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NEWS

Shorter regimen for multi drug resistant tuberculosis cures more than 80% of patients

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A nine month treatment regimen for multiple drug resistant tuberculosis (MDR-TB) patients across nine African countries has shown a success rate of more than 80%, according to results announced at the World Conference on Lung Health in Liverpool, UK.

The results give further impetus for the shortened treatment regimen to be widely adopted, those involved with the study said.

The previous standard regimen for treating MDR-TB lasted for at least 20 months and had a cure rate of less than 55%, often with severe side effects including hearing loss. The treatment consisted of more than 14 000 pills as well as daily injections for six months. Given the regimen's high cost and complexity, few people received adequate treatment.

The observational study, which began in 2013, found that of 1006 rifampicin-resistant TB patients across nine countries—including Rwanda, Benin, and Cameroon—82% were cured of MDR-TB at the end of treatment, with limited side effects.

Of the remaining patients, 5% did not respond to treatment, 8% died (not related to the treatment), and 5% were lost to follow-up. While the death rate was higher among patients co-infected with HIV, among those who survived the treatment there were similar successes among HIV positive and negative people.

The results complement a 2010 study that reported an 88% cure rate with a nine month MDR-TB treatment regimen.[1]

Following growing evidence that a shorter programme of treatment was more effective, the World Health Organization (WHO) earlier this year announced new recommendations for a MDR-TB regimen with a duration of 9 to 12 months.[2]

Valérie Schwoebel, programme manager for Francophone Africa at the International Union Against Tuberculosis and Lung Disease (The Union), who was involved with the study, told *The BMJ* that its findings were revolutionary.

"Before this year there was no standardised regime for MDR-TB so this is very important," she said. "The problem with MDR-TB is that it's widespread in settings where treatment is not well organised. To have a standardised regime is a revolution."

More than 20 countries in Africa and Asia have introduced shorter treatment regimens for MDR-TB, which works for patients both resistant to isoniazid and rifampicin as well as specific rifampicin resistant cases. But access to treatment is still a major challenge.

In 2015 there were an estimated 480 000 new cases of MDR-TB and an additional 100 000 people with rifampicin resistant TB. Of those, only 20% were enrolled in treatment programmes, according to the 2016 WHO Global Tuberculosis report.

Executive director of The Union, José Luis Castro, said that countries yet to implement the new regimen needed to train healthcare personnel and establish a drug procurement system.

"Previous experience shows that it takes a country one to two years in terms of uptake and implementation of a new treatment regimen," he said.

1 Aung K JM, Van Deun A, Declercq E, et al. Successful 9 month Bangladesh regimen for multidrug-resistant tuberculosis among over 500 consecutive patients. International Journal of Tuberculosis and Lung Disease. 2014;18:10(1180-1187(8).
2 World Health Organization. Rapid diagnostic test and shorter, cheaper treatment signal new hope for multidrug-resistant tuberculosis patients. 2016. http://who.int/mediacentre/news/releases/2016/multidrug-resistant-tuberculosis/en/.