

## **Abstract**

**Tuberculosis is one of the important health issues in the world, and is the notifiable disease in Taiwan. Tuberculosis cases have been registered and followed up by center of disease control (CDC) each year. The effects of prevention for tuberculosis were satisfied. However, the death rate of 5.81 per hundred thousand population was still higher than the control standard rate defined by WHO that the tuberculosis death rate is less than 2 people per hundred thousand population. There were 14,486 confirmed diagnosis TB cases and the default rate was 5.16% in 2001. Incomplete treatment is the important factor that increases the difficulty of tuberculosis's prevention and treatment. This study would like to investigate the relative factors of failed treatment for TB patients.**

**The database was derived from CDC nationwide dataset of TB patients that registered in CDC from January to December in 2001. This study would like to examine whether the patients were successfully treated after 18 months of registration and whether the patient had interrupted treatment more than two months during the treatment period. Proportional random sampling was applied to select TB patients. Structured questionnaire were used to interview TB patients by phone. Descriptive statistics described the patients' characteristics and the related variables according to treatment status. Logistic regression analysis was conducted to analyze the associated factors that influenced the treatment outcome of TB patients.**

**The results showed that the factors associated with interrupted treatments including lacking family support such as divorce or separation, taking medicine irregularly, having great impacts on life, being unfamiliar with the way of taking medicine, and feeling heavy burden of medical expenditure. The main problems for patients after taking medicine were drug's side effect and uncomfortable. Thus, the key factor causing to have interrupted treatments was highly related to patients' compliance behaviors. In addition, the factors associated with successful treatment were male, middle level education, and lower family income. Patients with these characteristics would have lower cure rates. When patients took medicine irregularly, had interrupted treatment, or lacked the awareness of TB, it would increase to have failed treatments.**

**Based on the results, the study provides some recommendations to CDC decision makers as follows: (1) advocate the concept of going to the fixed hospitals/clinics for TB treatments; (2) encourage pharmaceutical factory to invent new TB medicine with lower side effect or shorter treatment course; (3)**

**recommend the Bureau of National Health Insurance to modify the payment system for TB treatment; (4) reconfirm the TB dataset correctly. There are some recommendations to physicians as follows: (1) enhance the awareness of TB and treatment course to TB patients; (2) improve the communication with patients' families and enhance family's support; (3) implement case management program for TB patients. The recommendations to public health nurses are the following: (1) increase the visits and give more concerns to TB patients; (2) enhance TB patients' compliance.**

**Key word: Tuberculosis ; Interrupted treatment ; Failed rate ; Cure rate**

