

HARDSHIP OF TUBERCULOSIS TREATMENT ACCESS AND ADHERENCE AMONG MYANMAR MIGRANTS AT MAESAI HOSPITAL, THAILAND

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ABSTRACT: Tuberculosis in Thailand has been increasing its violence as increment of deaths and number of reported new cases. Crucial to the rising tuberculosis patients is HIV/AIDS coinfection or international migrants. This study aims to explore treatment access and adherence of Myanmar tuberculosis patients who had been receiving treatment in Thailand. In-depth interview and observation of 28 Myanmar patients at Maesai Hospital in Chiang Rai Province, and home-visit of 10 cases were conducted during November 2010 to April 2011. Results indicate that, additional to economic hardship, social factors-stigma and discrimination against tuberculosis or HIV and lack of social support-could affect treatment access and adherence of Myanmar patients. Moreover, lack knowledge of tuberculosis and HIV and personal health behaviors- including self medication, changing treatment places without referral system and poor health condition- were also negatively impact the treatment access.

Keywords: Myanmar Tuberculosis Patients, Tuberculosis Treatment Access, Tuberculosis Treatment Adherence

INTRODUCTION

Number of new tuberculosis cases reported via Bureau of Epidemiology, Thailand Ministry of Public Health has been increased gradually since 1990. Especially in 2008, tuberculosis incidence rate in Thailand was 54 per 100,000 and made Thailand as rank 17th in the world [1]. The world rank in 2008 was stepped up from rank 18th in 2007 and rank 22nd in 2006. In addition to human immunodeficiency virus (HIV)/acquired immune deficiency syndrome (AIDS) [2], international migrants have been considered as sources of infectious diseases including tuberculosis [3]. There were more studies on tuberculosis and HIV/AIDS coinfection, therefore this study majorly focuses on tuberculosis among international migrants.

The tuberculosis treatment success rate is targeted at 85 percent by the World Health Organization (WHO), so Thailand has not reached the WHO target yet [4]. While tuberculosis treatment in public hospitals is fully covered by National Health Security Office for Thais, it is free provided only tuberculosis drugs for international migrants who have no health insurance. Among international migrants in Thailand 2008, new tuberculosis

reported cases and death rate were reported higher in Myanmar than Cambodian and Laos and were highest in Chiang Rai Province which mostly received treatment from Maesai Hospital [1]. Therefore, this research aimed to find out challenges on tuberculosis treatment access and adherence of Myanmar migrants who were diagnosed with pulmonary tuberculosis and had been receiving their treatment with Maesai Hospital during data collection period, November 28, 2010 to April 30, 2011.

Experiences from mixed groups of population from various countries had shown that socio-economic factors, tuberculosis and its treatment and other illness might influence on their treatment access and adherence. Social determinants of health [5] would be explained socioeconomic factors which may affect on access to tuberculosis treatment and its adherence in this research.

MATERIALS AND METHODS

The data were drawn from a survey undertaken during November 28, 2010 to April 30, 2011. The geographic location of the sample was chosen with consideration on the highest new tuberculosis cases and death rate. Therefore an in-depth interview of 28 Myanmar migrants, who were diagnosed with tuberculosis and had/have been receiving their

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Table 1 Demographic characteristics and health information of the 28 cases

List	Sex	Age	Living in Thailand	Work in last 6 months	Travel time	Self medication	Private practitioner	TB	
								Treatment	Outcome
1	female	18	no	no	1-3 hr.	no	no	1 st time	lost follow-up
2	male	57	yes	no	1-3 hr.	no	no	1 st time	lost follow-up
3	male	40	yes	yes	<1 hr.	no	yes	1 st time	changed, as of default
4	male	37	yes	yes	<1 hr.	no	no	2 nd time	cured
5	male	29	yes	no	<1 hr.	yes	yes	2 nd time	under treatment
6	female	27	yes	no	<1 hr.	yes	yes	2 nd time	under treatment
7	male	45	no	yes	<1 hr.	yes	yes	2 nd time	cured
8	male	42	no	no	1-3 hr.	yes	yes	1 st time	cured
9	male	48	no	no	>3 hr.	yes	yes	1 st time	under treatment
10	female	18	no	yes	<1 hr.	yes	no	1 st time	cured
11	female	30	no	yes	>3 hr.	yes	yes	1 st time	under treatment
12	male	35	yes	yes	<1 hr.	no	yes	1 st time	cured
13	female	30	no	no	1-3 hr.	yes	yes	1 st time	cured
14	female	10	no	no	>3 hr.	yes	yes	1 st time	cured
15	male	52	no	yes	>3 hr.	no	yes	1 st time	cured
16	female	29	yes	yes	<1 hr.	no	no	1 st time	cured
17	male	34	yes	no	>3 hr.	yes	yes	1 st time	under treatment
18	female	41	no	no	<1 hr.	yes	yes	1 st time	under treatment
19	male	39	no	yes	>3 hr.	yes	yes	1 st time	under treatment
20	male	73	yes	no	<1 hr.	yes	yes	1 st time	under treatment
21	female	21	no	no	>3 hr.	yes	yes	1 st time	under treatment
22	female	35	yes	no	<1 hr.	no	yes	1 st time	under treatment
23	female	23	yes	yes	<1 hr.	no	no	1 st time	under treatment
24	male	26	no	yes	<1 hr.	yes	yes	1 st time	under treatment
25	male	52	yes	yes	<1 hr.	no	no	1 st time	under treatment
26	female	43	no	yes	<1 hr.	yes	no	1 st time	under treatment
27	female	73	no	no	<1 hr.	yes	no	1 st time	under treatment
28	female	24	yes	yes	<1 hr.	yes	no	1 st time	under treatment

Note: Information had been collected during November 28, 2010 to April 30, 2011.

treatment with Maesai Hospital, were conducted to provide details on challenges of treatment adherence and treatment access. Informers were balanced as much as possible between in-migrants and cross-border migrants, male and female, and age groups. Moreover, home visits was designed for more investigation of living condition and socioeconomics which probably influence on developing active tuberculosis and treatment

adherence of selected 10 Myanmar migrants. Data through face-to-face interviews with a structured questionnaire by the researcher was recorded in a field note and analyzed upon given content. Six co-interviewers and the researcher were fluent in Thai as well as Tai Language; and Tai Language is either the first language or second language of interviewees. Co-interviewers who have been working with Maesai Hospital either at



Figure 1 Location of selected key informants

tuberculosis clinic or HIV/AIDS clinic were well trained about the questionnaire.

A human subject clearance was obtained from Mahidol University Institutional Review Board (MU-IRB). As ethical issue concerning, all research's tools were approved by MU-IRB before conducting.

RESULTS

Drawing from the in-depth interviews and home visits, 28 tuberculosis patients reported their vulnerability based on social determinants of health, tuberculosis and its treatment and other illness. The factors which influenced tuberculosis treatment access and adherence of Myanmar patients can be identified into four key aspects.

1. Financial factors: Apart from physical vulnerability from tuberculosis, Myanmar patients are also encountering financial difficulties in many forms; i.e. no income, no health insurance, low level financial support from peer and relative and high cost of transportation to get treatment. A half of 28 were unemployed and six had not been working in the last six month because of their poor health condition. So they were no personal income, and lost opportunities in earning and capacity building. Only one has health insurance to cover costs of treatment, but 27 were less financial support for paying costs of investigation, medicines excluded tuberculosis drugs, a doctor fee and transportation, and three admitted they had lost the 1st tuberculosis treatment with a private practitioner because of no money. Seven of 28 were spending more than three hours for traveling between home

in Myanmar and Maesai hospital, and they could not travel back within one day as there was no bus available after 1 p.m. at Tacheleik bus station (Table 1).

"I had been suffering from cough and fever, and I was so tired at that time. I could not work (as a daily employee in a construction business). My kept money was spent for tuberculosis treatment at a private clinic, but it could not cover until treatment completion. For this time, I went 1stly to Maesai Hospital. Here, I can get free tuberculosis medicines and lower expenses."

(A 29 years' old single male in Maesai District, no. 1 in Figure 1)

"My daughter has been sick from on and off cough, fever and abdominal pain about a year. The father and I bought her medicines from drug stores several times. She went to private clinics and hospitals more than ten times until she found masses on the inner side of her left breast. Two months after found masses, we took her to a hospital of Chiang-Mai University as we were afraid of breast cancer. Doctor's report suggested the masses were caused by tuberculosis and she was referred to continue treatment from Maesai Hospital. In Chiang-Mai, we spent about 30,000 baht for all expenses including 10,000 baht of hospital bill which was deducted to 20 percent already. We came here by a public bus and it took us a whole day for traveling. Her father sold one crop field to pay for her treatment. But most of

all, we are appreciated with the result of her treatment.” her mother said. “I educated in Chinese Language School and planed to work in China with other classmates but it was delayed for two years already.” She said.

(A 21 years’ old single female and her parents in Mong Lar, no. 2 in Figure 1)

2. Social factors: The big barrier for the access to tuberculosis treatment of migrants is the negative attitude of patients’ relatives, friends, and communities. Two of these 28 were faced with stigma and discrimination against tuberculosis or HIV from their family and community or lack knowledge of tuberculosis and HIV, so they were lack of social support.

“No one talks to me, even my family. My aunt stopped eating with me. Only my sister that understands and gives me support but she is living in Bangkok. They believe that tuberculosis and HIV are the same. My brother has hit me hard as I have spent a lot of money for the treatment.”

(A 18 years’ old Akha single female in Tacheleik, no. 3 in Figure 1)

“I have been staying only in my house, I am afraid my neighbors would not talk to me. Only my mother is caring me and going with me everywhere. I told them I got tuberculosis but they believe that I got tuberculosis and HIV. It is so difficult for us to live like this. I want to get well soon.”

(A 30 years’ old Akha married female in Mong Yaung, no. 4 in Figure 1)

3. Health seeking behaviors: Despite their right to access health facilities, many migrants prefer to practices self-medication which could delay in treatment access. Eighteen of twenty-eight practiced self medication. Even though they visited a private practitioner prior to Maesai Hospital, only some came here with a referral letter (Table 1).

“I had cough, fever and pain at the right chest while coughing more than 20 days. I took herbal medicine, but it was not better. I consulted with a doctor at his clinic and was suspected tuberculosis, but a doctor had to go to Rangoon. I could not wait, so I went to

Maesai Hospital without any letter from a doctor. I was checked all again and found tuberculosis in my lung. I paid for investigation again and again, but I am pleased with a result of treatment”

(A 42 years’ old monk in Tacheleik, no. 5 in Figure 1)

4. Other illness: only one was developed hepatitis after one month of tuberculosis medicines. It could be adverse drug reaction or co-infections, but the patient was lost follow-up after a doctor tried to manage his condition for one month and his condition was not improved yet. Phone call could not reach him, so there was no further information. Therefore, poor health condition might affect on treatment adherence or access.

DISCUSSION

All kinds of hardship which probably affected on treatment access and adherence of Myanmar tuberculosis patients are as following:

1. Unemployment, no income, less financial support, lost opportunities in earning and capacity building, costs of TB treatment, and transportation and its costs, these six issues could cause them financial burdens which probably affected on treatment access and adherence as mentioned by Charmrathirong and Boonchalaksi [6], Kwara et al. [7], Munro et al. [8] and Xu et al. [9].

2. Stigma and discrimination against TB/HIV, lack knowledge of TB/HIV, and lack of social support, these social factors might affect on their treatment access and adherence as mentioned by Ngamvithayapong-Yanai et al. [10] and Xu et al. [9].

3. Practices of medication without a doctor consultation and changed treatment places without a referral letter, these two health seeking behaviors could delay in treatment access.

4. Poor health condition, is also another kind of hardship, might affect on treatment adherence as mentioned by Ditah et al. [11], Mesfin et al. [12], Munro et al. [8], Ngamvithayapong-Yanai et al. [10], Open Society Institute [13] and Xu et al. [9].

If patients could not manage their hardship and lost their first tuberculosis treatment, patients would lose an opportunity to be treated with the short course regimen (6 or 9 months) and will be treated with more complex regimens according to results of drug resistance [14]. The patients would lose what they paid for their previous treatment; worse than that, they have to repeat a same kind of payments, but in a longer period.

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