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Outbreak Investigation

A Tuberculosis Outbreak in a Psychiatric Institution at Northern Taiwan, 2014–2018

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Abstract

During May 2013 to April 2014, two cases of tuberculosis (TB) were notified in a long-term psychiatric institution in northern Taiwan. By September, three additional cases were confirmed. The outbreak had been confirmed since four cases were infected with the same genotype but one had no culture results. As of October 2017, 12 cases were confirmed (nine with the same genotype, and three had no culture results). Recommendations from expert meetings were implemented, including symptom surveillance and reporting, improving transfer records, improving the environment ventilation, and strengthening contact tracing every six months. A total of 493 contacts were monitored, and the completion rates of four times of contact tracing were 73%, 80%, 65% and 50%, respectively. Overall, of 97.6% contacts who tested for latent tuberculosis infection (LTBI), 17.5% were positive. The proportion of acceptance for treatment was 73.8%. By July 2019, no TB cases of the same genotype had been identified in the institution. Long-term psychiatric institutions must pay attention to the quality of infection control, maintain adequate human resources, systematic monitoring and management, and cooperate with public health authorities in order to lower risks of TB clusters.

Keywords: Tuberculosis outbreak, long-term psychiatric institution, infection control, LTBI treatment

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