP as a national policy in October 2017, and the operational guidelines were issued. Presently, LPEP is being implemented in all districts and states in India.

What long-term effects can be achieved if the practice is sustained over time?

If the practice of involving GHC staff in delivering services such as household-visits, enlisting of contacts, counseling, screening, and administration of SDR is sustained over time, then there will be break in the chain of transmission resulting in gradual reduction in new case detection.

What are the requirements to sustain the practice over time considering contextual factors, institutional support, human resources?

Simplified operational guidelines, standardized training modules, a supervisory check list, IEC material, and simplified records and reports would be required, in addition to organizing trainings of GHC staff along with regular monitoring and supervisory support.

Conclusions

How have the results benefited the population?

Under LPEP, 30,295 contacts of leprosy cases in DNH received chemoprophylaxis, and the community and general public became aware of and supported the interventions. Thus, the interventions were successfully integrated in the routine NLEP of the Govt. of DNH.

Why may that intervention be considered a “best practice”?

The activities are sustainable even after the project period. Because of the involvement of GHC staff, the acceptance rate was 99%. The GHC staff took ownership of LPEP and it became a routine part of NLEP.

What recommendations can be made for those intending to adopt the documented “best practice” or how can it help people working on the same issue(s)?

- Properly planned advocacy with government officials and stakeholders at different levels before inception of the project could lead to buy-in by the government (central, local) with involvement of GHC staff
- A good capacity-building process and system improved the confidence and motivation of GHC staff, resulting in good implementation outcomes.
- With the availability and use of simplified tool kits to implement LPEP, the involvement of GHC staff became easier

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Further Readings

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