

Abstract: Tuberculosis (TB) disease may be transmitted to close contacts of index cases, causing physical illness. No studies have investigated the risk of developing depressive disorder among TB contacts in a TB-endemic area. Adult participants with a new diagnosis of TB contact (ICD-9-CM codes V01.1 plus chest radiographic order) since January 1, 2008, were identified from the National Health Insurance Research Database in Taiwan. A control cohort matched for age (± 5 y), sex, enrolled years, and income level was selected. These 2 cohorts were followed until December 31, 2012, and observed for the development of depressive disorder. The Kaplan–Meier method and the log–rank test were used to examine the difference in cumulative incidences of depressive disorder between groups. Cox proportional–hazard models were used to calculate adjusted hazard ratios (aHRs) for depressive disorder. The TB contact cohort consisted of 9046 patients and matched controls of 36,184 ones. The mean age of TB contacts was 44.7 years, and 56.0% of them were women. During a mean follow-up period of 2.5 years, 127 (1.40%) TB contacts and 521 (1.44%) matched controls developed depressive disorder. TB exposure was found to be an independent risk factor of depressive disorder in women (aHR 1.34, 95% confidence interval [CI] 1.07– 1.68), but not in men (aHR 0.71, 95% CI 0.48–1.06) after adjusting for age, comorbidities, and income levels. The risk of depression was significantly higher for female TB contacts than for matched controls in the first and second years (aHR 1.49, 95% CI 1.03–2.14; and aHR 1.53, 95% CI 1.05– 2.23, respectively), but not thereafter. Of note, 67 (0.74%) TB contacts and 88 (0.24%) matched controls developed active TB, but none of them had subsequent depressive disorder during follow-up periods. Female TB contacts had an increased risk of depression within the first 2 years after exposure. Clinicians should consider conducting depression evaluations in addition to routine TB contact investigations in this subgroup population.