

## **Abstracts**

**Background:** Leprosy an age old disease still remains a public health problem in many parts of the world. Annual number of new cases reported ranged between 200, 000 to 250, 000 in the past decade. Leprosy is one of the major causes of disability among communicable diseases. Nepal is one of the high leprosy endemic country and contributes to 2% of leprosy burden in South Asia. Though leprosy is eliminated from country, 17 of 77 districts are still high endemic districts. To interrupt the transmission of disease and decrease the chance of disease development among the contacts of leprosy cases Leprosy Post Exposure Prophylaxis (LPEP) program was introduced in Nepal in 2015.

**Methods:** This study is an implementation research. The study used a mixed method explanatory sequential design to assess implementation fidelity of LPEP program. In the quantitative study, the secondary data from records were used to assess the number of contacts of index cases traced, screened for leprosy and given Single Dose Rifampicin (SDR) in Sudurpaschim Province. Then the quantitative data was collected in Kailali District to assess health workers adherence towards the program. Quantitative data was analyzed using STATA 13 software in frequencies and percentage. Qualitative data was used to explore facilitators and barriers in the program implementation and was collected from in depth interview with service providers in Kailali district. Thematic analysis was used to analyze the qualitative data.

**Results:** Of the total cases and contacts more than half were from Kailali district. All the cases enrolled in the program agreed to disclose their identity. Neighbor contacts accounted for 71.8% of total contacts. 13.8% of total listed contacts were absent and 0.1% refused to participate in the study. Total 79.2% among the listed contacts and 91.9% among screened contacts were administered SDR. Service providers showed much adherence to program indicators. Perception, stigma and taboos, lack of adequate training and orientation, gap in reporting and recording, less priority in program implementation were identified as barriers. Changed perception, stigma and taboos, service provider's positive attitude, support of nongovernmental organization were identified as facilitators.

**Conclusion:** Service providers show adherence to the program despite some problems. Training of health workers is much needed to improve their motivation.