

## Research Article

## Health seeking behavior among tuberculosis clients in a province of Thailand: A hospital-based study

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### Abstract

The aim of the study was to examine the patterns of health seeking among 60 tuberculosis clients. The demographic data, health seeking behavior, and delays on presentation were collected. Three symptoms of cough, weight loss, and exhaustion were commonly encountered of 85.0, 78.3, and 66.6% respectively. The average client delay-to-health service was 11.3 weeks, and the majority of 85% waited at least 4-week postponement. Considerable delay exists between symptom onset and treatment initiating among the clients might be poor awareness and concern.

**Keywords:** tuberculosis clients, health seeking behavior

### Introduction

Tuberculosis (TB) is a major global health problem. It causes ill-health among millions of people each year, and ranks alongside the human immunodeficiency virus (HIV) as a leading cause of death worldwide. Thailand ranks 18 of 22 TB high burden countries (HBCs) with an incidence of 119 cases per 100,000 people. In 2014, there were an estimated 9.6 million new TB cases, and there were also 1.5 million TB deaths: 1.1 million among HIV-negative people and 0.4 million among HIV-positive people. Most of these TB cases and deaths occur among men, but the burden of disease among women is also high. Between 2000 and 2014, there were 43 million lives were saved through TB diagnosis and treatment. [1,2]

The burdens of TB and deaths are alarming. Every year around 60,000 people in

Thailand develop TB. The detecting and curing TB clients are currently the two major applications for the prevention and control of TB. [3] The TB case detection rate (CDR) is the ratio of the number of notified TB cases to the number of incident TB cases in a given year. One key target for TB control program worldwide is achieving a sputum smear-positive CDR greater than 70%. [4] The TB treatment success in Thailand attains an average of 81%. [1] Nevertheless, currently we face with two challenges to meet the goal: diagnosis and non-completion of treatment. Between 1995 and 2004, most the studies done on diagnostic delay, a delay of 2 to 3 weeks is acceptable as patient delay from TB control point of view. Ideally the total delay from start of symptoms to the start of treatment should be 3 to 4 weeks. [5]

Myanmese refugees in Thailand face a stark choice: they can stay in one of refugee camps along the border with Myanmar, or they can live and work outside the camps, but typically without recognized legal status of any kind, leaving them at risk of arrest and deportation. Resettlement has had a negative impact on education, health care, and other social services in the camps. [6] Overall, the prevalence of tuberculosis among Myanmar refugees was quite high: 340 per 100, 000 and among Myanmar migrants 150 per 100,000 [7], as well as Maehongson province. [8,9] The authors aimed to determine the health seeking behavior and delay-to-health service among tuberculosis clients.

### Material and Method

The retrospective, descriptive study was conducted in Srisangwan general hospital, Maehongson province. The subjects were recruited from the TB clinic, beginning in January 2014. The last client completed the survey in April 2015. The consenting clients were enrolled and interviewed, and the exclusion criteria included uncommunicative person, or lost contact. The human research ethics committee and the institutional review board approved the protocol and informed consent.

The demographic data included age, sex, race, marital status, education, occupation, and income. The health seeking behavior questionnaire included symptom, prior self-remedy, factor the influence decision making, and time interval from symptom to first access to health service. Descriptive statistics were used included frequency and percentage.

### Results

The mean ages were 50.2 (SD = 18.86) years. Majority of them are male (60%), married (73.3%), Buddhist (58.3%), no education (60.0%),

house wife or unemployment (45.0%), and income per month less than 2,000 Baths (70.0%). The subjects were multiracial: Shan (33.3%), Karen (30.0%), Thai (16.7%), and other (10.0%).

The three common prior symptoms and signs included cough (85.0%), weight loss (78.3%), and exhaustion (66.6%), and the remains were less than a half such as chest pain (48.3%), fever (41.6%), hemoptysis (15.0%), and other non-specific symptoms (23.3%). The time interval from symptom to first access to health service were categorized into 1 to 3 week (15.0%), 4 to 6 weeks (36.7%), and more than 6 weeks (48.3%), as shown in Table 1. The mean interval delay access was 11.3 weeks (SD = 13.31), with the range of 2 to 51 weeks. **(Table 1)**

The reasons for seeking or no seeking health care were multifactorial determinants such as getting access to sites of care where they can receive needed services (55.0%), failure self-medical care (17.7%) and traditional medicine (11.7%), gaining entry into the health care (16.7%), and medical welfare (10.0%). Only few clients (3.3%) reported about the barrier to access health services, in terms of travelling expenditure and long wait times.

**Table 1** prior symptom and sign, clients' delay to access health care

	No. (%)
Symptom and sign	
cough	51 (85.0)
weight loss	47 (78.3)
exhaustion	40 (66.6)
chest pain	29 (48.3)
fever	25 (41.6)
hemoptysis	9 (15.0)
Other	10 (23.3)
Delay access (week)	
1 to 3	9 (15.0)
4 to 6	22 (36.7)
More than 6	29 (48.3)

## Discussion

Late diagnosis of pulmonary TB is likely to be associated with a worse prognosis owing to presence of extensive disease and poor clinical condition. The average time interval to access health care of 11.3 weeks is quite unacceptable postponement which is likely to be associated with a greater number of secondary cases per index case. [10] The overall average delay access to diagnosis is similar to 8, 10, and 12 weeks of several studies in Malawi, South Africa, and Nepal. [11-13]

The study confirms poor awareness and concern that there is a considerable delay between onset of illness and the initiation of treatment among TB clients in a border hospital, northern Thailand. The optimized delay to therapy should be less than a month for TB.

The present analysis described on delay access, and the reason for seeking or no seeking health service, may convey a more appropriate picture of delays than comparing averages. There were some limitations to the data. The patient recall regarding of the symptoms and signs may be inaccurate despite the semi-structured interview approach and repeated qualitative probing to validate response. It was also impossible to all cases to separate patient and services provider delay, which was more common among those who first visited traditional healers. In addition, the hospital-based survey study cannot provide information on individuals who were never treated in hospital and who may die untreated in the community.

In conclusion, there may have a delay both from the patient as well as the health system in treating TB. This might be poor awareness and concern, and the result can be used for future policy formulation by the control program.

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