A Pulmonary Tuberculosis Cluster in A Hospital in Southern Taiwan, 2009–2014

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Abstract

In Taiwan, tuberculosis has always been the notifiable disease with the largest number of confirmed cases every year. Tuberculosis infection possesses a great occupational risk to health care workers, and might even cause clusters. From December 2009 to November 2014, a total of 8 confirmed tuberculosis cases had been reported from Hospital A in southern Taiwan. Based on epidemiological investigation, 4 cases had common activity in a certain office space. Bacterial strains from 6 cases shared identical genotype, so a tuberculosis cluster was confirmed. According to the environmental investigation, one of the main factors might be due to poor ventilation. Therefore, the authorities and experts suggested that Hospital A should improve ventilation, infection control and staff health monitoring. This cluster was monitored for one year and no new case was reported by December 2015. Except one foreign worker case went back to home country, 7 other cases had completed treatment courses. The event indicated that hospitals need to actively monitor air quality, improve ventilation and strengthen the health care workers' willingness on latent tuberculosis infection screening and treatment, in order to decrease the risk for respiratory disease clusters in the future.

Keywords: Tuberculosis, health care worker, cluster

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