

# Hospital-Based Basic Management Unit in Public-private Mix Model for Tuberculosis control

Abstract:

**Objective:** After the implementation of national health insurance and health sector reform, tuberculosis (TB) patients are detected and treated from a wide array of public and private health care providers in Taiwan. National TB control programs should scale up public-private mix (PPM) approaches to ensure adherence to international standards of TB care. Therefore, we intend to set up the hospital-based basic management unit (BMU) in PPM model for TB control.

**Methods:** All patients notified as TB by Wan Fang hospital (Group 1) and registered TB patients referred to Wan Fang hospital (Group 2) from March 2006 through October 2006 were enrolled. We try to set up the hospital-based BMU model and integrate PPM to diagnose and treat these TB patients. Cohort analysis of treatment outcome was in according to the WHO definitions of treatment success, died, fail, default and transfer out.

**Results:** A total of 140 patients (Group 1: 93 patients and Group 2: 47 patients, including 10 multiple drug-resistant patients), were identified. They were 82(58.6%) male and 58(41.4%) female with a mean age of 62.5 years. Eleven patients (7 patients, 63.6%, due to nontuberculous mycobacteria) were excluded from treatment outcome analysis due to change of diagnosis. Of the 129 patients, 13(10.1%) had treatment success, 84(65.1%) are still on treatment, 11(8.5%) died, 21(16.3%) were transferred out (10 patients were notified and registered due to routine CXR check-up), and 0 defaulted (7 patients had ever loss follow-up more than 1 week). Among patients of Group 1, 26 patients (28.0%) had accompanying risk factors (including 14 had diabetes mellitus) and 29 patients (31.2%) had their anti-TB regimen changed due to drug-related side effects.

**Conclusions:** In view of high rate of co-morbidity and anti-TB drugs related side effects, hospital-based BMU in PPM model to ensure TB patients receive high-quality care, including PPM for DOTS, should be considered in Taiwan. To achieve these goals, national TB control programs should engage all health-care providers. To map all relevant public and private providers in a given setting and suitable roles for them should be identified. However, the financial resources to establish and sustain the collaboration should be provided or facilitated by the national TB programs, then, we can achieve the goal of halving the TB incidence by 2015.

**Keyword:** tuberculosis, Basic Management Unit, Public-private Mix