

Modified multi drug therapy may help eliminate leprosy

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New Delhi, March 2 (India Science Wire): A new hope for faster and more effective treatment for leprosy is in the offing. A new drug regime for leprosy has been found to be more effective and safe in clinical trials carried out in India and China.

The new drug regime is an improvement over the existing multi-drug therapy (MDT) and has been named uniform-multi drug therapy or U-MDT. The study was carried out at six locations in India and two in China (Guizhou and Yunnan), with about 3000 leprosy patients who were followed up for a period of five years. The clinical trial was coordinated by the National Institute of Epidemiology in Chennai, and drugs supplied by the World Health Organisation (WHO).

U-MDT is a supervised therapy in which patients get a monthly dose of 600 mg rifampicin, 300 mg clofazimine and 100 mg dapsone under the supervision of a doctor or a health worker. This is accompanied by daily doses of 50 mg clofazimine and 100 mg dapsone that patients have to take on their own. The total duration of the new U-MDT regime is 6 months, as against 12 months for conventional MDT.

The present MDT includes a monthly dose of 600 mg Rifampicin and 300mg Clofazimine and a daily dose of 100 mg Dapsone and 50 mg Clofazimine. And these drugs have to be taken by patients on their own.

In Geneva this year, WHO urged all countries including India to intensify efforts to completely eliminate leprosy. After introducing multidrug therapy to cure leprosy in the mid-1980s, the disease burden reduced significantly across the globe. From about 5.2 million people with leprosy in 1985, the numbers have dropped to approximately 0.17million at the end of 2015. Although leprosy was declared as eliminated by most countries in the year 2005, new cases continue to emerge to date.

The new regime appears promising with more than 94% of the patients completing the new drug regime, which confirmed good acceptability and compliance. About 99% of the patients did not show reappearance of the disease that indicated high efficacy. "Low relapse among the newly detected leprosy patients from India and China demonstrates efficacy and effectiveness of (new drug) regimen," say researchers. Based on results from the clinical trial, scientists have urged global and national programs to consider adapting the U-MDT for all types of leprosy patients.

The trial was conducted at six sites including leprosy control program offices in Tiruvannamalai and Villupuram in Tamil Nadu and in Pune. In Kanpur, the trial was conducted by National JALMA Institute for leprosy and other mycobacterial diseases, Agra. In Gaya and Rohtas in Bihar, the Damien foundation India trust in Chennai conducted the trial. Results from the clinical trial have been published in the latest issue of the *Indian Journal of Medical Research*. (India Science Wire)