NEW APPROACH ESTIMATES TUBERCULOSIS BURDEN IN INDIA, MODELS TRANSMISSION DYNAMICS OF URBAN AND RURAL REGIONS

Improved estimates of tuberculosis incidence are urgently needed to support effective control programs

NEW DELHI – India bears the highest burden of tuberculosis (TB) globally, about 25 percent of all cases. The extent of TB in high-burden and low-resource regions is difficult to measure directly, but knowing the number of cases is necessary to plan, staff and finance control programs.

A new study from CDDEP researchers and partners has developed an approach to estimate the extent of TB in India using previous estimates from nearby countries and a current understanding of TB transmission. The results of their study are published in *The International Journal of Tuberculosis and Lung Disease*.

The model suggests a TB incidence of 141.9 individuals per 100,000 population in India. The study also finds differences in urban and rural TB dynamics, specifically the number of people likely to be infected by a single patient and the length of time that patient remains infectious, both of which affect strategies for control. An urban TB case will infect an average of 12 people per year and remains infectious for about one year, while a rural case will infect an average of 4 people per year, but remains infectious for more than two years.

According to study co-author and CDDEP Director Ramanan Laxminarayan, “We urgently need improved estimations of the burden of tuberculosis. To implement appropriate policies and interventions, it is important to understand the current extent of the disease, as well as transmission dynamics.”

The study is released just before World Tuberculosis Day on March 24, 2017. This is the second year of the two-year theme, “Unite to End TB,” with a focus on addressing stigma, discrimination, marginalization, and overcoming barriers to access care.

The study is available online from *The International Journal of Tuberculosis and Lung Disease*: www.ingentaconnect.com/content/ijtld/ijtld/2017/00000021/00000004/art00004

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