

PREVENTIVE BEHAVIORS OF TUBERCULOSIS AMONG MYANMAR MIGRANTS AT MUANG DISTRICT, PHUKET PROVINCE, THAILAND

Hnin Thawda Thwin* and Robert S. Chapman

College of Public Health Sciences, Chulalongkorn University, Bangkok 10330, Thailand

ABSTRACT: This study aimed to explore the factors related to preventive behaviors of tuberculosis among Myanmar migrants at Muang District, Phuket Province, Thailand. This is the cross-sectional study design. The data came from 15 Myanmar migrant communities in Phuket Province by multistage sampling method. The subjects of the study were 342 Myanmar migrants, adult 18 years and above by using face to face interview with structured questionnaires. Non parametric tests were used for hypothesis testing. The results showed that preventive behaviors of the migrants was at good level ($\geq 80\%$ of total score) of 43.6%. The overall knowledge of the respondents at good level was 30.1%, perception at good level was 45.3% and the respondents who had high barrier were 49.4%. Migrants received the information relating to TB from various sources, but very few got from family members and drug stores. There were significant positive association between age, gender, marital status, education, ethnic groups, occupation, registration status and preventive behaviors. Even though there was significant positive association with knowledge and preventive behaviors, no association with perception portion and barriers. There was negative association between knowledge and barrier score. Likewise, knowledge was positively associated with perception. Again, barrier was negative association with perception.

Key words: preventive behaviors, tuberculosis, migrants

INTRODUCTION: Tuberculosis (TB) is one of the most globally serious public health problems. About one third of the global population has been infected with TB. With the increasing prevalence of HIV infection, the problem of TB is likely to be compounded in the years to come¹⁾. In most industrialized countries and large cities, the annual numbers of cases and deaths caused by tuberculosis have steadily declined over the past century up to the mid-1980s²⁾. Since then, an increasing number of TB cases in immigrants have reversed this downward trend in these areas with substantial levels of immigrants³⁾

In general, immigrants have difficulty in maintaining their health.

Many factors, often associated with the immigrants' journey and limited access to health care facilities in host regions (whether due to legal, economic, social or cultural barriers), make people vulnerable to infectious TB⁴⁾⁵⁾. Myanmar and Thailand are still in high burden countries, with the annual prevalence rate of 169 and 208 per 100,000 respectively. Annual mortality rate is 13 in Myanmar and 19 per 100,000 populations in Thailand⁶⁾. There is 799 of TB patients among 30,990

registered Myanmar migrants in Phuket when they go for work permit and the actual figure could be twice among unregistered⁷⁾.

MATERIALS AND METHODS: An analytical cross sectional survey with 342 Myanmar migrants, whose age was 18 years and above, and included both gender, registered and unregistered. Multistage cluster sampling was applied, meaning that District was selected purposively and clustered according to respondents' occupations and each sample was interviewed by convenience sampling. A structured questionnaire was used.

RESULTS: The respondents were mostly male 73.1%, aged 20-24 years (24.9%), 25-29 years (21.9%), average age 29 $\pm$ 8 years. Almost of half were married 42.1% and single were 37.4%, 34.6% were primary education and lower, 42.2% had secondary education. The main occupations were fishermen 36.8% and construction 33.6% and 64.6% were unregistered.

The level of knowledge, perception, barriers and preventive behaviors regarding tuberculosis: there are two levels for the variables knowledge, perception, barriers and preventive behaviors by

*To whom correspondence should be addressed.
E-mail: hninthawdathwin@gmail.com

scoring as $\geq 80\%$ of total score were assumed to be good and $<80\%$ were need improvement level. The good level of knowledge and perception were 30.1% and 45.3% respectively. The respondents with high barriers were 49.4% and the respondents with good preventive practices were 43.6%.

For the relationship between demographic characteristics and preventive behaviors, there were statistically significant association between age, gender, marital status, education, ethnic groups, occupation, income, registration status and preventive behaviors ($p < 0.05$).

Regarding among association between knowledge, perception, barriers and preventive practices, there were statistically significant positive relationship for knowledge and preventive behaviors ($p < 0.001$). On the other hand, there was negative association between barriers and preventive behaviors (Table 1).

Table 1 Preventive behaviors score with knowledge, perception and barriers

	Spearman's rho correlation coefficient	Preventive Behaviors <i>p value</i>
Knowledge score	0.239	$<0.001^*$
Perception score	0.087	0.109
Barrier score	-0.031	0.572

*highly statistical significance.

Likewise, the perception had negative relationship with barriers as the perception was low, the barriers became higher. In contrast perception was positively associated with knowledge ($p < 0.001$). (Table 2)

Table 2 Perception score with knowledge, barriers

	Spearman's rho correlation coefficient	Perception score <i>p value</i>
Knowledge score	0.286	$<0.001^*$
Barrier score	-0.034	0.535

* highly statistical significance.

However, knowledge had negative association with barriers, as the respondents' knowledge became higher, the barriers were reduced (Table 3).

Table 3 Relationship between barrier score and knowledge

	Spearman's rho correlation coefficient	Knowledge score <i>p value</i>
Barrier score	-0.195	$<0.001^*$

* highly statistical significance.

There were significant positive associations between most variables of accessibility to TB information. However there was no association with such information received from family and neighbors or drug stores.

DISCUSSION: There was a significant positive association with knowledge and preventive behaviors, suggestion that the respondents practiced tuberculosis preventive behaviors when their knowledge became higher. But there was no association with perception and preventive behaviors. It is suggested that the respondents practiced tuberculosis preventive behaviors according to the knowledge they had although they did not perceive. Another reason may be due to the fact that migrants have so many barriers like registration status in order to treat TB, and also the economic burden when they contacted TB. In terms of barriers, it was not associated with either perception or preventive behaviors. However there was negative association between knowledge, perception and the barriers. The major barriers were local authorities and language barriers in seeking health care. There were significant associations between accessibility of information and preventive behaviors except information received from family or neighbors and drug stores.

RECOMMENDATION: Upon this survey, one third of the respondents never heard of any kind of health information regarding tuberculosis. Likewise, some of the respondents had still misconception about tuberculosis. Therefore, it

is suggested that the health information and health education programs should directly cover all layers of the migrants. Health education should include all of the information about TB. Moreover, the education programs should also make some adjustments to the various times to suit the leisure hours of working groups so that there would be no one who had never got any health information.

The major barriers to seek health care for the migrants were local authorities and language barriers. Thus, it would be better if there were some health centers for Myanmar migrants and should provide a translator for each centers to overcome the language difficulties in seeking health care.

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