


# Transnational Mobility and Utilization of Health Services in Northern Thailand: Implications and Challenges for Border Public Health Facilities

Journal of Primary Care & Community Health  
Volume 12: 1–7  
© The Author(s) 2021  
Article reuse guidelines:  
sagepub.com/journals-permissions  
DOI: 10.1177/21501327211053740  
journals.sagepub.com/home/jpc  


Natthani Meemon<sup>1</sup>, Seung Chun Paek<sup>1</sup>, Penchan Pradubmook Sherer<sup>1</sup>,  
Wilasinee Keetawattananon<sup>1</sup>, and Thammarat Marohabutr<sup>1</sup> 

## Abstract

**Introduction/Objective:** Transnational populations from the Association of Southeast Asian Nations are crossing borders regardless of whether their status is legal or undocumented, to receive health services in the border regions of Thailand. The implications and challenges of transnational mobility and the utilization of public health facilities in Thailand's border regions are therefore investigated in this study. **Methods:** Four public health facilities were selected, located in 2 economically-active border areas in Northern Thailand: Mae Sai–Tachileik at the Thailand–Myanmar border and Chiang Saen–Ton Phueng at the Thailand–Lao PDR border. Qualitative data were obtained from in-depth interviews with 8 medical and non-medical hospital staff responsible for implementing facility-level policies and providing health services for the transnational population. **Results:** Five themes were identified through analysis of the implications and challenges for transnational mobility and the utilization of public health facilities under study: contextual determinants of illness in specific border areas; uncompensated care as opposed to financial management in serving the transnational population; health service opportunities for the transnational population; cross-border collaboration on public health; and the remaining challenges of transnational mobility in border regions. **Conclusion:** Conventional content analysis with interpretative induction of in-depth interview data offers recommendations for improving the capacity of border health facilities to reduce the burden placed upon them to provide services to the transnational population.

## Keywords

transnational mobility, health facility, health service utilization, border health, Northern Thailand

Dates received 16 August 2021; revised 27 September 2021; accepted 29 September 2021.

## Introduction

Regional integration stimulates population mobility among member countries through more advanced infrastructure development and lax regulations facilitating border trade, both of which result in transnational mobility from lower developing economies into countries with better living and occupational opportunities. Transnational mobility not only affects specific areas, but also the international economy, society, culture, and politics.<sup>1</sup> The objective of transnational migrants to seek a better quality of life in destination countries is usually motivated by their health needs. Accordingly, destination countries may grant them the right to access national health services and receive health benefits. For instance, the European Union (EU), as a part of its regional integration policy, allows equal access to local health

facilities for any member state and encourages the exchange of patients between border towns.<sup>2–4</sup>

In Southeast Asia, the health systems of the Association of Southeast Asian Nations (ASEAN) are limited to within the borderline of each member state. The right to health care is only granted to citizens or documented transnational migrants who live and work legally. There is still no policy on health protection for undocumented and illegal transnational people

<sup>1</sup>Mahidol University, Nakhon Pathom, Thailand

### Corresponding Author:

Thammarat Marohabutr, Department of Society and Health, Faculty of Social Sciences and Humanities, Mahidol University, Nakhon Pathom 73170, Thailand.  
Email: thammarat.mar@mahidol.ac.th



despite moving within the ASEAN boundary.<sup>5</sup> As a member of the ASEAN, Thailand has long been one of the main destinations for transnational populations from border countries to work and seek health services due to its better economic status and quality of medical care.<sup>6</sup> The cross-border movement to Thailand of transnational patients from Myanmar, Cambodia, and Lao People's Democratic Republic (Lao PDR) is not a makeshift situation. Thailand has adopted a policy that allows migrant workers and their families who live and work legally in the country to access its health services under the health insurance card scheme for migrant workers or the social security system.<sup>7,8</sup> However, the status of the transnational population in Thailand is diverse, involving both legal and illegal migrants. Consequently, everyone has different health needs and not all migrants can access Thailand's health services.

In border regions, Thai public health facilities often face constraints in responding to the diverse health needs of the transnational population, especially those entering the country illegally who have no right to access health care or the ability to pay.<sup>9,10</sup> A significant driving factor in transnational populations entering Thailand with a view to using the health services in its border regions is the weakness of health systems in neighboring countries. This is intensified by pull factors such as the convenience of travel, more modern medical equipment, and better quality health services. However, since the budget allocated for Thai public health is often austere, health service provision for transnational migrants is regarded as ethical and humanitarian aid.<sup>9</sup> Thailand still has limitations in public health in comparison to their counterparts in the ASEAN with a similar development level. For instance, in terms of the Thai medical manpower in Thailand, the doctor-population ratio of 8.1 doctors per 10 000 and the nurse and midwife-population ratio of 27.8 nurses per 10 000 are lower than ratios in Malaysia (15.4 doctors per 10 000 and 34.7 nurses and midwives per 10 000). In Thailand's border regions, the number of medical personnel is much lower than in other areas of the country.<sup>11</sup>

There is a scarcity of previous studies on transnational mobility and the implications for public health facilities located in Thailand's border regions of Thailand. These are generally limited to the domain of cross-border infectious disease control, including emerging and reemerging infectious diseases such as HIV and AIDS,<sup>12</sup> malaria, tuberculosis (TB), and avian flu.<sup>13</sup> Some studies are dedicated to resource limitations and the cost burden of unpaid services for transnational people who have no health insurance due to its unaffordability and the arrangement of medical records for transnational patients needing continuous treatments.<sup>9,14,15</sup> There are a couple of studies focusing on the behavior of transnational people using health services in Thailand from countries with which it shares a border, namely Myanmar, Laos PDR, and Cambodia.<sup>6,16</sup> Hence, the

objective of this study is to investigate the implications and challenges of transnational mobility and utilization of public health facilities in Thailand's border regions.

## Methods

This study used the qualitative method, with cross-sectional data from in-depth interviews as the primary source for analysis. The data were collected from medical and non-medical staff in 4 public hospitals located in 2 economically-active border areas in Chiang Rai Province, Northern Thailand: (1) Mae Sai District, connected to Tachileik Province, Shan State, Myanmar; and (2) Chiang Saen District, connected to Ton Phueng District, Bokeo Province, Lao PDR. The 2 areas have transnational people regularly crossing the border for diverse purposes such as sightseeing, visiting friends and relatives, trade, and health care. Mae Sai District has 12 public hospitals, 11 of which are sub-district hospitals offering primary care and health promotion, while the other is a district hospital offering secondary care. In Chiang Saen District, thirteen of the fourteen public hospitals are sub-district hospitals while the other is a district hospital. One sub-district hospital and 1 district hospital at each border area were selected for this study. The selection criteria for the public hospitals were based on the location closest to border checkpoints where active cross-border movement occurs. Qualitative data were obtained from in-depth interviews and the purposive sampling of 8 medical and non-medical hospital staff responsible for implementing facility-level policies and providing health services for transnational populations. Details of the study participants are presented in Table 1. A semi-structured interview guideline was used with discussions conducted in the Thai language led by the main researchers. As an example, participants were asked about general situations, trends, and challenges involved in the utilization of health services by transnational populations at public hospitals located in border areas. All participants gave their written informed consent. Sound recordings from the in-depth interviews were transcribed verbatim and then analyzed based on conventional content analysis with interpretative induction. Without qualitative data analysis software, coding was identified and agreed by reading and understanding the transcript of in-depth interviewing with a consensus among 3 researchers regarding the generation of themes. The data were then labeled and grouped under the same categorized themes to be reported in the results section. This study forms part of the research project "Transnational Medical Spaces: Dynamics of Transnational Utilization of Health Services and Implications to the Health Services System and Social Suffering in the ASEAN Context" certified with a research ethics clearance from the Committee for Research Ethics (Social Sciences) of Mahidol University numbered MU-SSIRB No.: 2017/308 (B1).

**Table 1.** The Study Participants.

Informant	Position	Facility level	Border region
1	Head of border health department	Secondary hospital (district level) (SH-DL)	Mae Sai–Tachileik (A)
2	Medical technologist		
3	Director	Primary hospital (sub-district level) (PH-SL)	
4	Director	Secondary hospital (district level) (SH-DL)	Chiang Saen–Ton Phueng (B)
5	Deputy director		
6	Information system and health insurance staff		
7	Director	Primary hospital (sub-district level) (PH-SL)	
8	Registered nurse		

### *The Context of the Border Region in Mae Sai District, Chiang Rai Province*

Mae Sai District in Chiang Rai Province is the northernmost district of Thailand. Its territory is adjacent to that of Tachileik Province of Shan State in Myanmar. In Mae Sai District, there are 2 border checkpoints between Thailand and Myanmar; the first of which is the Mae Sai Border Checkpoint situated between Mae Sai town and Tachileik township facilitating the regular cross-border movement of Thai and Myanmar residents and workers as well as tourists from other places. The area between Mae Sai District and Tachileik Province is hedged by the Sai River as its natural border. The 2 towns are pivotal, being the hub for commercial and service businesses such as shops, hotels, restaurants, and entertainment venues to serve locals and visitors. Another border checkpoint of Mae Sai District is located at the Thai–Myanmar Friendship Bridge over the Sai River for logistical purposes. Mae Sai District also has several checkpoints for border trade with Myanmar. Many people from Tachileik Province and other areas of Shan State traveling into Mae Sai District pass through these channels every day for the purposes of buying and selling goods, visiting relatives, receiving health services, and employment in both formal and informal sectors without the need for immigration and customs formalities.

### *The Context of the Border Region in Chiang Saen District, Chiang Rai Province*

Chiang Saen District is located to the northeast of Chiang Rai Province. Its territory is connected to Ton Phueng District, Bokeo Province in Lao PDR. The natural borderline separating the 2 countries is the Mekong River. This border region is part of the famous “Golden Triangle” situated in Ban Sop Ruak Village at the triple point between Thailand, Myanmar, and Lao PDR. Chiang Saen District has 1 border checkpoint between Thailand and Lao PDR, routinely used by local people and tourists who travel by boat crossing to the Mekong. The Golden Triangle Special Economic Zone and Kings Romans Casino (a private casino

supported by Chinese investors) are located on the Lao PDR side. Chiang Saen District also has 2 checkpoints for border trade located at the borderline facing Lao PDR. Lao and Myanmar people regularly use these channels to cross the border to buy consumer goods, visit relatives, and use the health services in Chiang Saen District. Myanmar migrant construction workers working on the Kings Romans Casino as well as tourists from China and other countries visit both sides of the Thailand–Lao PDR border.

## **Results**

Data collected from the in-depth interviews with medical and non-medical hospital staff responsible for implementing facility-level policies and providing health services for transnational population at 4 public health facilities were classified into the following 5 themes.

### *Contextual Determinants of Illness in Specific Border Areas*

The contextual determinants of illness in transnational populations differed according to the socio-economic conditions of each border region. The transnational population from Myanmar in the border region of Mae Sai District appeared to be better-off and normally suffered from behavior-related diseases. However, Chiang Saen District in the border region was less urbanized. Since the majority of transnational people from Lao PDR worked as agriculturalists and laborers, their illnesses were usually occupation-related such as sickness from the use of chemical substances at banana plantations. A large number of migrant Myanmar construction workers were involved in the construction of the casino, crossing the border with Thailand to obtain treatment for construction-related injuries. On the Thai side of the border, there were also problems from sexually transmitted diseases such as HIV due to the existence of covert places offering commercial sex.

*“On the Mae Sai border, people are rather rich so their lifestyles can cause behavior-related diseases.”* (Medical Technologist, SH-DL, A)

*“More Myanmar workers from the casino have come to receive our services. For example, if the workers have accidents such as knife cuts, injuries from falling objects, and other sorts of sickness, they will come to receive our services.”* (Director, PH-SL, B)

*“Lao people grow bananas because Chinese people residing on the Lao side of the border really like eating bananas. However, a large amount of pesticide is used at the banana plantations. They (the transnational people) come to spend money at massage parlors with covert prostitution. When crossing the border to return home, they then spread HIV to their wives.”* (Registered Nurse, PH-SL, B)

The study participants expressed that the most important issues for transnational workers were lack of access to health services and lack of knowledge on health. Despite some transnational workers moving legally to Thailand with health insurance cards authorized by the Thai authority, they were unable to access health services in the country. This was because their employers forbid them from visiting health centers when they became ill. They also had little knowledge about health, particularly regarding dengue, which can be more common in these ethnic groups. Since some transnational workers were undocumented, they had limited access to health services due to their fear of arrest.

*“Their employers seize their health cards because they are afraid the workers will escape. They belong to ethnic groups who have little knowledge about health. In the case of dengue, we tell them to eliminate mosquito larvae but they don't even know what mosquito larvae looks like. If they don't have any cards or documents, they are afraid. After 6 p.m., migrant workers can't go out because soldiers may arrest them. Their health rights are limited.”* (Director, PH-SL, A)

### **Uncompensated Care as Opposed to Financial Management for Serving the Transnational Population**

All public health facilities investigated in this study are owned by the government. Their service charges are not high, especially those at the primary care level. According to the study participants, most users can afford the health services available at these facilities without health insurance. Transnational patients usually planned well to allow for payment of the health care received, including higher indirect expenses such as for transportation. However, the health facilities had to bear the financial burden if patients came without health insurance and were unable to pay. However, for ethical reasons, the hospitals sometimes allow patients to postpone payment or even treat them free of charge. Since the health service expenses are not high and charged at the same rate as for Thai people, the health facilities can still

manage the cost burden of unpaid services charges by using income from the health insurance fund for migrant workers and the social security fund as compensation.

*“We charge a small amount of money. However, the charges should not be so high that migrant workers can't afford them. In fact, they need to have some money for crossing the border. They have to pay 100 baht (3 US dollars) for a motorcycle service from their village, 30 baht (0.90 US dollar) for the boat service, 30 baht (0.90 US dollar) for the immigration fee, and 50 baht (1.50 US dollars) for a motorcycle service in order to come to us.”* (Director, PH-SL, A)

*“If they come to Thailand, we'll give them treatment first because of our professional ethics. If they don't have money, we allow them to either delay payment or make payment by installments. Once the migrant workers receive their health insurance cards and the government allows them to join the social security scheme, this problem is then alleviated.”* (Deputy Director, SH-DL, B)

*“The service charges are at the same rate as for Thai people. We don't charge them extra. We can survive because we are compensated for the overdue payment from the health insurance scheme for migrant workers.”* (Head of Border Health Department, SH-DL, A)

### **Health Service Opportunities Resulting from the Transnational Population**

Health services for the transnational population were perceived by participants as an opportunity for Thailand's health system to earn income without compromising the health services provided to Thai people. The payments received from transnational patients could be used to increase work opportunities such as by hiring interpreters as well as helping to prevent cross-border diseases and referral costs.

*“Affluent Myanmar people can contribute to support our work and subsidize us.”* (Medical Technologist, SH-DL, A)

*“We can use the income generated to hire interpreters.”* (Director, PH-SL, A)

*“We perceive the services provided to transnational people as an opportunity. Also, it gives us the opportunity to manage our system for transnational people to address the issue of various communicable diseases, including patient referral. Our services also help to prevent people on the Thai border side being infected with communicable diseases.”* (Director, SH-DL, B)

### **Cross-Border Cooperation on Public Health**

The health facilities in Chiang Saen District have established cross-border relationships and a close network with

the Lao PDR public health office and Ton Phueng Hospital in Bokeo Province. These health facilities work on health promotion and a referral system. They also communicate regularly with one another, particularly in cases involving HIV and dengue, through the use of social networks. In addition, a memorandum of understanding (MOU), the surveillance and rapid response team (SRRT), and a system for sharing patient records have been established to enable transnational patients to receive quality health services and effective follow-up, especially those with communicable diseases such as TB, HIV, and dengue. The scope of health services also covers other programs such as the expanded program on immunization (EPI) and antenatal care (ANC).

*“It’s good that we have a LINE group (a group chat application). We don’t know whether or not Lao patients take all the prescribed medications they obtain from us so we’ve started to contact Ton Phueng Hospital to follow up. After being tested for infection in Thailand, Lao people can return to obtain HIV treatment in Lao PDR. If people on that side get dengue, they may not inform us. However, if we find that their people come to Thailand to receive our services for dengue treatment, we’ll inform the hospitals on the Lao side.”* (Registered Nurse, PH-SL, B)

*“We’ve worked together with the staff at Ton Phueng Hospital in Bokeo Province, Lao PDR. Later, the cooperation expanded to cover TB (tuberculosis), and this is necessary for patient referral. An MOU was then made. We started the SRRT for surveillance on the issue of cross-border communicable diseases. One year later, we began working on the EPI and the ANC and we have regular discussions with each other. We use a LINE group for information exchange between each other.”* (Deputy Director, SH-DL, A)

However, the recent political constraints in Myanmar have made cooperation on public health between health facilities in Mae Sai District and Tachileik Province of Myanmar difficult because of bureaucratic problems and the lack of an MOU. Therefore, information transfer and follow-up treatment are now limited to only major communicable diseases with the support of non-government organizations (NGOs). The control of other communicable diseases cannot be implemented immediately, thus triggering the risk of cross-border epidemic transmission if Myanmar patients cross the border to receive health services in Thailand.

*“Cooperation with the other side of the border is difficult. For example, the cooperation is not done via direct channels because we don’t know the line of command in Myanmar. Their bureaucracy often changes, and every work position is replaced frequently. If we previously had contact with someone there, that person has inevitably been replaced by a new person. We need to start talking again. It’s still good that HIV treatment is supported by NGOs, but the treatments for other diseases are*

*subject to bureaucracy. We don’t have an MOU for hospitals working together.”* (Head of Border Health Department, SH-DL, A)

*“For example, in the case of dengue, we can handle it if found on our side, but we can’t do anything on the Myanmar side. If there’s an outbreak on that side, we won’t know about it until their people have fallen sick and crossed the border for treatment on our side.”* (Medical Technologist, SH-DL, A)

One study participant commented that transnational cooperation in the border regions should be initiated at the ministerial level with a view to transferring information on diverse diseases emerging between both Thai and Myanmar hospitals. This should not be limited only to reports on websites for certain diseases such as TB and HIV. This transnational cooperation should also include the transfer of cross-border outpatients and emergency cases.

*“We’ve cooperated by reporting on communicable diseases in border areas but this is limited to only diseases such as TB and HIV. There’s only a website for reporting these cases. Cooperation should be established at the ministerial level to specify that, if TB and HIV cases arise, parallel hospitals in both Thailand and Myanmar should be informed in order to prepare for treatment and follow-up.”* (Head of Border Health Department, SH-DL, A)

### Challenges of Transnational Mobility in Border Regions

The provision of health services for transnational patients in the border regions remains challenging for the following reasons: Language barriers, lack of sufficient personnel for responding to the health needs of people crossing the border, limitations due to ethnic and administrative issues, communicable disease control, disaster management, and providing Thai people with an efficient service. These challenges are reflected in the following quotes from the study participants.

Language barrier: *“An obstacle to service provision is the language barrier. Although we have interpreters, sometimes we still don’t thoroughly understand the situation. Although patients can speak some Thai, they don’t understand the real meaning of the Thai language either.”* (Head of Border Health Department, SH-DL, A) Lack of personnel in response to the utilization of health services in the context of border health: *“We would like one of our nurses to learn about emergency practice. We think it’s necessary for this area where there are various groups of people and tourists. People at a higher level or administrators don’t understand what the border region needs.”* (Director, PH-SL, B)

Limitations because of ethnic and administrative issues: *“Ethnic differences are of concern. For example, we referred a Shan ethnic patient to the Myanmar side and a hospital there had already admitted him. However, the patient didn’t want to go to the hospital there and said he wasn’t ethnic Burmese. It seemed he didn’t want to be identified as a Shan ethnic. If the patient was a real Burmese ethnic, he wouldn’t have a problem with the Myanmar authority.”* (Head of Border Health Department, SH-DL, A)

Communicable disease control: *“The lack of immunization given to Lao people on the other side of the border has impacted on our Thai people, with infections such as TB rising. Local people here become infected by migrants. The communicable disease control in Lao PDR is still problematic.”* (Director, PH-SL, B)

Disaster management: *“A new challenge is disaster management. Once a Chinese oil tanker exploded in the Mekong River.”* (Director, SH-DL, B)

Servicing Thai people: *“We have been asked by Thai people whether this hospital is only for people from Myanmar.”* (Medical Technologist, SH-DL, A)

## Discussion

The in-depth interviews with medical and non-medical hospital staff responsible for implementing facility-level policies and providing health services for transnational populations at 4 public health facilities revealed diverse results for transnational mobility and the utilization of public health services in the border regions of Northern Thailand. In these border regions of the ASEAN, the contextual determinants of illnesses in transnational populations were found to depend on the socio-economic conditions of the area. For instance, behavior-related diseases tended to be prevalent in affluent areas, while occupation-related and sexually transmitted diseases such as HIV were common in areas with low urbanization.

The lack of health knowledge remains an important health issue, while access to health services is deemed crucial for undocumented migrant workers. However, if the transnational population is legally documented, they could access medical welfare guaranteed by the Thai government. Migrant workers would be able to use health insurance cards and obtain medical care benefits through social security cards. Some groups of transnational people can afford Thai health services because the charges are not high, and the rate is the same as for Thai citizens. For those unable to pay, public health facilities tend to abide by professional ethics, allowing them to postpone payment or even treat them free of charge.

The unpaid service charges do not present a serious problem for the public health facilities since they can use the income received from the health insurance card scheme for migrant workers and the social security system to

compensate for the deficit caused by non-payment. However, the utilization of health services by the transnational population is perceived as an opportunity for the public health facilities to earn income. This source of income could be used to increase their work potential such as employing interpreters and the cost of referrals, as well as controlling cross-border communicable diseases through transnational cooperation in public health. Such cross-border cooperation is an important factor in preventing transnational communicable diseases and generating a cross-border referral system for transnational patients.

Although the implications of transnational mobility and utilization of health services appear to be positive with the public health facilities effectively managing health service provision for the transnational population in the border regions, certain challenges remain. These include the language barrier, lack of personnel for responding to the utilization of health services in the context of border health, limitations caused by ethnic and administrative issues, communicable disease control, disaster management, and effectively servicing the Thai people.

## Conclusion

The challenges highlighted by the study participants could be used to establish policy guidelines for health service improvement to support those involved. The government should provide training to develop the capacities of public health personnel in foreign language proficiency, especially in relation to the languages used in neighboring countries. Improving the knowledge and the skills of public health personnel would help them to effectively respond to the utilization of health services by transnational people in the context of border health. Cross-border cooperation in public health with the governments of bordering countries should also be strengthened. Indeed, the government should provide assistance for public health agencies in the Thai border regions to help them deal with their counterparts in neighboring countries regarding ethnic and administrative issues to improve the health services of transnational patients of different ethnicities and cultural backgrounds. The government should also establish a disaster management system with the governments of bordering countries and promote understanding in Thai people to ensure the health service provision for the transnational population does not spill-over to create a negative impact on local Thai users.

## Limitation

The scope of this study only covers the border regions of Thailand connected to the ASEAN member states of Myanmar and Lao PDR. It is recommended that the scope of further study be extended to other border regions of the ASEAN to elaborate on the transnational mobility of the

ASEAN population and their utilization of local public health facilities.

### Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Funding of this research was provided by the Thailand Research Fund (TRF).

### ORCID iD

Thammarat Marohabutr  <https://orcid.org/0000-0003-1471-0276>

### References

- Gropas R, Triandafyllidou A. *Integration, Transnational Mobility and Human, Social and Economic Capital: Concept Paper for the ITHACA Project*. European University Institute; 2014.
- Mainil T. *Transnational Health Care and Medical Tourism: Understanding 21st-Century Patient Mobility*. NRIT Media; 2012.
- Glinos IA, Baeten R. *A Literature Review of Cross-Border Patient Mobility in the European Union*. Observatoire Social Européen; 2006.
- Rosenmöller M, McKee M, Baeten R, Glinos IA. Patient mobility: the context and issues. In: Rosenmöller M, McKee M and Baeten R (eds) *Patient Mobility in the Union: Learning from Experience*. The Cromwell Press; 2006;1-8.
- Ramon Lorenzo LRG, Ufara ZC, Rapeepong S, Nicola SP. Universal health coverage in 'One ASEAN': are migrants included? *Glob Health Action*. 2015;8:25749.
- Haritavorn N, Sukkasem C. *Borderless Health: Crossing the Borders for Health Care in Thailand among Burmese, Laotian, and Cambodian*. Health System Research Institute; 2018.
- Poonpoksinsin W. Health insurance for protecting migrant workers: points of view from social capital of Thailand. *J Soc Work*. 2018;26(1):1-33.
- Tongsamsi K, Tongsamsi I, Sangkhaduang R, Sanguankaew S. Foreign labor protection of firms under social security fund. *Humanit Soc Sci*. 2020;37(3):54-78.
- Meemon N, Paek SC, Keetawattananon W, Khaing P, Htet SS, Srimanee C. *Cross-Border Utilization of Health Care Services by Myanmar Residents Living around Mae Sai-Tachileik Economic Zone*. International Trade and Health Program; 2017.
- Chunwattana W. Border health management system between Thailand and Cambodia. *Acad J Pathum Thani Univ*. 2017; 9(2):165-174.
- World Health Organization. *World Health Statistics 2020: Monitoring Health for the SDGs, Sustainable Development Goals*, World Health Organization; 2020.
- Siriphon A. *On the Cross-Border Suffering: Reflections from Thai-Lao HIV Infected People*. Chiang Mai University; 2011.
- International Cooperation Development Group. *Guideline for Border Health to Support ASEAN Economic Community*. Ministry of Public Health; 2014.
- Health Insurance System Research Office. *Health Service Utilization of Lao Patients in Thailand: A Case Study of Impacts on Thai Public Hospitals*. International Health Policy Program; 2012.
- Health Insurance System Research Office. *Studying Situations of Health Services for Cambodian at Thai-Cambodian Border: A Case Study of Sa Kaeo, Chanthaburi and Trad Province*. International Health Policy Program; 2013
- Keetawattananon W, Meemon N, Paek SC, Marohabutr T. Illness and healthcare-seeking behavior among Cambodian transnational workers in Chong Chom border market, Surin province, Thailand. *Res Dev J Suan Sunandha Rajabhat Univ*. 2016;8(2):96-109.