HEALTH STATUS OF FOREIGN MIGRANTS IN SAMUTPRAKAN PROVINCE

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ABSTRACT

This research was a survey research. The purpose of this research was to assess the health status of foreign migrants in Samutprakan Province. The study population were Burmese, Laotian and Cambodian migrants living in Samutprakan Province for more than 3 months. The sample comprised of 1602 households with 3041 persons. The research instrument was a household questionnaire. Data collection was done from August to October 2007. Frequency, percentage, mean and standard deviation were applied for analysis. The results showed that about half of the foreign migrants (51.2%) lived in Muang District. More than half of the foreign migrants were male (52.2%), Burmese(73.1%), able to speak Thai but not writing (63.7%), married (60.2%) and perceived having good health (72.5%). During the prior month, the reported morbidity rate among the foreign migrants was 118 per 1000 population, the average number of family members was two persons, median income 5000 baht per month and being an employee (54.8%). Related to health behaviours only 21.7% had regular exercise, 11.7% smoked cigarette and 4.6% consumed alcohol. Most of them (95.8%) accessed to water supply and 87.9% had garbage management. Most of migrants (70.5%) had health security card, 71.3% of them used the government health security card for migrant workers and 74% had a health check up. The contraceptive prevalence rate was 66.4% which the oral pill was the most popular method(79.2%). 62% of foreign migrants obtained the oral pill from drug stores. Only 13.2% of female migrants had cervical cancer check up and 4.7% had breast self-examination. 91.3% of the pregnant women received ante-natal care service. 44.4% of them utilized government hospitals. Satisfaction of service utilization among foreign migrants was more than 70%. The majority of the foreign migrants utilized government health services at a health center or hospital. Provincial Health Office should make use of these findings to formulate a strategic plan for promoting health and controlling diseases among foreign migrants.

KEY WORDS: HEALTH STATUS / FOREIGN MIGRANTS / SAMUTPRAKAN PROVINCE

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บทคัดย่อ

การวิจัยครั้งนี้เป็นการศึกษาเชิงสำรวจ เพื่อประเมินสถานะสุขภาพของผู้ย้ายถิ่นข้ามชาติในจังหวัดสมุทรปราการ ประชากรศึกษาเป็นผู้ย้ายถิ่นข้ามชาติสัญชาติพม่า ลาวและกัมพูชาที่พักอาศัยในจังหวัดสมุทรปราการอย่างน้อย 3 เดือนขึ้นไป จำนวน 1,602 ครัวเรือน 3,041 คน เครื่องมือที่ใช้เป็นแบบสัมภาษณ์ครัวเรือน เก็บข้อมูลเดือนสิงหาคมถึงตุลาคม 2550 ใช้สถิติเชิงพรรณนาได้แก่ ความถี่ ร้อยละ ค่าเฉลี่ยและส่วนเบี่ยงเบนมาตรฐาน ผลการศึกษาพบว่า ผู้ย้ายถิ่นข้ามชาติมากกว่าครึ่งหนึ่งพักอาศัยอยู่ในอำเภอเมืองสมุทรปราการเป็นเพศชายร้อยละ 52.2 สัญชาติพม่าร้อยละ 73.1 สามารถพูดภาษาไทยได้ เขียนไม่ได้ร้อยละ 63.7 มีสถานภาพสมรสหรืออยู่กินฉันท์สามี ภรรยาร้อยละ 60.2 ส่วนใหญ่ประเมินตนเองว่ามีสุขภาพดีและดีมากร้อยละ 87.1 ใน 1 เดือนที่ผ่านมามีอัตราการเจ็บป่วย 118 ต่อประชากรพันคน มีความเครียดร้อยละ 14.5 ผู้ย้ายถิ่นข้ามชาติพักอาศัยเฉลี่ยครัวเรือนละ 2 คน ค่ามัธยฐานของรายได้ต่อเดือน 5,000 บาท ประกอบอาชีพรับจ้างอุตสาหกรรมทั่วไปร้อยละ 54.8 มีพฤติกรรมออกกำลังกายเป็นประจำร้อยละ 21.7 สูบบุหรี่เป็นประจำร้อยละ 11.7 และดื่มเครื่องดื่มที่มีแอลกอฮอล์เป็นประจำร้อยละ 4.6 แหล่งน้ำดื่มเป็นน้ำประปาร้อยละ 95.8 บริเวณชุมชนที่พักอาศัยมีการกำจัดขยะร้อยละ 87.9 มีหลักประกันสุขภาพร้อยละ 70.5 เคยใช้สิทธิหลักประกันสุขภาพร้อยละ 71.3 ตรวจสุขภาพประจำปีร้อยละ 74 มีอัตราการคุมกำเนิดร้อยละ 66.4 ใช้ยาเม็ดคุมกำเนิดร้อยละ 79.2 รับบริการที่ร้านขายยาร้อยละ 62 ตรวจมะเร็งปากมดลูกร้อยละ 13.2 ตรวจมะเร็งเต้านมด้วยตนเองร้อยละ 4.7 หญิงกำลังตั้งครรภ์มีการฝากครรภ์ร้อยละ 91.3 ฝากที่โรงพยาบาลของรัฐร้อยละ 44.4 การดูแลมารดา บุตร หลังคลอดครบตามเกณฑ์ร้อยละ 69.5 มีความพึงพอใจต่อการรับบริการทางสุขภาพมากกว่าร้อยละ 70 การดูแลรักษาเมื่อมีการเจ็บป่วย ส่วนใหญ่เข้ารับบริการที่สถานบริการของรัฐ คือ สถานีอนามัย/ศูนย์สุขภาพชุมชนและโรงพยาบาลของรัฐ สำนักงานสาธารณสุขจังหวัดสมุทรปราการควรนำผลที่ได้จากการศึกษาครั้งนี้ไปจัดทำแผนยุทธศาสตร์เพื่อส่งเสริมสุขภาพและป้องกัน ควบคุมโรคในผู้ย้ายถิ่นข้ามชาติต่อไป

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CHAPTER 1
INTRODUCTION

1.1 Background and Rationale of the Study

Rapid changes of the world lead to various development streams that cause so different politics, economics, society, environment and living standards of people at the national and regional levels. The subsequent outcome is the migration of migrant workers to seek for better quality of life, not only migrating from a poor country to a rich one, from a dictatorship country to liberalized-politics one, but also from an underdeveloped country to a developed one. The migration in any regions around the world is likely to be higher and higher. The level and importance of migration have been increasing so rapidly that it becomes an important negotiation issue for global development. The United Nations provides the Convention on Right Protection for Migrant Workers and Family Members, which comes into force as an international law on 1 July 2003. This Convention protects migrant workers and migrant labors in countries and their families as human beings and labors taking part in driving the global economics; however, rights of such migrant workers have been frequently violated since they are foreign migrants from different cultures and have no chance to access into protection mechanism provided by each country. The countries involving in the migration could be divided into 4 groups: countries of origin, countries of destination, sending and receiving countries, and transit countries. The growth rate of foreign migrants to stay in the countries of destination at least 1 year and up is 2.6% (Archavanitkul, 2003).

Thailand has a special role in this matter because it is a sending, receiving and transit country. Since Thailand has rapid economic growth and is surrounded by neighboring countries with different economic, social and political systems, most foreign migrants in Thailand come from 3 neighboring countries; namely, Myanmar,

Laos and Cambodia. Therefore, Thailand has entered into the Memorandums with 3 countries of origin: 1) Memorandum between the Government of the Kingdom of Thailand and the Government of the People's Republic of Laos on Cooperation for Labor Employment held at Vientiane, the People's Republic of Laos on 18 October 2002; 2) Memorandum between the Government of the Kingdom of Thailand and the Government of the Kingdom of Cambodia on Cooperation for Labor Employment held at Ubon Ratchathani Province on 31 May 2003; and 3) Memorandum between the Government of the Kingdom of Thailand and the Government of Myanmar on Cooperation for Labor Employment held at Chiang Mai on 21 June 2003. Such memorandums cover measures in 4 main activities: appropriate implementation procedure for labor employment, efficient measures on returns of labors after employment expiration term or going into exile by any related agency of another party to their homeland, reasonable protection to labors of both countries as well as prevention and suppression of illegal migration, and trading of illegal labors and labor employment (Archavanitkul, 2005).

In the sociological, demographic and legal dimensions, migrant workers from other countries could affect the society of countries of destination in 5 aspects (Archavanitkul, 2004): 1) demography – they influenced the change of population structure, 2) labor and employment rate – there were both positive and negative effect, 3) sociology – the countries of destination had to bear some social welfare, 4) national security – the countries of destination had to accept a great number of illegal foreign migrants, and 5) health system – populations in countries of destination had to confront more risks due to pandemic of diseases hidden in foreign migrants. Thus, every country has built up the solution system for health and illness occurring among foreign migrants in order to protect its own populations. Such country also has to bear other expenses relating to preventing and disease surveillance. Conversely, foreign migrants may face some health problems in countries of destination. Factors resulting to higher rate of illness and death of these foreign migrants are: 1) discrimination due to bias and terror, which is a root of basic human right violation to this group of populations either intentionally or unintentionally until the overall well-being and living of foreign migrants are affected, 2) difficulty to access into health service and education in countries of destination, 3) migrating to the countries of destination with

different environment that increases the probability of disease infection among foreign migrants who have low immunity and they get infection from local people, 4) most foreign migrants have to stay in so crowded areas without proper hygienic system and essential utilities such as drinking water and general-consuming water, etc., 5) low income makes foreign migrants face the malnutrition. The aforesaid factors certainly add more risks of infection. Kritiya Archavanitkul (2003) analyzed policies and measures on migrant workers placed by the Government of Thailand and found that, regarding the health service of the government, the medical treatment and disease controls and prevention have been normally provided to foreign migrants but a plenty of those foreign migrants still had problems to access into that health service.

The Thai Government eased this problem by allowing foreign migrants from these 3 countries to register for work permit license since 1992 and this registration has been done up to now (Archavanitkul et al., 2004). According to the registration of foreign migrants and followers recorded by the Department of Provincial Administration, the Ministry of Interior on July 2004, there were 1,284,920 foreign migrants in total. About 849,552 of foreign migrants received the work permit license, and 884,634 of them have accessed into the health security system already (Ministry of Public Health, 2005). The Thai Government had to provide health care to this group of people. Under the measures and guidelines of health checking and security for migrant workers in 2005 (effective up to 30 June 2006), the Ministry of Public Health had missions to take actions about health care under 4 main activities comprising 1) annual physical check-up, 2) medical treatment service, 3) health promotion and disease prevention, and 4) disease surveillance. The Ministry of Public Health prescribed that migrant workers had to enter into the health security system under the same criteria to the universal health security scheme of Thai people. The right of health, as defined by the United Nations, means the right to receive the health service and to receive conditions necessary for well being or the reasonable right so that people will not suffer from social and economic inequality or freedom to control their health, sex freedom and fertility, medical treatment freedom, etc. However, health service provided to foreign migrants still had some limitations and resulted to subsequent problem preventions and controls. In fact, public health problems dealing with foreign migrants included: 1) infectious diseases, 2) expenses for providing the

public health service, 3) maternal and child health problems, 4) environmental hygiene problems, 5) shortage of actual database, and 6) shortage of budget for direct management. The essential problem determining other problems was the shortage of actual, precise and reliable database (Atichart and Gongkhuntod, 2004).

Samut Prakarn is a province where a number of foreign migrants have been staying, whether those with or without registration with the Office of Provincial Administration, Ministry of Interior. At present, about 50,881 foreign migrants are registered (Office of Provincial Administration, 2006). About 28,202 of them have already accessed to the health security system (Samut Prakarn Provincial Health Office, 2006). Since a lot of Myanmar, Laos and Cambodian migrants have stayed at Samut Prakarn without precise health data, the health care planning for those foreign migrants has not been universal yet and those foreign migrants could not reach their equitable right. In the fiscal year of 2007, Samut Prakarn Health Office prepared the migrant health strategy to allow them to receive the integrated and universal public health service. The Office also carried on disease surveillance for some diseases that might be spreading among foreign migrants. The policy of setting up the public health system of foreign migrants were placed as well; meanwhile, public health centers, both in the government and private sectors, have provided the integrated service with quality standard and accessibility that was consistent to the condition and limitations of population. The universal health security scheme was formed for those foreign migrants. Foreign migrants and family members were involved in caring their health and doing activities in communities. The health management and information system, and unique management structure were established to have the precise and universal database about foreign migrants.

The researcher recognized the necessity of preparing the foreign migrant database and was interested in evaluating the health condition of foreign migrants in Samut Prakarn to be used as public health information for further medical treatment planning, health promotion, disease controls and surveillance, and for monitoring and evaluation and appropriate supports so that foreign migrants in Samut Prakarn further receive public health service according to their equitable right.

1.2 Objectives of the Study

1. To assess the health status of foreign migrants in Samut Prakarn province.

2. To assess the coverage of health security and accessibility to health service of foreign migrants in Samut Prakarn province.

3. To describe about public health accessibility of foreign migrants in Samut Prakarn province.

1.3 Operational Definitions

1. Foreign migrant means a migrant worker or follower who is a child at age of 0-5, school age, fertile age and old age whose nationality may be Myanmar or Loas or Cambodian who may be or may not be registered and has been staying at Samut Prakarn not less than 3 months.

2. Health status means indicators showing the health condition of a foreign migrant, e.g. well-being, health condition.

3. Well-being means the general health evaluation perceived by oneself that may be excellent, good, fair, poor and sick, and stress during the prior month.

4. Health condition means having a chronic disease as diagnosed by health personnel, e.g. physician, nurse or health official.

5. Non-medical determinants of health indicators mean the health determinants showing health status of a foreign migrant, e.g. well-being and job characteristics, health behaviors, environmental factors.

6. Health behaviors mean the daily practice of a foreign migrant whose age is 15 and over such as doing exercises or physical activities for health promotion, smoking and alcohol drinking.

7. Living and working type means the number of family members, average monthly income for all members in a family who have income, job characteristics such as labors at houses, restaurants, doing fishery, fishery businesses,

general labor in the frozen food industry, labor in the textile industry, labor in general industries, construction and special occupations.

8. Environmental factors means clean and safe drinking water source, water quality improvement before drinking and environment condition of a community the foreign migrant has been staying, e.g. waste disposal, polluted water, smell, dust/smoke and noise.

9. Accessibility means the acquisition of health security, receiving health information about health promotion, disease controls and prevention and accessibility to any health service at a government health service center, including:

- Health check-up with a physician, nurse or health officer, e.g. Tuberculosis checking, sexual infectious diseases (syphilis, AIDS, etc.), leprosy, filariasis, malaria, hypertension, diabetes and others.
- Family planning service, Pap Smear checking, breast self-examination for female migrants at ages of 15 -59 or married female migrants.
- Pregnancy service – Pregnant foreign migrants must receive the pre-natal care service from health personnel and have at least 4 pregnancy check-ups as per the standard criteria, and receive the birth delivery service and post-natal service for 2 times as per the standard criteria.
- Immunization as per the standard criteria for children at ages of 12 – 23 months.

10. Satisfaction means the satisfaction of persons receiving health services such as satisfaction in utilizing health security card, satisfaction to pre-natal care service, birth delivery, post-natal services, and child immunization.

11. Care on illness means the medical care according to levels of sickness as perceived by the information providers, which could be divided into 3 levels:

- Mild sickness means a person who has non-serious sickness and he/she is still able to do daily activities.
- Moderate sickness means a person whose sickness becomes more severe and he/she cannot go to work, but stays at home and does some daily activities.
- Severe sickness means a person whose sickness becomes serious that blocks him/her to go to work, to do any daily activities and he/she must have the medical care more than 3 days.

CHAPTER 2
LITERATURE REVIEW

In this study, all related literature was reviewed to be the guideline under the following key contents:

2.1 Foreign migrant and migration

2.2 Health status indicators

2.3 Related researches

2.1 Foreign Migrant and Migration

Migration for a new settlement is a normal event (Pinprateep, 1999) in the human history. In the world's present situation, it is the era of borderless world. Traveling between countries has been more convenient; so immigration across the border of each country has been increasing sharply, especially migration from countries with low social and economic condition or underdeveloped countries to those with better social and economic condition. The irregular migration was used pursuant to the proposal of the United Nations in order to avoid using "illegal migration" that looked like marking a negative sign on migrants. The irregular migration, in general, could be divided into several types, depending on levels and viewpoints on that irregular migration. In Asia, there were 3 main types of irregular migration:

1. Undocumented migration or migrants with no traveling documents. This case has been frequently found in the migration to Thailand, Malaysia, the Philippines and several West European countries. Most migrants sneaked to a country of destination without passing the checking point or they were helped by some trans-national labor trading groups under ignorance or supports of immigration officers.

2. Overstays or migrants who stayed over the approved period stated in the visa. Most of them are tourists, students and migrant workers who stayed beyond the approved period.

3. Workers, which consisted of several groups but the most obvious one was the group of workers with no license. For example, in case of tourists or students traveling to countries of destination legally but they worked as labors there. This case has been frequently found in countries with high economic growth.

Verma BK. (1996) viewed that, from health problems, health service to migrants should be provided based on groups of migrants as follows:

1. Voluntary migrants or migrants who intended to migrate by themselves or self-selected migrant. This group of migrants usually passed the health check-up and had good health before migrating to a new settlement. These people usually had familiar persons, relatives and friends as their network at countries of destination. This network partially helped migrants at countries of destination.

2. Illegal migrants or migrants entering into a country of destination without any legal migration documents. Though these people are self-selected, it is possible that they should have good health. But, in fact, they might face problems to access into health service sources or use various health services.

3. Migrants on work contract – These migrants were usually checked for their health at countries of origin, especially labor migrants who were skilled or specific professionals.

4. Refugees – Most refugees usually departed their countries without any preparation. This group comprised various kinds of populations, e.g. women, children and elderly people rather than working-age people. In the meantime, this group consisted of people whose mind and body were threatened and tortured, which affected their mental condition before and on the way to new settlements.

5. Travelers – Travelers going to any areas aimed at tourism and temporary staying only; they had no intent to work or settle permanently.

There were 3 important characteristics of illegal migrants: 1) disruption or condition of social disturbance because they separated from their family, relatives, homeland and such migration causes tension that directly affected their health; 2) difference or difference of race, language, religion and culture because, among

migrant especially in the international migration, the differences of race, language and culture were the main hindrances if those migrants want to contact for assistance from communities in countries of destination, and to adjust themselves to the different culture. The tradition at countries of destination was usually different from their original society; 3) difficulties to access into service sources including educational service sources, studying in schools, receiving health service, public utilities, pipe water and electricity. The migrants would suffer more problems in case of international and illegal migration. In the public health service sources, they usually had problems concerning information shortage since the illegal migrants had no relatives or brothers/sisters or familiar persons; they did not know about health service and how to access to it, and they had problems about exercise of right. Frequent migration also caused problems about service provision, consequent treatment and completeness of service receipt and discrimination, particularly the discrimination of race.

According to the report on population policies to migration prepared by the United Nations in 2003 by studying opinions of countries all over the world towards the migration policy from Year 1976 to 2003, it stated that, in 1976, only 7% of governments in the global community announced the policy of reducing the migration of foreign migrants. But, for 10 years later, in 1986, the states with this concern were higher to be 20%, and in 2003, this concern hiked to 34% (United Nations, 2004).

The trend of migration has been changing; not migrating from poor countries to rich ones or from dictatorship countries to liberalized ones. The migration might be from a developing country to another developing country. This could be more obvious when several countries that used to be those sending foreign migrants to be countries receiving such labors as well; Thailand is also in this case(Archavanitkul, 2003).

In accordance with the law of Thailand regarding nationality, every non-Thai nationality person staying in Thailand deems a foreign national or foreign migrant. “Foreign migrant” or officially called “alien migrant” (Archavanitkul, 2003) was an event of labor moving from one country to another by reacting with another society or culture through the employment of labor. Such moving basically occurred

at every region of the world. There were two types of foreign migrants that were overlapping; foreign migrants and migrant workers. A foreign migrant in Thailand was defined by two criteria: international border involving the international relationship, and social acceptance for human being that is a humanism concept. Therefore, the definition of foreign migrant was firmly linked to the possession of nationality and permanent residence. Thus, the foreign migrant was also defined as the person traveling from a country to another (Archavanitkul and Kittisooksathit, 2005) to be a foreign migrant in the destination country and a stateless person. If considering this definition, foreign migrants in Thailand might be divided into 7 groups with some overlapping characteristics:

1) Foreign tourists or foreigners visiting Thailand and staying here for a short period. They were the biggest group of migrants. According to the statistics, more than 15 million tourists have visited Thailand every year.

2) Foreigners settling in Thailand caused by several factors such as foreigners settling in Thailand for a long time before the enactment of immigration law, foreigners getting married with Thai people in Thailand, foreigners working in Thailand or by other reasons and they wanted to stay in Thailand permanently might ask permission as permanent residents. These foreigners might be aging foreigners who want to spend their last period of life here. At present, the Government sets up conditions of asking for the long-term visa permission for this group.

3) Illegal migrant workers – This group was the second largest group. The illegal migrant workers included persons illegal sneaking to a country for working or those legally entering into the country but holding non-worker visa but they illegally worked in the destination country.

4) Legal migrant workers – These people might be sub-divided into several types; for example, migrant workers with an exact employment contract, occupation, workplace, working period, etc. These workers might be skilled or unskilled.

5) Refugees or asylum seekers – They could be divided into political refugees or natural disaster refugees or both.

6) Minority and stateless people – The condition of statelessness extremely affected the living and limits various living opportunities of stateless

people since they explicitly losed their legal rights, that is, they were unable to ask for visa permission since they had no person appearance as required by international rules. This group of people also included any human race that had no its own country, lived at the border of two countries and was not regarded as a citizen of any country; namely, Mon and Thai Yai.

7) Foreigners staying in Thailand by other reasons such as studying, working for international organizations or embassies, etc.

Foreign nationals or foreign migrants in Thailand might be separated in many groups and each group might be overlapping or they might be divided into 5 groups (Archavanitkul, 2003) because the statistics collected by each government body could not divide them separately:

1) Foreign nationals entering into Thailand and staying temporarily - The main agency collecting the data was the Immigration Office. If deleting transit foreign nationals, these foreign nationals could be divided into 3 main groups:

a. Tourists

b. Legal migrant workers with work permit

c. Migrant workers with temporary permission to stay due to other reasons such as staying with Thai family, studying or diplomatic reason, etc.

2) Foreign nationals settling in Thailand – At present, certain foreign nationals were granted to stay permanently in Thailand and they held the alien registration card like the identification card. Most foreign nationals in this group came from China.

3) Foreign nationals born in Thailand.

4) Non-Thai nationality students.

5) Foreign nationals illegally sneaking to Thailand.

Foreign nationals in Thailand in the study on Questions and Challenges to the Policy of Thailand in Dimensions of Well-Being and Rights of Migrant Workers conducted by Kritiya Archavanitkul and Panthip Kanchanajitra Saisoonthorn (2005) divided them into 3 main groups:

1) Migrant workers from Myanmar, Cambodia and Laos

This labor group was the biggest group most concerned in term of policy and administration. There were several resolutions of the council of ministers since Year 1992 easing workers from these 3 countries to register for their work permit. The latest resolution of the council of ministers was on 2005 forcing this group of workers to show up and register to get the 13-digit ID number. It was found that almost 1.3 million workers came to register. It was assumed that at least 20% of them have not had the registration yet.

2) People on highlands, minorities and children born in Thailand as well as political refugees

The Ministry of Interior classified foreign nationals in Thailand by dividing them into 19 sub-groups and issuing different color cards. Each group had the different personal status (Chongpoonpol and Korkiattrakul, 2004) comprising a group waiting for Thai nationality proof, a group waiting for Thai nationality granting, a group seeking refuge out of refugee campus, and a group in refugee campus to be returned to its origin.

3) Foreign migrants from other countries – They covered foreigners with irregular migration or violating Thai law but they were not classified in the first 2 groups. Most of them came from South Asia, e.g. Bangladesh, Pakistan, India, Sri Lanka and Nepal.

In conclusion, foreign migrants meant foreign nationals or migrants moving to work in Thailand that included their families. These people might be legally registered or not registered as required by law.

Impact of Migration

Migration had effects to individuals, society and local communities, either in countries of origin and destination. (Wongboonsin et al., 2001)

Impact to Individuals

1. Economic Impact

One impact of migration frequently mentioned was money or objects sent back to home countries or countries of origin, especially families of migrants.

This money was a key foreign financial source and it helped increase the national income.

2. Social Adjustment

Although, in the long term, migration might help improving the migrants' living condition as they expected in the short term, they might confront difficulties in adjusting to new social structure, new culture; for example, language, daily living, etc. This process might not be so smooth, particularly at the first time they moved to work there. In several cases, if the migrants were not aware of social norms such as tradition and custom as well as laws of the country they moved in, they might violate laws of that country and punished severely.

3. Impact of migration to human right problems

The government of each country always enacted laws or regulations or practice rules to protect or grant rights to its citizens. Those citizens excluded foreign migrants. According to the provisions of the International Labor Organization on "human rights", the following 5 aspects should be concerned:

1) Right of forming a labor group or freedom of establishing the labor organization without any intervention of the state.

2) Right of forming a group for negotiation power in order to sustain the interest of labor group.

3) Right of working without coercion.

4) Right of not being discriminated, restricted for chance or cut any working right, apprenticeship or training due to race, color, sex, religion, political attitude or social origin.

5) The minimum age for employment should be determined to prevent the exploitation of child labor and prevent the exploitation of child labor in harmful work.

Human rights were complicated issues; they need cooperation of countries of origin and countries of destination to solve these problems.

Impact to the Society

1. Population Impact

Migration effects to the growth of population size and the population growth rate in countries of destination while it caused the reduction of population size

and population growth in countries of origin. The effect might be great or slight depending on the net number of migrating populations as compared with total populations living in that area. In addition, each migration stream had its own population structure, e.g. age and education. Migration that was usually a selection process might effect to the change of population structure of countries of destination or to the fertility of countries of destination.

2. Economic Impact

Migration not only increased the foreign currencies and national income, foreign migrants, especially in Asian countries, helped reduce the labor shortage in some careers. In Thailand, Thai labors disliked doing fishery or other work relating to the fishery industry; so foreign migrants could replace the demand in this section, which also helped increase the national productivity. However, if the economic crisis occurred, foreign migrants might be adversely affected, e.g. job snatching by populations in countries facing an unemployment problem.

3. Social Impact

When foreign migrants moved into countries of destination with so different culture, they might cause social problems. For example, blinding to situation might cause the violation of prohibition or laws of destination countries, or foreign migrants temporarily stayed there might commit crime, pilferage or murder of employers. Foreign migrants whose culture was different from natives might cause conflicts between natives and migrants. There might be other problems about pandemics of several important infectious diseases, e.g. sexual infectious diseases, malaria, filariasis, etc.

According to sociology and demography, labors migrating from other countries might effect to communities in countries of destination and to migrants in 5 following dimensions (Archavanitkul, 2003):

1. Impact to populations – Migration resulted to changes of population structure in term of age and gender, population dependence rate, birth rate and death rate, population density rate in city areas or industrial areas. These changes may be great or few depending on the number and characteristics of migrants, e.g. gender, age, education and marriage status, etc.

2. Impact to labor and employment rate – Positively, migrants substituted the labor shortage in production sectors, especially low-level work that was dirty, harmful and risky rejected by local people. Negatively, foreign migrants might press local wages, negotiation power and labor rights of local labors because the employers had other choices, which might result to negative changes of working and employment conditions.

3. Impact to the society, especially social welfare expenses to be borne by countries of destination due to changes of birth rate, school attendance of children attached to migrants or new-born children, increasing use of medical service, etc. that were drawn from the tax base paid by people of destination countries.

4. Impact to health – If there were a lot of foreign migrants in a destination country, the health system of populations in that country might be risky as a result of disease spreading from those foreign migrants. Every country usually formed its health and illness management system for foreign migrants in order to protect good health of its own citizens. Also, the destination community had to bear other expenses in epidemics prevention and surveillance; namely, increasing use of medical service, vaccination for children attached to foreign migrants or new-born children, etc. Conversely, foreign migrants might face health problems in destination countries. The determinants of the increase of morbidity rate and mortality rate in foreign migrants were:

(a) Discrimination due to bias and terror, which is a root of basic human right violation to this group of populations either intentionally or unintentionally until the overall well-being and living of foreign migrants are affected.

(b) Difficulty to access to health service and education in countries of destination.

(c) Migrating to the countries of destination with different environment that increased the probability of disease infection among foreign migrants who had low immunity and they got infection from local people.

(d) Most foreign migrants have to stay in so crowded areas without proper hygienic system and essential utilities such as drinking water and general-consuming water, etc.

(e) Low income makes foreign migrants face the malnutrition.

The above factors added up more risks of infection to any pandemics.

5. Impact to national security that was a key concern of destination countries receiving a lot of illegal foreign migrants. Another concern of destination countries, local people and mass media was an increase of unverifiable migrants because of no system of controlling their number and residence, which might cause other uncontrollable activities such as employment of illegal labors, illegal medical service provided by illegal clinics, increasing crimes committed by illegal migrants, etc. This seemed that the migrants, especially persons illegally sneaking to destination countries, might cause the disorder there. On the other hand, this group of migrants should be deemed a group of minority; they lacked negotiation power so they have been mistreated, taken advantage, and their human rights were violated easily and by any way. The impact to national security was complicated; not only issue should be considered but considering which part was affected, e.g. economics, social order, culture or politics.

Public Health Measures and Handling of Migrant Workers

Since 1996, the Cabinet had the first resolution of easing the registration of migrant workers from 3 neighboring countries; namely, Myanmar, Cambodia and Laos by virtue of Section 17 of the Immigration Act, B.E. 2522. The Cabinet launched the policy of "easing" persons illegally sneaking to Thailand to be temporarily employed for jobs according to conditions set out by the government. This policy has been announced on a yearly basis as the resolution of the Cabinet to ease regulations and place the practice guideline of registering illegal foreign migrants since 2006.

After easing the employment of illegal foreign migrants in 2006, it could be said that the government sector has never prepared for public health measures (Archavanitkul, 2002). The only measure implemented for this matter was the compulsory physical check-up for foreign migrants under the same criteria to the physical check-up for persons applying for government officers. Under such public health measure, it set up 6 controlled diseases; namely, Tuberculosis, leprosy, filariasis, syphilis, malaria and intestinal parasitic infectation. The work permit would

not be granted to foreign migrants who had one of 7 diseases; namely, mental disease or mental infirmity or idiot, infection-stage tuberculosis, leprosy disgusted by general people, stage 3-syphilis, addiction to harmful narcotics, and alcoholism. This disease checking aimed at controlling infectious diseases previously causing problems to the Thai society such as Tuberculosis, leprosy, malaria, elephantiasis, etc. to prevent foreign migrants spread those diseases, harm the society and cause the financial burden in part of medical expenses.

Roles and Duties of the Ministry of Public Health regarding Migrant Workers

The Ministry of Public Health has been assigned for health care activities (Archavanitkul et al., 2004) in 4 main aspects: 1) annual physical check-up, 2) medical treatment service, 3) health promotion and disease prevention and 4) disease surveillance. The Ministry has stipulated that every registered foreign migrant receiving the work permit had to enter into the health security system. The protection term of health security was 1 year under the same privilege to the universal health security scheme given to Thai people (30-Baht for all diseases project). The main objective of this system was the systematic disease controls and prevention, medical treatment and health promotion while foreign migrants borne fewer expenses of medical and public health services.

Health Security Card for Migrant Workers (Center for AIDS Rights, 2006) meant the card issued by a hospital to foreign workers in 3 nationalities, including Myanmar, Laos and Cambodia, who wanted to work in Thailand or persons coming together with those foreign migrants, e.g. husband, wife or children. These persons had to pass the physical check-up and pay for the health security at Baht 1,900, consisting of physical check-up expense at Baht 600 and health security at Baht 1,300.

Physical Check-up for Migrant Workers – The check-up results could be divided into 4 types:

Type 1: Persons with normal health

Type 2: Persons passing the physical check-up but they got infection or ill by a disease that had to be controlled and treated continuously such as Tuberculosis, leprosy, elephantiasis, syphilis and intestinal parasitic infestation under the health security system for foreign migrants. The foreign migrants who had this physical check-up result would be approved for working.

Type 3: Persons not passing the physical check-up due to ill health or one of 7 prohibited diseases, including infection-stage tuberculosis, leprosy at the stage of being disgusted by general people, filariasis at the stage of being disgusted by general people, stage 3-syphilis, addiction to harmful narcotics, alcoholism, and mental disease or mental infirmity or idiot. Foreign migrants with Type 3 physical check-up result would not be granted for work permit in Thailand but they had a right to be cured and sent back to their countries of origin after they turned to normal.

Type 4: Pregnant women who might apply for the work permit, but their employment would rely on the discretion of the Employment Agency and employers.

The protection period for foreign migrants holding the health security card was one year.

Privilege of Health Security Card for Migrant Workers – The health security card for foreign migrants could be used for the following health service:

1. Medical service under protection included:

1.1 General medical treatment and recovery

- Medical checking, diagnosing, treating and recovering until the treatment process ended, which included the alternative medical treatment as certified by the Medicine Treatment Board.
- Teeth extraction, filling and teeth scaling.
- Food service and common patient room.
- Drugs and medical supplies according to the national medicine list.
- Patient transfer.

1.2 Medical treatment with high expenses.

The medical treatment with high expenses would be in compliance with conditions set out by the central working group on health security, physical check-up and treatment of foreign migrants.

1.3 Accident and emergency cases

In accidents and emergency cases, foreign migrants might use health facility to which they had the registration. They might change health facility as appropriate, except:

1.3.1 Foreign migrants in the fishery business, who had to use health facility determined by each province that were located in 22 coastal provinces. The health facility provided the service to these foreign migrants could charge for the medical expenses pursuant to the universal health security system given to Thai people with health facility where those foreign migrants had the registration.

1.3.2 Foreign migrants in Bangkok must use the medical service in 8 health facility securing health of foreign migrants (Rajvithee Hospital, Lerd Sin Hospital, Nopparat Rachtani Hospital, Klang Hospital, Taksin Hospital, Charoenkrung Pracharak Hospital, Vachira Phayabarn Hospital, and Bangkok International 9 Hospital). The health facility provided the service to these foreign migrants could charge for the medical expenses pursuant to the universal health security system given to Thai people with health facility where those foreign migrants had the registration.

1.4 Patient referral system

In case of referring foreign migrants to other health facility for further medical treatment, the expenses would be paid on an actual basis according to the transfer of patient based on the universal health security system given to Thai people. If a patient was transferred to another health facility located in other province, that transferring health facility had to ask approval, attached with 2 photos of that transferred foreign migrant, from the Governor of that province or any person authorized by the Governor.

2. Uncovered medical service

2.1 Mental disease

2.2 Treatment and recovery of narcotics addicts in accordance with law on narcotics.

2.3 Victims by car accident could exercise his right pursuant to the Protection of Car Accident Victim Act.

2.4 Treatment for infertility

2.5 Artificial insemination

2.6 Sex reversal

2.7 Any surgical treatment for physical beauty without medical indication.

2.8 Any checking, diagnosis and treatment beyond necessity and medical indication.

2.9 The same disease with the treatment period as an inpatient longer than 180 days, except in any necessary case due to complications or medical indication.

2.10 Treatment that was on experimental process.

2.11 Treatment for the last-stage chronic renal failure patient by way of peritoneal dialysis and haemodialysis.

2.12 Anti AIDS virus drug, except in case of preventing the disease spreading from mother to child. The treatment by giving the anti AIDS virus drug would be under discretion of the physician in each area.

2.13 Organ transplant

2.14 New-born infants by foreign migrant mothers.

2.15 Making denture.

3. Protected service in relation to health promotion, disease prevention and controls consisted of:

3.1 Holding and using the personal health book to take care of individuals' health regularly.

3.2 Health checks and cares for pregnant women including the pre-natal and post-natal service.

3.3 Physical check-up for risky groups

3.4 Giving the anti AIDS virus drug to prevent the AIDS virus spreading from mother to child

3.5 Family planning

3.6 Home visit and home health care

3.7 Educating health information to individuals and families

3.8 Counseling and supports for involvement in health promotion

3.9 Health promotion and prevention of oral cavity diseases, e.g. mouth check-up, advice on dental health, giving fluoride for groups risky to dental caries.

3.10 Disease prevention and controls

Foreign migrants in Samut Prakarn province, either legal and illegal, would receive the health care relating to the physical check-up, medical treatment, health promotion and disease prevention and surveillance, as well as improvement of health behavior in order to reduce chronic diseases of these foreign migrants.

2.2 Health Status Indicators

The World Health Organization (WHO, 1997) stated in a report that adding the average age of world populations without good quality of life deemed a worthless award. Good health throughout the average age was more valuable than a long life. Therefore, the public health wok targets well-being, which means the balance of life in part of physical body, mind, society and spirit. The foreign migrants' health has been changing always due to personal factors, which have changed naturally, and other behavior, as well as other external reasons. The assessment of health status, so, led to appropriate prevention plan and solutions.

Health of individuals and communities has also been changing always due to personal factors, which have changed naturally, and other behavior, as well as other external reasons. The evaluation of health status, so, led to appropriate prevention plan and solutions. In studying future trends, it is necessary to know the information about what affected health apart from populations' health status. Therefore, the following information was useful for studying health status (Viboonpolprasert et al., 1999):

1) Individuals' information: belief, risk behavior and health behavior, genetic, mental health and level of immunity.

2) Information about all surrounding aspects: economics, politics, culture, belief, religion, population (immigration, structure of age, growth rate,

fertility rate, dependency rate, level of education, income and income distribution, family structure, foreign migrant, air pollution, water pollution, noise pollution, toxic substances, toxic waste, environmental hygiene, residence, food and water safety, waste disposal and refuse, impact from economic crisis, public health policy, communications, technologies, especially medical and public health technologies.

3) Information about health service system, e.g. organization structure in implementing public health activities, public health and environment policies, public health resources, public health and environment service coverage, medical service quality and expenses, service effectiveness and proficiency and population health security.

Health security does not directly mean a good health, but the condition when general people could keep their health away from factors or situations harming their health. The World Health Organization (WHO, 1995) indicated that health security covered human rights in term of health as well, which meant the accessibility and receipt of health service by every person, either men or women or children under principles of equitability, alternatives and involvement. Health equitability (Boonyaratapan, 2003) meant the offer of health protection to groups of minorities in the same society, e.g. poor people, migrants and people in remote areas.

The instruments assessing health status of individuals consisted of several elements including the weight of health status at each level (Tantisirin et al., 2003):

1) HUI (Health Utility Index) – The index for health status and quality of life in part of health as developed by McMaster University of Canada in 2003. This index has been developed up to HUI 3, which comprised of 2 parts: health sates classification and health states evaluation by weighting health information from community surveys. Health status was divided into 6 levels and 8 elements: vision, hearing, speech, ambulation, dexterity, emotion, cognition and pain.

2) WHO Health State Survey (2002 – 2003) after health status surveys in the sample groups from 70 member countries by developing health elements from the International Classification of Functioning, Disability and Health (ICF) until WHO got 8 main elements stated in the questionnaire used for health status surveys in volunteer countries:

Mobility	- Moving and walking
Self care	- Ability in self-care in daily activities
Pain and discomfort	- Pain and discomfort
Cognition	- Memory, concentration
Interpersonal and relationship	- Relationship with others
Vision	- Seeing
Sleep and energy	- Good sleeping or energy
Affect	- Emotion, concern, depression

3) Health Canada (cited in Boonyaratapan, 2003) indicated that there were 12 health status determinants: income and social status, social supporting network, education, employment and job characteristics, social surroundings, physical environment, personal health behavior and adjustment skills, growth with good health on childhood, genes and biology, health service, sexual condition and culture/way of life.

Non-communicable Disease Information Center, Non- communicable Disease Bureau, Department of Communicable Disease Control, Ministry of Public Health (2005) has standardized the population health index to be an instrument to monitor and evaluate the health development matters in 2004. The health indication framework could be divided into 4 groups: health status, non-medical determinants of health, health system performance and community and health system characteristics. Each group would consider issues relating to:

1) Health status dealing with health status of population, morbidity rate, mortality rate and quality of life of general people.

2) Non-medical determinants of health dealing with health behavior, personal factors and economics, as well as personal skills in perceiving events, living behavior, environmental factors.

3) Health system performance dealing with indicators about performance in the health system, quality of health service system, evaluation of performance effectiveness and efficiency and performance improvement, as well as impact caused by public health service provision, public policies, information and research.

4) Community and health system characteristics dealing with information about resource allocation, communities and health system.

Applying health indicators should be consistent to the implementation for various management levels, which could be divided into 3 levels:

1. Operational indicators – used in the operational level by taking the initially-processed data to analyze problems of implementation results in order to control the performance to meet the set goals, e.g. coverage of prenatal care pursuant to the criteria, proportion of pregnant women with anemia and goals of this group, etc.

2. Management indictors – used in the provincial level by taking the initially-processed data to sort the priority and select the appropriate information for further decision-making on management, e.g. prevalence of first 5 diseases found in each area, budget spent in carrying on each work, etc.

3. Strategic indicators – used in the policy planning level for various matters in an organization. These indicators were macro-based indicators, e.g. economic, social, political status, tendency of disease occurrences, changes of population, etc. The information would be further analyzed to have important issues for the policy and strategic planning.

Health Status Indicators

Well-Being

- Prevalence of persons assessing their health as excellent-good, fair-poor: the self-assessment on health status could indicate the overall health status and showed the relationship with results of using the medical service regarding working situations of physical body and death rate. According to a survey of risk behavior towards non-communicable diseases and injuries in 2004 conducted 41 provinces (Chernrungroj, 2005), populations at ages of 15 and up assessed their health status as good and excellent at 63.15%, fair-poor at 36.73%. In this study, the self-perception was used to evaluate health.

- Average days of physical illness and mental illness – People with weak physical body and those with mental disease would lose working effectiveness, which could indicate the condition of chronic diseases. The condition of physical illness and mental illness could be used to evaluate general people's health. In this study, illness and stress in a period of 1 month were used to evaluate the physical illness and mental illness.

Health Condition

- Prevalence of hypertensive persons was measured by self – reported Hypertension in populations who were previously informed by some physicians, nurses or health officers that they had hypertension. The evaluation was done by interviews, which was more convenient than the direct measurement. This issue was important in indicating the health status relating to chronic diseases of a community at that time. Although the information got from interviews might be lower than the actual situation, continuous monitoring of problems could make us know the tendency of problem size.

- Prevalence of diabetes persons was measured by interviews as well – Diabetes in populations who were previously informed by some physicians, nurses or health officers that they had diabetes. The evaluation was done by interviews, which was more convenient than the direct measurement. This issue was important in indicating the health status relating to chronic diseases of a community at that time. Although the information got from interviews might be lower than the actual situation, continuous monitoring of problems could make us know the tendency of problem size.

In this study, the researcher used the interviews for chronic diseases as diagnosed by health personnel.

Non-Medical Determinants of Health Indicators

Living and Working Type

- Monthly income of individuals – Information about personal income was the basic information about economic and social condition of individuals, which determined the accessibility to the health service when needed, and factors influencing the health being.

Health Behavior

- Prevalence of persons with adequate physical activities – Physical activities from hard working or doing exercises dealt with the reduction of risk factors to have heart attack, major stroke and cancer, diabetes and complications of diabetes, overweight, and Osteoarthristis. Monitoring the exercise-taking of general people could indicate the behavior and anticipation of related health problems concerning exercise-taking.

- Present prevalence of smoking – Smoking added more risks of heart attack, cancer, paralysis and respiratory diseases. The information got from regular surveys could show the tendency of health risk behavior among populations. It might be also used to set up policies, plan for controlling and preventing non-communicable diseases that were main objective of controlling cigarette consumption, which was the indicator of controlling the cigarette consumption by the Department of Communicable Disease Control.

- Present prevalence of alcoholic drinking was important information useful for public health planning. The overall alcoholic drinking of population was an indicator showing the problems caused by alcoholic drinking.

Environmental Factors

- Proportion of populations accessing into safe and clean water was an indictor reflecting the safety of physical environment. The safety of supplying clean water resulted to the prevention of health danger, disease occurrence and quality of life.

This study involved safe and clean water sources, improvement of water quality before drinking and condition of community environment at residences of foreign migrants, e.g. garbage disposal, polluted water, smell, dust/smoke/ noise.

Accessibility

- Prevalence of persons having health security – Health security system for populations, either government health security system or volunteer health security system, showed populations' confidence in accessing into the health service system, which included the health promotion service, disease screening service and medical treatment for any illness. The information obtained showed the coverage of health security system.

- Prevalence of persons having physical check-ups with physicians or health officers in the past 12 months – The obtained information showed health behavior of populations and their accessibility to the health service system, which included health promotion service and care for physical check-up of populations, e.g. annual physical check-up, disease screening service.

- Proportion of persons vaccinated for polio, diphtheria, pertussis, tetanus, measles and tuberculosis as targeted. The coverage of vaccination to have

immunity for preventable diseases indicated the service quality to the public. The high values showed effectiveness of disease prevention.

- Prevalence of women passing the breast self – examination by medical personnel – breast self – examination by medical personnel was a process of screening for patients having the initial-stage breast cancer. It showed the recognition to self-caring of health problems, coverage and accessibility of health service system. This study used the breast self – examination of female migrants.

- Prevalence of women receiving the cervical cancer screening was the information showing the acceptance in the cervical cancer screening method, recognition of health problems. It also showed the coverage and quality of health service in proving the cervical cancer screening service.

- Proportion of infants passing the physical check-up by medical personnel – Care for infants after delivery was the information showing the recognition to the infant care by parents and quality of maternal and child work.

- Proportion of using health service at government health facilities – The proportion of using health service between government health facilities and private health facilities was the information showing the coverage of health service provided by the state. The low proportion of using the government service showed the coverage and quality of service system that was not sufficient for general people's needs.

Satisfaction

- Satisfaction of persons receiving the health service showed satisfaction of service users to service provision and quality of related elements and other facilities.

This evaluation of health status of foreign migrants in Samut Prakarn province was done by applying the survey based on population health indicators according to standards of the Non-communicable Disease Information Center (2005) in order to get the health information as the database of further health implementation planning for foreign migrants.

2.3 Related Research

From studying related researches regarding migration of foreign migrants in Thailand (Hewgage and Panpueng, 2005), the migration effects to the disease controls. According to the statistic reports of the Bureau of Epidemiology, it was confirmed that the morbidity rate caused by communicable diseases led to periodical epidemics such as diarrhea, malaria, etc. These health status problems regarding disease controls in foreign migrants were similar to the study on health status of migrant workers registered at Khlang Hospital, Bangkok (Leelarangsaeng, Kornluck and Tantanasuwat,2005) that more migrant workers got tuberculosis, but the treatment could not be completed due to patients' inexact residences, no understanding resulted by different languages and no attention of employers until disease controls faced some problems. This was consistent to the study on impact from birth, illness and death of migrant workers to the public health policies, stated in the research series on Thailand's Alternative Policies of Importing Migrant Workers: Study of Facts from Interest-Taking Groups, Legal Surveys and Analysis of Government Management System (Archavanitkul et al., 1997), which found that the health problems occurred when communicable diseases could not be controlled effectively. According to the study on demographic, economic and social impact from migrant workers (Pinprateep, 1999), the fertility problems among illegal migrants added more risks of various events intensifying the fertility problems. Four main problems were also discovered:

1) Spreading of sexual communicable diseases, infection of AIDS and AIDS – The spreading of sexual communicable diseases resulted from changing ways of life, sexual behavior supporting the disease spreading, especially easy immigration due to convenient transportation and communications, so epidemics were more rapid.

2) Health and safety of pregnant women – Compulsory migration is usually sharp without any preparation. Living in a new residence might be difficult. The pregnant migrants would be more stressed and concern, which certainly affected their baby. For the maternal and child health, women migrants were more likely to have diseases than non-migrants. In particular, children with frequent migration

would lose opportunities to be vaccinated completely. For pregnant women, if they had frequent migration, they would have problems about immunity reinforcement and complete pre-natal care.

3) Violence confronted by women – This problem frequently found in persons forced to migrate. In general, women are taken advantage. By the anatomical condition, women are weaker than men. Upon migration, it is likely that women are maltreated by employers in destination countries.

4) Unsafe aborticide – Accessibility to social service centers, especially health service centers was so restricted; so most working-age women have not had the family planning. The undesirable pregnancy was greatly possible, which led to unsafe aborticide that was done by migrants. This issue was consistent to the study on fertility of Myanmar migrant women at Ranong Province (Issarapakdee and Jongthavornsathit, 2004) that birth delivery at home that was treated and cared by Myanmar midwifes was still so popular. The main reason was that those migrant women sneaked to Thailand illegally; they were afraid that they might be arrested if their birth delivery was done at hospitals. Therefore, the rate of pre-natal care and post-natal care by health personnel was still low. The researches mentioned above confronted the same problem, that is, the shortage of clear database about foreign migrants, the shortage of real conditions of foreign migrants, etc.; so it was difficult to have health implementation planning, solutions of international controls of communicable diseases, particularly surveillance of significant communicable diseases.

According to literature review while Samut Prakarn Provincial Health Office placed the policy of arranging the public health service system for foreign migrants, the Researcher was interested in studying the health status of foreign migrants in Samut Prakarn province to ensure that the public health service plan could cover the health strategy for foreign migrants. The results from this study could be implemented as the database for the health care planning for foreign migrants in the future.

CHAPTER 3
RESEARCH METHODOLOGY

3.1 Research Design

This survey research aimed to assess the health status of foreign migrants in Samut Prakarn province.

3.2 Population

The study population was foreign migrants whose nationality may be Myanmar or Laos or Cambodian who had been staying at Samut Prakarn province not less than 3 months. It covered 6 districts including Muang Samut Prakarn, Pra pradaeng, Bang Phli, Bang Bo, Bang Sao Thong and Pra samut Chedi. A total of 10,232 foreign migrants from 3,913 households were the population.

3.3 Research Instrument

The researcher adapted a household-interview questionnaire which was applied from the project on "Survey on health status of population in Bangkok in 2005" designed by Chaweewon Boonshuyar, an Assistant Professor of Biostatistics Department, Faculty of Public Health, Mahidol University. The researcher also reviewed documents and related researches regarding general data of foreign migrants, health status, health determinants, accessibility to healthcare services and customers' satisfaction. The questions were designed in Thai language which was composed of 2 parts as follows:

Part 1 Household data of foreign migrants, the household representative were be interviewed about

- Characteristics of informants who provided household data such as age of the informant and relationship to a head of household.

- Non-medical determinants of health indicators such as numbers of family members living in the same household, water resource, water improvement before drinking and community environment.

- Accessibility such as information about health promotion as well as disease prevention and control.

- Care on illness according to severity of illness among foreign migrants aged 0-5 years, 6-14 years, 15-59 years (working age group) and 60 years and over (aging people).

Part 2 Each individual data, all foreign migrants were asked during an interview. The data included:

Characteristics of foreign migrants which consisted of;

- Age, sex, and nationality (asked all foreign migrants)
- Understand Thai language (asked foreign migrants aged over 7 years)
- Marital status (asked foreign migrants aged 15 years and over)

Health status of foreign migrants which include;

- Self assessment for general health condition, having chronic disease and having stress during last month (asked foreign migrants aged 15 years and over)
- Getting illness during last month (asked all foreign migrants)

Non-medical determinants of health indicators include;

- Monthly income, type of work, exercising behavior or activities that promote healthy condition, smoking, and alcohol drinking (asked foreign migrants aged 15 years and over)

Accessibility include;

- Having health security, the use of health security, and receiving a health check-up within the last 12 months (asked all foreign migrants)
- Obtaining healthcare services on family planning, checking-up to screen cervical cancer and breast self-examination, receiving ante-natal care, delivery,

postpartum care and maternal and newborn care (asked female migrants aged 15 years and over or married female migrant)

- Receiving immunization in children aged 12 – 23 months

Evaluating customers' satisfaction asked foreign migrants aged 15 years and over who used to apply health security to receive healthcare services.

3.4 Data Collection

The process of data collection started from August to October 2007. First the researcher had asked for cooperation from 84 officials of the Provincial health Office in Samut Prakarn province who were responsible for foreign migrants and 26 foreign volunteers who know the Thai language. Questionnaires were used for data collection and the steps were as follows:

3.4.1 The researcher held a meeting to inform Sub-committees of the Health Service System Development about the research on assessments of health status of migrants in Samut Prakarn province.

3.4.2 The researcher set a workshop to clarify and trained the coordinators of six districts who were responsible for migrants in Samut Prakarn province about the interview forms or questionnaires on migrant household. Explain about the target group which included migrants who had been staying in Samut Prakarn province for at least 3 months. Migrants who legally got married with Thais were excluded. An interviewer must interview only when consent was made. In the case that participants' age not exceed 18 years, the approval from their parents was needed and the parent could join the interview. (In case, a child could sign his/her name, informed consent with his/her signature is required. Make sure to understand forms of an interview in each question and apply with a survey handbook. Any emerged questions or problems were be clarified by the researcher at all time.

3.4.3 Each district coordinator set a workshop to clarify understanding of the questionnaires about household migrant with the responsible officials at sub-district level.

3.4.4 The responsible officials who worked with foreign migrants at a sub-district level informed foreign volunteers (who were able to serve as interpreters)

about research objectives, keeping personal data of participants confidentially, and the officials explained about questions used in household data collection among foreign migrants.

3.4.5 The responsible officials at a sub-district level collected data of foreign migrants at health centers/primary health care unit. The head of a community where foreign migrants were staying was contacted before conducting any interview. The foreign volunteers who knew and understood Thai always joined in all interview. Research objectives and other ethical issues were carefully informed to all participants. Data collection was started from August to October, 2007.

3.4.6 Right after interviewing each foreign migrant, an interviewer checked all answers for completeness. After finishing interview at all sites where target group or migrants were staying, the questionnaires were gathered and sent to district health offices and to Samut Prakarn Provincial Health Office respectively.

3.4.7 The researcher collected all questionnaires from the Samut Prakarn Provincial Health Office. After that all questionnaires were checked for its conformity and correctness. Some incomplete ones were sent back to asked the participants so that all data were completely filled as much as possible.

Table 1 Data collection on interview questionnaire among foreign migrants

District	Households	Interview questionnaire	Questionnaires completeness	
			Number	%
Muang Samut prakarn	2064	877	819	93.4
Pra pradaeng	456	137	136	99.3
Bang Phli	472	238	227	95.4
Bang Bo	425	192	177	92.2
Bang Sao Thong	195	98	97	99.0
Pra samut Chedi	301	147	146	99.3
Total	3913	1689	1602	94.8

3.5 Data Analysis

Frequency, percentage, mean and standard deviation were applied to describe general data, health status, health status determinants, accessibility to health services and customers' satisfaction.

3.6 Ethical Consideration

1. Follow the risk protection keeping confidential for all personal data of participants especially to those migrants who were not registered. The numbers were put instead of names of participants during data recording process. Interview was conducted in privacy and at a safety area in a community. All of these activities were conducted in corporation with the participants.

2. Thoroughly inform research objectives and its advantages to all participants as well as answer the questions and clarify any ambiguous points.

3. Obtain inform consents from all participants.

4. A participant has the right to withdraw from this research project at any time they needed without any negative impact occurring to them.

5. Personal data, name and surname of participants will not be presented to public, only result as a whole picture would be illustrated.

This research was approved by the Committee on Human Rights Related to Human Experimentation, Mahidol University, Bangkok. (Appendix B)

CHAPTER 4
RESULTS

The objective of this study was to assess the health status of foreign migrants in Samut Prakarn province. The instrument was the household questionnaire form to inquire those foreign migrants. The data collection was cooperated by the staff responsible for foreign migrant affairs, and foreign volunteers. The data were colleced from August to October 2007 in 1,602 households, comprising 3,041 foreign migrants and their followers. The results were presented as follows:

4.1 General information about foreign migrants

4.2 Health status and determinants of health status

4.3 Accessibility to health service and satisfaction of service users

4.4 Care on illness

4.1 General Information about Foreign Migrants

From households and number of foreign migrants staying in Samut Prakarn province longer than 3 months, about half of households and foreign migrants staying in Amphoe Muang Samut Prakarn (51.2% and 49.5% respectively) have been staying at Tambon Tai Baan, Amphoe Muang Samut Prakarn at 14.3% and 17.3% while there were the fewest households and number of foreign migrants (0.1% and 0.2%) at Tambon Samrong Tai, Amphoe Phra pradaeng as illustrated in Table 2.

About half of respondents were men (52.2%) at age of 14-63 years. About 56.0% of respondents at age of 20-29 were household head, 48% of them were wives or husbands at 32.3% as illustrated in Table 3.

Table 2 Foreign migrants who were living in Samut Prakarn province for at least 3 months classified by district and sub-district.

Item	Household*		Population**	
	Number	%	Number	%
Total foreign migrants	1602	100.0	3432	100.0
Muang Samutprakan District	**820**	**51.2**	**1702**	**49.6**
Tambon Taiban	229	14.3	526	15.3
Tambon Taiban Mai	139	8.7	295	8.6
Tambon Bang Mueang	134	8.4	274	8.0
Tambon Samrong Nuea	70	4.4	88	2.6
Tambon Phraek Sa	55	3.4	137	4.0
Tambon Thepharak	46	2.9	100	2.9
Tambon Bang Mueang Mai	44	2.7	85	2.5
Tambon Bang Pu Mai	39	2.4	87	2.5
Tambon Paknam	24	1.5	57	1.7
Tambon Bang Pu	15	0.9	21	0.6
Tambon Bang Prong	15	0.9	15	0.4
Tambon Bang Duan	10	0.6	17	0.5
Bang Phli District	**226**	**14.1**	**466**	**13.6**
Tambon Bang Cho Long	56	3.5	92	2.7
Tambon Bang Kaeo	49	3.1	152	4.4
Tambon Racha The Wa	48	3.0	97	2.8
Tambon Bang Phli Yai	38	2.3	85	2.5
Tambon Bang Pla	35	2.2	40	1.2
Bang Bo District	**177**	**11.0**	**365**	**10.6**
Tambon Khlong Dan	115	7.2	252	7.3
Tambon Bang Bo	38	2.4	72	2.1
Tambon Bang Phriang	24	1.5	41	1.2

Table 2 Foreign migrants who were living in Samut Prakarn province for at least 3 months classified by district and sub-district. (cont.)

Item	Household*		Population**	
	Number	percent	Number	percent
Phra Samut Chedi District	**146**	**9.1**	**373**	**10.9**
Tambon Nai Khlong Bang Pla Kot	84	5.2	225	6.6
Tambon Laem Fapha	34	2.1	93	2.7
Tambon Na Kluea	10	0.6	13	0.4
Tambon Pak Khlong Bang Pla Kot	10	0.6	29	0.8
Tambon Ban Khlong Suan	8	0.5	13	0.4
Phra Pradaeng District	**136**	**8.5**	**309**	**9.0**
Tambon Samrong	32	2.0	97	2.8
Tambon Bang Phueng	31	1.9	54	1.6
Tambon Bang Chak	27	1.7	41	1.2
Tambon Bang Ya Phraek	18	1.1	64	1.9
Tambon Bang Hua Suea	13	0.8	27	0.8
Tambon Bang Kharu	8	0.5	12	0.3
Tambon Bang Namphueng	5	0.3	8	0.2
Tambon Samrong Tai	2	0.1	6	0.2
Bang Sao Thong District	**97**	**6.1**	**217**	**6.3**
Tambon Bang Sao Thong	97	6.1	217	6.3

* The percentage of 1,602 households

** The percentage of total foreign migrants who were living in Samut Prakarn province for at least 3 months 3,432 persons

Table 3 Characteristics of 1,602 foreign migrants who were household representative

Characteristics General	Number	%
Sex		
Male	837	52.2
Female	765	47.8
Age (years)		
14-19	105	6.6
20-24	461	28.8
25-29	436	27.2
30-34	303	18.9
35-39	166	10.4
40-44	87	5.4
45-49	33	2.1
50-63	11	0.7
Mean ± Standard deviation	28 ± 7.1	
relationship with a head of household		
Head of household	769	48.0
Wife or husband	518	32.3
Accommodation sharing	214	13.4
Relative	85	5.3
Son/daughter	16	1.0

The survey of health status of foreign migrants in Samut Prakarn province covered 5 target groups: a group of infant at age of 0-11 months, a group of children at age of 12-23 months, a group of children at age of 2-6 years, a group of children at age of 7-14 years and a group of adults at age of 15-63 years. The survey results showed that most foreign migrants (93.3%) were in the group of 15-63 years. Over a half of all foreign migrants were male labors (55.9%). The group of infant at age of 0-11 months was 2.4%, and over a half of this group were male (55.6%) as illustrated in Table 4.

Table 4 Foreign migrants classified by age

Age	Total		Male		Female*	
	Number	%	Number	%	Number	%
	3,041	100.0	1,707	56.1	1,334	43.9
0-11 months	72	2.4	40	55.6	32	44.4
12-23 months	19	0.6	10	52.6	9	47.4
2-6 years	61	2.0	42	68.9	19	31.1
7-14 years	53	1.7	29	54.7	24	45.3
15-63 years	2,836	93.3	1,586	55.9	1,250	44.1

* Have twin

According to the characteristics of foreign migrants in this survey, about half of them was in the group at age of 20-29 years (50.4%), comprising Myanmar people at 73.1%, Cambodians and Laotians (23.7% and 3.2% respectively). The foreign migrants at age of 7 years and over could speak but not write Thai (63.7%), and only 2.8% of them had good Thai speaking and writing. About 60.2% of foreign migrants at age of 15 and over were married or had cohabitation status as illustrated in Table 5.

Table 5 Characteristics of 3,041 foreign migrants

Characteristics	Number	%
Age (years)		
0-11 months	72	2.4
12-23 months	19	0.6
2-4	46	1.5
5-9	37	1.2
10-14	31	1.0
15-19	263	8.6
20-24	756	24.9
25-29	775	25.5
30-34	513	16.9
35-39	297	9.8
40-44	149	4.9
45-49	65	2.1
50-54	16	0.5
55-63	2	0.1
Nationality		
Myanmar	2,222	73.1
Cambodian	721	23.7
Laos	98	3.2
Thai language proficiency (Age 6+ years) [1]		
Cannot speak or write	351	12.1
Speak and write some	617	21.4
Speak some	1,839	63.7
Speak and write fluently	82	2.8

Table 5 Characteristics of 3,041 foreign migrants (cont.)

Characteristics	Number	%
Marital status (Age 15+ years) [2]		
Single	1,074	37.9
Married	1,708	60.2
Widow/Divorced/Separated	54	1.9

[1] 2,889 Respondents

[2] 2,836 Respondents

4.2 Health Status and Determinants of Health Status

Well-Being

Most foreign migrants at age of 15 and over (87.1%) had self-evaluation by stating that their health was good and excellent. Almost all did not have any chronic diseases (98.4%). For those having chronic diseases, the disease most frequently found was peptic ulcer and other diseases frequently found were asthma and allergy (0.6% and 0.2% respectively) as illustrated in Table 6.

Health Status

From surveying the illness of foreign migrants in prior month, the reported morbidity rate was 118 per 1,000 populations. The illness most frequently found was respiratory system disease, circulatory system disease and digestive system disease as well as oral cavity disease (42.9%, 15.6% and 13.9% respectively). The foreign migrants felt sick most frequently by the aforesaid diseases were in the group at age of 20-29 (as illustrated in Table 7). According to foreign migrants' stress in prior month, about 14.5% of those migrants reported that they had stress.

Table 6 Health condition of 2,836 foreign migrants aged 15 years and over

Health condition	Number	%
General health		
Poor	50	1.8
Fair	315	11.1
Good	2,057	72.5
Excellent	414	14.6
Do not have any chronic diseases	2,793	98.4
Peptic ulcer	17	0.6
Ashma	6	0.2
Allergy	5	0.2
Hypertension	3	0.1
Thyroid	2	0.1
Diabetes	2	0.1
Valvular heart disease	2	0.1
Tuberculosis	1	0.04
Hemorrhoid	1	0.04
Epilepsy	1	0.04
Digestive system disease	1	0.04
Anemia	1	0.04
Heart disease & Kidney disease	1	0.04
Illness of foreign migrants during the prior month [1]	359	11.8
Stress of foreign migrants during the prior month	411	14.5

[1] Foreign migrants 3,041 persons

Table 7 Illness of foreign migrants during the prior month classified by age group (years)

Disease group	Total		Age (years)											
			<15		15-19		20-29		30-39		40-49		50-63	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Illness of foreign migrants classified by disease group	359	100.0	40	11.1	15	4.2	157	43.7	104	29.0	41	11.4	2	0.6
Diseases of the respiratory system	154	42.9	38	24.7	10	6.5	61	39.6	36	23.4	9	5.8	0	0.0
Diseases of the circulatory system	56	15.6	0	0.0	1	1.8	22	39.3	22	39.3	10	17.9	1	1.8
Diseases of the digestive system	50	13.9	1	2.0	0	0.0	26	52.0	13	26.0	10	20.0	0	0.0
Diseases of the musculoskeletal system and connective tissue	45	12.5	0	0.0	3	6.7	18	40.0	16	35.6	7	15.6	1	2.2
Diseases of the skin and subcutaneous tissue	6	1.7	0	0.0	0	0.0	3	50.0	2	33.3	1	16.7	0	0.0
Certain infectious and parasitic diseases	5	1.4	1	20.0	1	20.0	1	20.0	1	20.0	1	20.0	0	0.0
Endocrine, nutritional and metabolic diseases	3	0.8	0	0.0	0	0.0	2	66.7	1	33.3	0	0.0	0	0.0
Diseases of the nervous system	1	0.3	0	0.0	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0
Diseases of the eye, adnexa, ear, and mastoid process	1	0.3	0	0.0	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0
Diseases of the genitourinary system	1	0.3	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0
Injury, poisoning and certain other consequences of external causes	1	0.3	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0
No specify	36	10.0	0	0.0	0	0.0	22	61.1	11	30.6	3	8.3	0	0.0

Well-Being and Job Characteristics

From interviewing household representative regarding the number of foreign migrants in each household, about 46.8% of them had 2 members in the household while 28.5% stayed alone. The average members in each household were 2.14 persons (S.D. = 1.26). The average male population per household was 1.2 persons (S.D. = 0.87) and the average female population per household was 0.94 persons (S.D. = 0.85) as illustrated in Table 8.

Table 8 Foreign migrants staying at Samut Prakarn province in 1,602 households

Item	Total		Male		Female	
	Number	**%**	**Number**	**%**	**Number**	**%**
Number of household members (person)						
0			217	13.5	453	28.3
1	456	28.5	996	62.2	892	55.7
2	749	46.8	281	17.5	194	12.1
3	239	14.9	82	5.1	44	2.7
4	108	6.7	19	1.2	8	0.5
5-9	44	2.7	6	0.3	11	0.7
10-20	6	0.4	1	0.1	0	0.0
Total of foreign migrants	3,432	100.0	1,929	56.2	1,503	43.8
Mean ± Standard deviation per household	2.14 ± 1.26		1.2 ± 0.87		0.94 ± 0.85	

From interviewing foreign migrants at age of 15 and over in term of income and job characteristics, the maximum monthly income was 20,000 Baht and the minimum monthly income was 1,000 Baht; so the mean of monthly income was 5,000 Baht. The foreign migrants with the income in the range of 3,001 – 6,000 Baht accounted for 79% of all. About 54.8% of them were labors in general industries, 19.6% of them were construction labor and 7.8% were labors in the fishery business respectively as illustrated in Table 9.

Table 9 Income and type of work of foreign migrants in Samut prakarn province

Characteristics		Number	%
Income (Age 15+ years) per month (Baht)[1]			
≤ 3000		120	5.9
3001-6000		1,619	79.0
6001-9000		289	14.1
9001-12000		17	0.8
>12000		4	0.2
Median (Baht)	5,000		
Minimum - Maximum (Baht)	1,000 – 20,000		
Occupation (Age 15+ years)[2]			
Factory workers		1,553	54.8
Construction labor		557	19.6
Fishery business		221	7.8
Labor		192	6.8
Unemployed		132	4.7
Seafarer		78	2.7
Vendor		40	1.4
Craftman		37	1.3
Student		2	0.1
No specify		24	0.8

[1] 2,049 Respondents

[2] 2,836 Respondents

Health Behavior

From interviewing foreign migrants at age of 15 and over, it was found that most of them were in the group at ages of 20-29 (54%), 30-39 (28.6%) and 40-49 (7.5%).

Regarding exercise taking by foreign migrants, in general, a half of them have never done exercises; only 21.7% of them have done exercises regularly. If classified by age and gender, foreign migrants at ages of 20-39 have exercised most frequently (41.4%). In this group, about 54.8% of male migrants and only 23.7% of female migrants have exercised regularly as illustrated in Table 10.

For smoking among foreign migrants, in general, it was found that three-fourth of foreign migrants have never smoked (75.4%) and only 11.7% of them have smoked. If classified by age and gender, foreign migrants at age of 20-39 at 25.4% have smoked regularly. In this group, 42.7% of male migrants have smoked while only 2.2% of female migrants have smoked (Table 11).

In relation to alcohol drinking of foreign migrants, in general, almost three-fourth of foreign migrants have never drunk alcohol (70.7%) and only 4.6% of them have drunk regularly. If classified by age and gender, foreign migrants at age of 20-39 have drunk most frequently (10%). In this group, 17.2% of male and only 0.6% of female migrants have drunk regularly (Table 12).

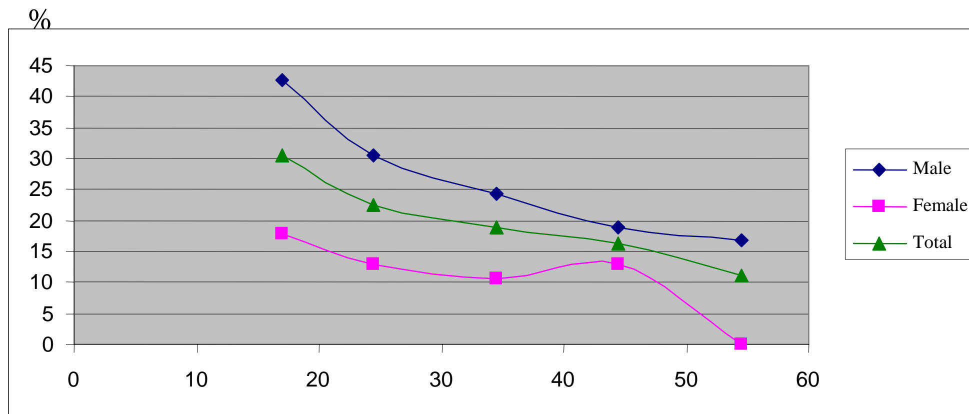

Figure 1 Percentage of foreign migrants age 15 yrs and over having regular exercise

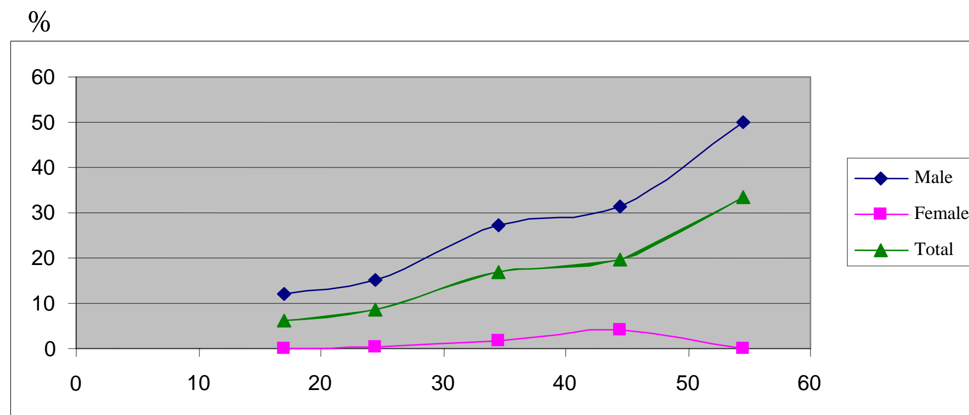

Figure 2 Percentage of foreign migrants age 15 yrs and over having regular smoking

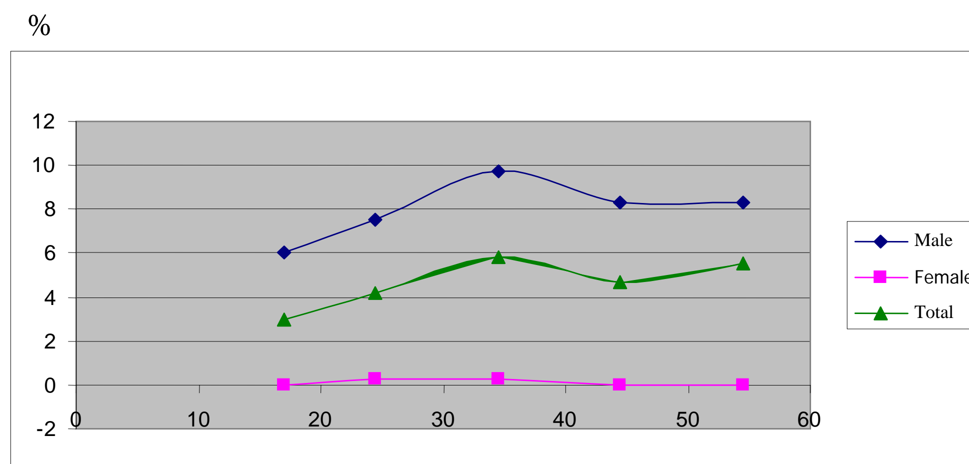

Figure 3 Percentage of foreign migrants age 15 yrs and over having regular alcohol drinking

Table 10 Exercise in foreign migrants aged 15 years and over

Exercise	Total		Non-exercise		Irregular exercise		Regular exercise	
	Number	%	Number	%	Number	%	Number	%
Age(years)	2,836	100.0	1,419	50.0	802	28.3	615	21.7
15-19	263	9.3	119	45.3	64	24.3	80	30.4
20-29	1,531	54.0	757	49.4	428	28.0	346	22.6
30-39	810	28.6	416	51.3	242	29.9	152	18.8
40-49	214	7.5	116	54.2	63	29.4	35	16.4
50-63	18	0.6	11	61.1	5	27.8	2	11.1
Male	1,586	100.0	636	40.0	495	31.3	455	28.7
15-19	134	8.4	42	31.3	35	26.1	57	42.6
20-29	844	53.2	324	38.4	263	31.2	257	30.4
30-39	475	30.0	201	42.3	158	33.3	116	24.4
40-49	121	7.7	62	51.2	36	29.8	23	19.0
50-63	12	0.7	7	58.3	3	25.0	2	16.7
Female	1,250	100.0	783	62.6	307	24.6	160	12.8
15-19	129	10.3	77	59.7	29	22.5	23	17.8
20-29	687	55.0	433	63.0	165	24.0	89	13.0
30-39	335	26.8	215	64.2	84	25.1	36	10.7
40-49	93	7.4	54	58.1	27	29.0	12	12.9
50-63	6	0.5	4	66.7	2	33.3	0	0.0

Table 11 Smoking in foreign migrants aged 15 years and over

Smoking	Total		Non-smoking		Irregular smoking		Regular smoking	
	Number	%	Number	%	Number	%	Number	%
Age (years)	2,836	100.0	2,139	75.4	365	12.9	332	11.7
15-19	263	9.3	223	84.8	24	9.1	16	6.1
20-29	1,531	54.0	1,189	77.7	210	13.7	132	8.6
30-39	810	28.6	568	70.1	106	13.1	136	16.8
40-49	214	7.5	149	69.6	23	10.7	42	19.6
50-63	18	0.6	10	55.6	2	11.1	6	33.3
Male	1,586	100.0	924	58.3	343	21.6	319	20.1
15-19	134	8.4	97	72.4	21	15.7	16	11.9
20-29	844	53.2	514	60.9	201	23.8	129	15.3
30-39	475	30.0	247	52.0	98	20.6	130	27.4
40-49	121	7.7	62	51.2	21	17.4	38	31.4
50-63	12	0.7	4	33.3	2	16.7	6	50.0
Female	1,250	100.0	1,215	97.1	22	1.9	13	1.0
15-19	129	10.3	126	97.7	3	2.3	0	0.0
20-29	687	55.0	675	98.3	9	1.3	3	0.4
30-39	335	26.8	321	95.8	8	2.4	6	1.8
40-49	93	7.4	87	93.5	2	2.2	4	4.3
50-63	6	0.5	6	100.0	0	0.0	0	0.0

Table 12 Alcohol drinking in foreign migrants aged 15 years and over

Alcohol drinking	Total		Non-drinking		Irregular drinking		Regular drinking	
	Number	%	Number	%	Number	%	Number	%
Age(years)	2,836	100.0	2,005	70.7	700	24.7	131	4.6
15-19	263	9.3	222	84.4	33	12.6	8	3.0
20-29	1,531	54.0	1,096	71.6	370	24.2	65	4.2
30-39	810	28.6	533	65.8	230	28.4	47	5.8
40-49	214	7.5	142	66.3	62	29.0	10	4.7
50-63	18	0.6	12	66.7	5	27.8	1	5.5
Male	1,586	100.0	798	50.3	660	41.6	128	8.1
15-19	134	8.4	98	73.1	28	20.9	8	6.0
20-29	844	53.2	428	50.7	353	41.8	63	7.5
30-39	475	30.0	211	44.4	218	45.9	46	9.7
40-49	121	7.7	55	45.4	56	46.3	10	8.3
50-63	12	0.7	6	50.0	5	41.7	1	8.3
Female	1,250	100.0	1,207	96.5	40	3.3	3	0.3
15-19	129	10.3	124	96.1	5	3.9	0	0.0
20-29	687	55.0	668	97.2	17	2.5	2	0.3
30-39	335	26.8	322	96.1	12	3.6	1	0.3
40-49	93	7.4	87	93.5	6	6.5	0	0.0
50-63	6	0.5	6	100.0	0	0.0	0	0.0

Environmental Factors

From interviewing respondents who were household representative, it was found that the biggest drinking water resource in the household was the pipe water (95.8%). Only 28.7% of them improved water quality before drinking. About 87.9% of residences handled the waste disposal. Less than 30% of household representatives said that there were the polluted water around residences, bad smell, loud noise and dust/smoke (29.8%, 28.4%, 28% and 24.9% respectively) as illustrated in Table 13.

Table 13 Drinking-water sources and surroundings around communities of 1,602 households

Item	Number	%
Water resource		
Rain water	48	3.0
Ground water	19	1.2
Water supply	1,535	95.8
Water quality before drinking		
Never	784	48.9
Sometimes	359	22.4
Always	459	28.7
Environment condition of a community		
Have garbage management	1,408	87.9
Have waste water	477	29.8
Have bad smelling	455	28.4
Have noisy	449	28.0
Have dust/smoke	399	24.9

4.3 Accessibility to Health Service and Clients Satisfaction

Almost three-fourth of foreign migrants had the health security card (70.5%) and about 71.3% of health security card holders used their health security card to receive medical services (Table 14).

Regarding the receipt of health information in relation to health promotion, disease prevention and controls from various information sources, as it was a multiresponse. It was found that most of them received the information about health promotion from health officers, radio/television and brochures/posters (71.8%, 62.5% and 49.5% respectively). Regarding the disease prevention and controls, most received such information from health officers, radio/television and brochures/posters (74.7%, 63.2% and 54.7% respectively).

In relation to the annual physical check-up with physicians, nurses or health officers, about 74% of foreign migrants received the annual physical check-up. In addition, the morbidity rate caused by tuberculosis and hypertension accounted for 3.3 per 1,000 populations for each. Other most prevalent diseases were the diabetes, sexually transmitted infection disease and filariasis, the rate accounted for 1 per 1,000 populations. About 30.6% of foreign migrants who had the annual physical check-up and found any diseases were sent for the medical treatment at health facilities or primary care unit (Table 15).

Table 14 Health security and information received about health of 3,041 foreign migrants

Item	Number	%
Had the health security card	2,145	70.5
used health security card [1]	1,529	71.3
Information received about health promotion [2]		
Public health officer	1,151	71.8
Radio/TV	1,001	62.5
Brochure/Poster	793	49.5
Health volunteer	715	44.6
Newspaper/Magazine	257	16.0
Public Announcement	245	15.3
Village headman	135	8.4
Information received about controlling disease [2]		
Public health officer	1,197	74.7
Radio/TV	1,012	63.2
Brochure/Poster	877	54.7
Health volunteer	748	46.7
Public Announcement	261	16.3
Newspaper/Magazine	259	16.2
Village headman	152	9.5

[1] The percentage of foreign migrants who had the health security card 2,145 persons

[2] Multiple response N= 1,602 household

Table 15 Health accessibility of foreign migrants of 3,041 foreign migrants

Health condition	Number	%
Health check-up	2,249	74.0
No disease[1]	2,200	97.8
Have disease[2]		
Tuberculosis	10	3.3
Hypertension	10	3.3
Diabetes	3	1.0
Sexually Transmitted Infection Diseases & Filariasis	3	1.0
Sexually Transmitted Infection Diseases	2	0.7
Filariasis	1	0.3
Tuberculosis & Filariasis	1	0.3
Thyroid	1	0.3
Digestive system disease	1	0.3
Ashma	1	0.3
No specify	16	5.3
Treatment (n=49)		
No	2	4.1
Health center/PCU	15	30.6
Government hospital	7	14.3
Private Clinic	1	2.0
No specify	24	49.0

[1] The percentage of foreign migrants who had a health check up 2,249 persons

[2] Reported morbidity rate : 1,000 population

About receiving the family planning service among foreign migrant women with the marriage status, it was found that, 66.4% of them had birth control by oral pills, injection and women sterilization (79.2%, 15.7% and 4.7% respectively). The locations they used the birth control service included the drug store, health centers or primary care unit and government hospitals (62.0%, 21.1% and 6.5% respectively). The main reasons that some foreign migrant women did not have birth control were that they wanted to have several children, they were pregnant and they stayed in different places with husbands (29.8%, 28.2% and 11.0% respectively (Table 16).

Table 16 Family planning provided for married foreign migrants age 15-59 years 863 persons

Family planning	Number	%
Contraceptive Prevalence Rate[1]	573	66.4
oral pill	454	79.2
injection	90	15.7
sterilization	27	4.7
Intra uterine divices	2	0.4
Place for family planning		
Drug store	371	62.0
Health center/PCU	126	21.1
Government hospital	39	6.5
Private clinic	41	6.9
Private hospital	4	0.7
Sending country	17	2.8
Reasons not to have birth control [2]		
have several children	73	29.8
pregnancy	69	28.2
stayed in different places	27	11.0
don’t feel like to control	15	6.1

Table 16 Family planning provided for married foreign migrants age 15-59 years 863 persons (cont.)

Reasons	Number	%
health problem	10	4.1
postnatal	7	2.9
don't know how to do	6	2.4
menopausal	4	1.6
no ready	2	0.8
breast feed	2	0.8
infertility	1	0.4
waiting to have a cycle of menstruation	1	0.4
after operation from Ectopic pregnancy	1	0.4
No specify	27	11.0

[1] Excluded natural method and condom use among 45 married woman

[2] % from those who have no birth control

Regarding cervical cancer check-up service and breast self - examination as surveyed in migrant women at ages of 15 -52, it was found that 13.2% of them used to have the cervical cancer check-up. The migrant women receiving such service were in the group at age of 40-44, 35-39 and 30-34 respectively (22.1%, 20.6% and 17.6%). About 39.4% of these women had the cervical cancer check-up each year while only 4.8% received such service last 5 years. For migrant women experiencing the breast self- examination, about 4.7% of them did on a monthly basis. The migrant women who did this, most were in the group at age of 40-44 or at 8.8% as illustrated in Table 17 and 18 respectively.

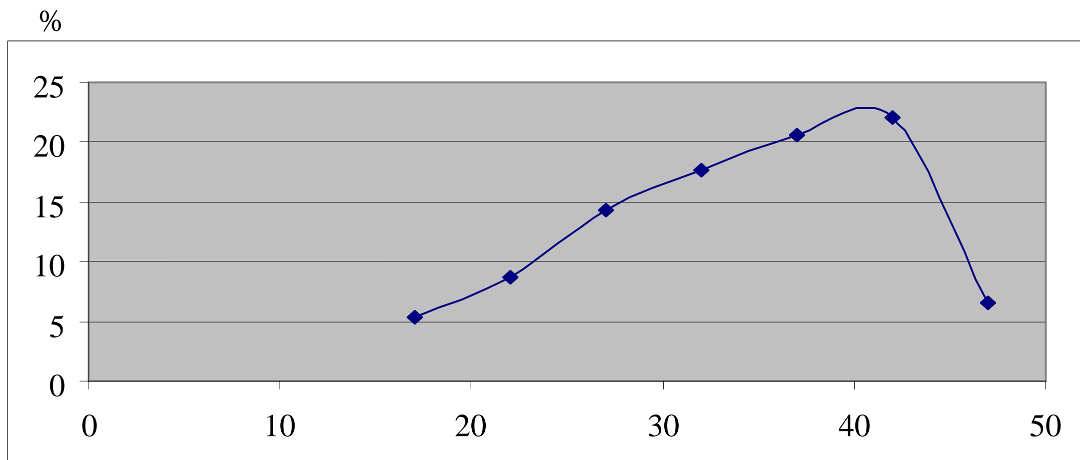

Figure 4 Percentage of female foreign migrants having cervical cancer screening

Table 17 Foreign migrants aged15-59 years who received cervical cancer screening

Age group	Female foreign migrants	Number	%	Duration (years) of received cervical cancer screening (%)						
				1	2	3	4	5	≥ 5	No specify
Age (years)	1,250	165	13.2	39.4	37.6	6.7	3.6	1.2	3.6	7.9
15-19	129	7	5.4	2.3	0.8	0.0	0.0	0.0	0.0	2.3
20-24	358	31	8.7	3.1	3.1	0.8	0.6	0.0	0.3	0.8
25-29	329	47	14.3	6.4	5.8	0.6	0.6	0.0	0.0	0.9
30-34	204	36	17.6	6.4	6.9	1.0	0.5	0.5	1.0	1.5
35-39	131	27	20.6	8.4	8.4	2.3	0.8	0	0.8	0
40-44	68	15	22.1	7.4	7.4	1.5	0.0	1.5	2.9	1.5
45-52	31	2	6.4	3.2	3.2	0.0	0.0	0.0	0.0	0

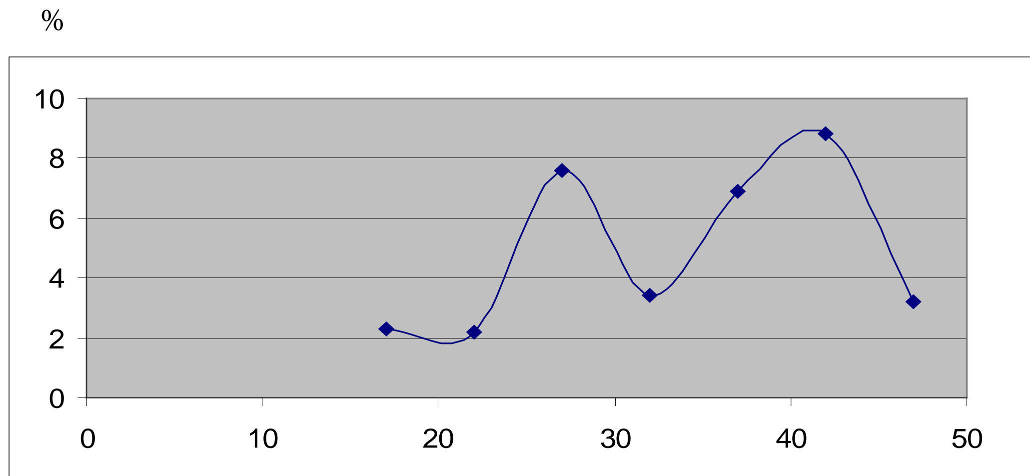

Figure 5 Percentage of female foreign migrants having breast self - examination

Table 18 Female foreign migrants aged15-52 years who performed breast self – examination

Age (years)	Number	self check-up for breast cancer					
		Never		Irregular		Monthly	
		Number	%	Number	%	Number	%
Total	1,250	1,029	82.3	162	13.0	59	4.7
15-19	129	119	92.3	7	5.4	3	2.3
20-24	358	311	86.9	39	10.9	8	2.2
25-29	329	266	80.8	38	11.6	25	7.6
30-34	204	165	80.9	32	15.7	7	3.4
35-39	131	95	72.5	27	20.6	9	6.9
40-44	68	45	66.2	17	25.0	6	8.8
45-52	31	28	90.3	2	6.5	1	3.2

Regarding gestational age pre-natal care service for pregnant women, it was found that most of migrant women had the between 7-10 months (37.7%). About 91.3% (63/69) received the pre-natal care service. The reasons of those not receiving the pre-natal care service were that they were recently aware of their pregnancy, they had no money and their pregnancy was still early. For locations of the pre-natal care service, most of them (44.4%) received the pre-natal care service at the government hospitals, health center or primary care unit (25.4%) as illustrated in Table 19.

Table 19 Pre-natal care service of 69 pregnant migrant women

Pre-natal care service	Number	%
Gestational age (months)		
1-3	20	29.0
4-6	23	33.3
7-10	26	37.7
Ante-natal care		
Yes	63	91.3
No	6	8.7
Place for ante-natal care [1]		
Government hospital	28	44.4
Health center/PCU	16	25.4
Private clinic	11	17.5
Private hospital	8	12.7

[1] The percentage pregnant migrant women from 63

For the coverage of pre-natal care and post-natal care for migrant women whose children's ages were less than 12 months, it was found that about 76.3% received the complete pre-natal care service. The reasons of not receiving the pre-natal care service were that they had frequent migration, the health center were far away from home and no one took them to the health center. For the maternal and child care after delivery pursuant to the medical standard, about 69.5% and 74.6% received it completely as illustrated in Table 20.

Table 20 Coverage of ante-natal and post – natal care of 71[*] migrant mothers who had child of < 12 months

Ante-natal and Post – natal care	Number	%
Ante – natal care [1]		
Yes, according to the schedule	45	76.3
Yes, not according to the schedule	5	8.5
No [2]	9	15.2
Post – natal care [1]		
Yes, according to the criteria	41	69.5
Yes, not according to the criteria	18	30.5
Child care after delivery [1]		
Yes, according to the criteria	44	74.6
Yes, not according to the criteria	15	25.4

[*] From 71 mothers who had children age of less than 12 months (1 mother had twin)

[1] From 59 mothers who had children age of less than 12 months

[2] Reasons were mobility, too far from home and nobody brought her to ANC

Regarding locations of pre-natal service and delivery service for migrant women whose children's age were less than 12 months, it was found that most of them utilized government hospitals (68.5%), health center or primary care unit (14.8%). Most of migrant women delivered at government hospitals (74.6%), and private hospitals (3.4%). It was also found that 20.3% of migrant women returned to their countries to give birth (Table 21).

Table 21 Place for ante-natal care and delivery of 71 female foreign migrants whose child age less than 12 months

Health facilities	Number	%
Place for ante-natal care		
Government hospital	37	68.5
Health center/PCU	8	14.8
Private clinic	1	1.9
Private hospital	1	1.9
Sending country	7	13.0
Place for delivery[2]		
Government hospital	44	74.6
Private hospital	2	3.4
Health center/PCU	1	1.7
Sending country	12	20.3

[1] Of 54 migrant mothers

[2] Of 59 migrant mothers

From 19 migrant girls at ages of 12-23 months who were vaccinated, it was found that 11 girls or 57.8% of them were the first child in the family. The proportion of holding the vaccination and vaccination coverage record cards were 89.5% and 78.9% respectively as illustrated in Table 22.

Table 22 Immunization among 19 migrant children aged 12–23 months

Receiving immunization	Number of children	%
Sex		
Male	8	42.2
Female	11	57.8
Birth order		
1	11	11
2	4	4
3	3	3
4	1	1
Coverage of vaccination record cards	17	89.5
Coverage of vaccination	15	78.9

About the clients satisfaction, it was found that foreign migrants with health security card and experience in using the medical service privilege felt satisfied with the exercise of rights at the highest and high level at 70.7%. The pregnant women felt satisfied with the pre-natal service at the highest and high level at 85.5%. Migrant women with children younger than 12 months felt satisfied with the pre-natal service during their pregnancy period at the highest and high level at 78.7%, and they felt satisfied with the birth delivery service at the highest and high level at 80.4% as illustrated in Table 23.

Table 23 Satisfaction of 1,528 foreign migrants on healthcare service

Satisfaction	Number	lowest		low		moderate		high		highest	
		Number	%	Number	%	Number	%	Number	%	Number	%
The acquisition of health security	1,528	46	3.0	43	2.8	359	23.5	628	41.1	452	29.6
Receiving ante- natal care – pregnant foreign migrants	62	1	1.6	0	0.0	8	12.9	34	54.8	19	30.7
Receiving ante- natal care – female foreign migrants whose child aged less than 12 months	47	0	0.0	1	2.1	9	19.2	19	40.4	18	38.3
Receiving postpartum care for female foreign migrants whose child aged less than 12 months	51	0	0.0	1	2.0	9	17.6	25	49.0	16	31.4

4.4 Care on Illness

From interviewing foreign migrants of each household in case of mild sickness, moderate and severe sickness as classified by 3 groups of ages: 0-5 years, 6-14 years and 15-63 years as illustrated in Table 24, it was found that, for children at ages of 0-5 years in case of mild sickness, 38.2% of respondents took children to health center or primary care unit, 19.8% bought the medicine from the groceries close to their houses and 17.6% bought the medicine from drug stores. In case of moderate sickness, the respondents took children to health center or primary care unit (51.1%), government hospitals (30.5%) and private clinics (14.5%). In case of severe sickness, the respondents took children to government hospitals (89.3%) and health center or primary care unit (6.9%).

For children at ages of 6-14 years, in case of mild sickness, 31% bought the medicine from the groceries close to their houses, 23.8% received the medical service at health center or primary care unit and 14.3% bought the medicine from drug stores. In case of moderate sickness, 38% of respondents received the medical treatment at government hospitals, 33.3% at health center or primary care unit and 14.3% at private clinics. In case of severe sickness, 85.6% received the medical treatment at government hospitals and 4.8% at health center or primary care unit.

For labors at ages of 15-63 in case of mild sickness, 25.2% bought the medicine from the groceries close to their houses, 22.9% bought the medicine from drug stores and 21.8% had no treatment. In case of moderate sickness, 37.3% received the medical treatment at health center or primary care unit, 29.9% at government hospitals and 9.5% at private clinics. In case of severe sickness, 78% went to government hospitals and 9.9% to health center or primary care unit.

Table 24 Care on illness of foreign migrants

Type of health care practice	Illness level					
	Mild		Moderate		Severe	
	Number	%	Number	%	Number	%
Age 0 - 5 years [1]						
Do nothing	6	4.6	0	0.0	0	0.0
Herbal medicine	1	0.8	0	0.0	0	0.0
Purchased medicine from grocery	26	19.8	1	0.8	1	0.8
Purchased medicine from drug store	23	17.6	4	3.1	0	0.0
Health center/PCU	50	38.2	67	51.1	9	6.9
Government Hospital	17	12.9	40	30.5	117	89.3
Private Clinic	7	5.3	19	14.5	2	1.5
Private Hospital	0	0.0	0	0.0	2	1.5
Employer provided medicine	1	0.8	0	0.0	0	0.0
Age 6 - 14 years [2]						
Do nothing	4	9.5	1	2.4	0	0.0
Herbal medicine	0	0.0	0	0.0	0	0.0
Purchased medicine from grocery	13	31.0	2	4.8	1	2.4
Purchased medicine from drug store	6	14.3	2	4.8	1	2.4
Health center/PCU	10	23.8	14	33.3	2	4.8
Government Hospital	4	9.5	16	38.0	36	85.6
Private Clinic	5	11.9	6	14.3	2	4.8
Private Hospital	0	0.0	1	2.4	0	0.0

[1] From 131 Households

[2] From 42 Households

Table 24 Care on illness of foreign migrants (cont.)

Type of health care practice	Illness level					
	Mild		Moderate		Severe	
	Number	%	Number	%	Number	%
Working age group (15 - 63 years) [3]						
Do nothing	349	21.8	18	1.1	2	0.1
Herbal medicine	21	1.3	23	1.4	1	0.1
Purchased medicine from grocery	404	25.2	137	8.6	24	1.5
Purchased medicine from drug store	367	22.9	184	11.5	37	2.3
Health center/PCU	252	15.8	597	37.3	159	9.9
Government Hospital	107	6.7	478	29.9	1248	78.0
Private Clinic	51	3.2	153	9.5	101	6.3
Private Hospital	5	0.3	10	0.6	27	1.7
Employer provide medicine	45	2.8	1	0.1	2	0.1

[3] From 1,601 Households

CHAPTER 5
DISCUSSION

This survey research was aimed to assess the health status of foreign migrants in Samut Prakarn province. The household-interview questionnaire was used for data collection. The discussion is presented in four parts as follows:

5.1 General characteristics of foreign migrants
5.2 Health status and health determinants
5.3 Health accessibility and client satisfaction
5.4 Care on illness

5.1 General Characteristics of Foreign Migrants

Samut Prakarn province consists of 6 districts which are Muang Samut Prakarn, Pra pradaeng, Pra samut Chedi, Bang Phli, Bang Bo and Bang Sao Thong. The study results showed that more than half of foreign migrants were living in Muang Samut Prakarn district because of convenient transportation, good infrastructure, having industrial economics, being a location of industrial settlement and of large and small industries. Then, entrepreneurs need workers with low wage payment. As a result, a large number of foreign migrants workers were the target and replacement for Thai workers. This phenomenon creates the most huge foreign migrants in Muang Samut Prakarn when comparing to other districts.

More than half of the household representatives were male aged between 20 – 29 years. This may be because foreign migrants in the survey were male migrants in working age group and male had low risk when migrated compared to female due to their physical condition.

Most of foreign migrants were from Myanmar. Likewise, it was found that in a group of foreign migrants who were registered, a number of Myanmar migrants

was the highest on the list. (Department of Administration, 2006) More than half of foreign migrants with age of 8 and over were able to speak Thai but unable to write Thai. It was similar to the study of Aphichat Chamratrithirong and Wathinee Boonchalaksi (2005) revealed that three-fourth of migrant workers from Myanmar and Cambodia could speak Thai. Most of them were able to speak Thai at a poor to moderate level. Moreover, the ability in speaking Thai language provided them an opportunity to get higher wage (20-30% more) when compared to non-Thai speaking. The migrant workers tried to communicated with the Thais as well as adjusted themselves to the Thai custom and tradition so that their lives could be in harmony with the Thais and then they could settle in Thailand for good in the future.

5.2 Health Status and Health Determinants

From the survey, it was found that more than 80% of foreign migrants assessed from their perception on their health at a very good level. It may be because most of them were in working age group, they were healthy and ready to work for a living. It was conformable to the study of Khwanjit Sasivongsaroj (2006) showed that Myanmar migrants evaluated that their health were in a good condition. There were some foreign migrants with stress during last month. It may caused from their concern about economic status—inadequate income due to the very low wage. Most foreign migrants in working age group had gastritis. This may be because they paid attention to the hard work to get more wage, they had irregular time for their meal. However, it indicated that less than 15% of migrants were reported during last month got most respiratory infection. This may caused by their living environment and sanitation of their workplace and the housing location in industrial area.

The foreign migrants mostly worked in general industrial sectors since Samut Prakarn province was a location of industrial settlement and had various sizes of factories. Therefore, a massive workers were badly in need. The wage was rather stable compared to other jobs. Thus, this kind of job was popular among most migrants. It conformed to the study of Sirinun Kittisuksathit (2004). In her study, it showed that most Myanmar migrants were working in industrial sectors. With the fact that, it was so difficult to find Thai workers compared to Myanmar workers. Besides,

Myanmar workers were willing to do the hard work and willing to work over time or work until morning of the next day. For Thai workers, they can work with limited time—not longer than 9 p.m.. The study conducted by Aphichat Chamratrithirong and Wathinee Boonchalaksi (2005) indicated that Myanmar workers in Chaeingmai and Tak worked in industries.

About health behavior of foreign migrants: it was found that more than half of them had never exercised to promote healthy condition. Most female migrants commonly did the exercise less than male because they did not think that exercise could support health promotion. In addition, there was no place and instruments available for exercising. There were less than 30% of male aged 20-39 years always smoked and drank alcohol. It was in contrast with the study of Khwanjit Sasivongsaroj (2006) which showed over half of Myanmar migrants had risk behavior to get chronic diseases such as smoking. And the study of Sriwan Tangvongma and Rungrasami Srivongpunth (2006) revealed in contrast that more than 30% of male aged 15-59 years smoked and a half of them drank alcohol. It may be because foreign migrants in Samut Prakarn province had small household income, they therefore, saved their money and then led to less risk behaviors on drinking and smoking and may be because public health officials were interviewers, another inaccuracy may derive from the defensive answer caused by the fear feeling of participants.

More than 90% of foreign migrants drank pipe water. This may be the good public utility provided in almost all area of Samut Prakarn province. However, more than half of migrants did not improve water quality before drinking because they deemed that pipe water was safety and ready for consuming .

5.3 Health Accessibility and Client Satisfaction

For accessibility to health service: it was found that more than half of foreign migrants had health security and more than half of migrant in this group utilized healthcare services. This was in agreement with the study of Aphichat Chamratrithirong and Wathinee Boonchalaksi (2005) which indicated that more than three-fourth of foreign workers perceived their right on utilization of healthcare service. It means that Thailand opens the right to receive healthcare service for

foreign migrants based on their normal living. Unlike the study of Khwanjit Sasivongsaroj (2006), which was found that only 18% of Myanmar migrants had health security card and 26.6% of them had never used such a card. It may be because they had a mild illness.

Concerning information received on health promotion and disease control and prevention, it showed that foreign migrants obtained information from public health officials the most. It may be due to the proactive services provided by public health officials among foreign migrants. The contact between public health officials and foreign migrants was performed regularly. And most foreign migrants chose to receive healthcare service at government hospital, thus they understood more about healthcare information.

About annual health check-up of foreign migrants: more than half of them received health check-up. This may be because the national health policy indicated that foreign migrants who had been registered, their employers had to support for their physical examination. It was unlike the study of Sriwan Tangvongma and Rungrasami Srivongpunth (2006) which found that more than 70% of Hmong had never had annual check-up for their health because they did not know the advantages of this activity and probably nobody supported them.

Family planning, 66.4% of female foreign migrants aged 15-49 years had birth control. However, it was less than the contraceptive prevalence rate among Thai people in 2006. The use of oral pill was the highest. Similar to the study of Aphichat Chamratrithirong and Wathinee Boonchalaksi (2005) which indicated that contraceptive prevalence rate in a group of Myanmar and Cambodia migrants aged between 15-49 years was 57%. The most popular methods were oral pill and injection. This was in contrast with the study of Sriwan Tangvongma and Rungrasami Srivongpunth (2006) which revealed that Hmong used injection for birth control the most while the study of Dusanee Paresuwan and Nittaya Sanglek (2006) showed that contraceptive prevalence rate among Karen was lower than among Thai. The Karen were commonly used injection method for birth control. The study conducted by Somkuarn Jaikrajang and Nitaya Sanglek (2006) presented that E-kor hill tribe had less birth control compared to the Thai people in 2006. They normally used injection. The study of Pimonpan Isarabhakdi and Sukunya Jongtavonsathit (2006) revealed that

contraceptive prevalence rate of married women was less than those of Thais. They used injection the most.

Place provided for family planning and birth control services were at private health facilities such as drug store, private clinic. More than 70% of foreign migrants in Samut Prakarn province received this service at private health facilities. It may be because their status was an obstacle. Besides, many steps caused some difficulties to receive healthcare services. The findings showed less birth control among foreign migrants compared to Thai. Another supported may be the need of foreign migrants. They wanted to settle their family in Thailand and need legal status for their offspring in the future. Less than one-fourth of foreign migrants used to perform breast self-examination. It may be because all women were shy they rarely checked themselves to investigate breast cancer. In the same way, it was presented in the study of Sriwan Tangvongma and Rungrasami Srivongpunth (2006) that only 24% of Hmong used to do breast self-examination and less than half of them used to have screening for cervical cancer. They had never checked for these cancer because they had no knowledge and felt shy. Their shyness caused by social refine and Hmong believed that all things about sex need to be in secret.

For ante-natal care in pregnancy and care for postpartum and child aged less than 12 months, showed that more than 90% of pregnant women received antenatal care. And more than half of women whose child's age was less than 12 months received care based on its standard, children and their mothers had received standard of care as indicated. It was conformable to the study of Somkuarn Jaikrajang and Nitaya Sanglek (2006) which revealed that 58.5% or E-kor hill tribe got postpartum care and maternal care according to indicated standard. Some of them returned home or went back to place of origin. More than three-fourth of women whose babies age less than 12 months received antenatal care at government healthcare facilities such as health centers, primary care unit and government hospitals. More than 70% of them delivered babies at government hospital whereas more than half of pregnant women selected to have ante-natal care from government health facilities.

For client satisfaction, it was showed that more than half of foreign migrants who had health security card and utilized it had a very high satisfaction.

More than three-fourth of female foreign migrants who received ante-natal care and had delivered a baby had the most satisfaction on health service received from health facilities. Similarly, the study of Aphichat Chamratrithirong and Wathinee Boonchalaksi (2005) showed that foreign migrant workers were satisfied with healthcare services provided by the health facilities in Thailand.

5.4 Care on Illness

When foreign migrants were ill, care and treatment were conducted depending upon level of illness. When a mild illness occurred in children aged 0-5 years, more than half of them went to government health facilities. They tend to received care service at health center or primary care unit more than government hospitals. For migrants aged 6-63 years, more than half of them bought medicine from drug store nearby their houses. For moderate illness over three-fourth of migrant children aged 0-5 years and over half of migrants aged 6–63 years received healthcare service at health center or primary care unit more than at government hospitals. When getting into serious illness, more than three-fourth of foreign migrants would receive care service at government hospitals. Similar to the study of Khwanjit Sasivongsaroj (2006) indicated that the first step of seeking care would start from buying medicine at drug store. If such illness was not recovered the migrants still continued buying drug for self-treatment. When it came to serious illness, the migrants would select a health facility with higher standard and quality concerning both medical personnel and instruments. In this study, more than half of Myanmar migrants bought medicine from drug store. It may result from the illness was still mild. The study of Dussadee Paresuwan and Nitaya Sanglek (2006) presented that when having illness, Myanmar migrants received healthcare service at health center the most. It was in agreement with the study of Somkuan Jaikrajang and Nitaya Sanglek (2006) which revealed that the E-kor hill tribe commonly went to receive care at health center the most. However, the study of Aphichat Chamratrithirong and Wathinee Boonchalaksi (2005) showed the contrast. Since most Myanmar and Cambodia migrant workers tended to receive healthcare service at government hospital whereas health center were selected as equal as private hospital or private health facilities.

5.5 Limitations of the Study

The researcher found some limitations such as language barrier. Since foreign migrants cannot speak or understand Thai language, the interpreters were very helpful in a process of data collection. However, some errors may occur especially data about health behaviors e.g. smoking, alcohol drinking and satisfaction of clients. As public health officials were interviewers, another inaccuracy may derive from the defensive answer caused by the fear feeling of participants.

CHAPTER 6
CONCLUSION AND RECOMMENDATIONS

This study was the survey research conducted to assess health status of foreign migrants at Samut Prakarn Province. The research instrument was the households interview form for foreign migrant as modified from the household interview of "Survey of Health Status of Populations in Bangkok, 2007" designed by Asst. Prof. Chaweewon Boonshuyar, the Department of Bio-Statistics, the Faculty of Public Health, Mahidol University. This study was cooperated by persons in charge of foreign migrants, and foreign migrant volunteers to collect the data about Myanmar, Cambodian and Laotian migrants staying at Samut Prakarn province at least 3 months and over. The data collection has been done from August to October 2007. The descriptive statistics used in this study included the frequency, percentage, mean and standard deviation.

6.1 Conclusion

The study covered 1,602 foreign migrant households, comprising 3,041 foreign migrants staying in Samut Prakarn province not less than 3 months: 52.2% were men and 50.4% were at age of 20-29. About 73.1% were Myanmar people. About 63.7% of foreign migrants whose ages were 7 years and over could speak Thai, but could not write Thai. About 60.2% of foreign migrants at age of 15 and over were married or had the cohabitation status.

Foreign migrants at age of 15 and over had self-assessment on their health status and about 87.1% of them considered that their health was good and excellent. Regarding the illness of foreign migrants in prior month, the reported morbidity rate was 118 per 1,000 populations: 42.9% got the respiratory diseases and 14.5% had stress.

About 46.8% of foreign migrants had 2 members in the household. The maximum monthly income was 20,000 Baht and the minimum monthly income was 1,000 Baht. 54.8% of foreign migrants were labors in general industries. About 21.7% of foreign migrant at ages of 15 and over did exercises regularly: 54.8% out of them were male migrants in the group at ages of 20-39. About 11.7% of foreign migrants were men in the group at ages of 20-39: 42.7% out of them had smoking regularly. About 4.6% of foreign migrants had alcohol drinking regularly and 17.2% of them were men in the same group. Regarding the drinking water sources for foreign migrant households, 95.8% of them could access into the pipe water, 28.7% improved the water quality every time before drinking, and 89.7% had the waste disposal in their communities.

About 70.5% of foreign migrants entered into the health security scheme: 71.3% have ever used the medical service; over 70% received the health information in term of health promotion and disease control from health officers; 74% received the annual physical check-up. The reported morbidity rate for tuberculosis and hypertension accounted for 3.3 per 1,000 populations. About 30.6% got the medical treatment at health center or primary care unit.

About 66.4% of migrant women with the marriage status had the birth control: 79.2% took birth control pills, 62% got the birth control service from drug stores. For migrant women with no birth control, 29.8% wanted to have children. For migrant women at ages of 15-59, 13.2% out of them used to have the cervical cancer screening, 4.7% had breast self-examination every month, 91.3% received the pre-natal service and 44.4% got the pre-natal service at government hospitals.

For migrant women with children whose ages were younger than 12 months, 76.3% of them got the complete pre-natal service; 69.5% got the complete maternal and child post-natal care; migrant women got the pre-natal and birth delivery service at government hospitals at 68.5% and 74.6% respectively.

From 19 migrant girls at ages of 12-23 months who were vaccinated, it was found that the proportion of holding the vaccination and vaccination coverage record cards were 89.5% and 78.9% respectively.

For foreign migrants holding health security card and previously exercising such right, 70.7% were satisfied in exercise such right at the high and

highest level. The pregnant migrants with children younger than 12 months, were satisfied with the pre-natal service at the high and highest level at 85.5% and 78.7% respectively. In addition, 80.4% were satisfied with the birth delivery service at the high and highest level.

From children at age of 0-5 years in case of minor sickness, quite serious sickness and serious sickness 89.3% got the medical service at government medical service places, e.g. health centers or primary care unit and government hospitals. For children at ages of 6-14 years, in case of mild sickness, they bought the medicine from the groceries close to their houses. In case of moderate or serious sickness, they received the medical treatment at government medical service places, e.g. health centers and government hospitals.

6.2 Recommendation

The recommendations from this research are as follows:

1. The findings indicated that more than half of foreign migrants worked in factories. Half of them exercised regularly and more than 10% of them always smoked and drank alcohol. Less than 20% of them used to have health check-up to prevent breast and cervical cancers.

- Setting a policy at provincial level to cooperate with all entrepreneurs who hire foreign migrants on health promotion which should be in written words to reduce risks of non-communicable diseases is needed. Some activities such as exercising and instruments for exercising should be provided in workplaces to promote healthy condition of employees. The activities that point out harm of smoking and drinking should set to enhance knowledge of employees. For those who want to stop or give up smoking should be supported and encouraged. Activities that support the health check-up to prevent breast and cervical cancers among all female foreign migrants aged over 15 years should be set annually. Provide useful information or poster to acknowledge people about heath promotion, disease prevention and surveillance of both communicable and non-communicable diseases.

- Plan for health promotion in a community. Support the activities of foreign migrant health volunteers in a village on health promotion so that foreign

migrants can put such knowledge into practice e.g. exercising, reduce or stop smoking and drinking. Persuade female foreign migrants aged over 15 years receive health check-up to prevent breast and cervical cancer.

2. The research results showed more than 70% of foreign migrants had rights to received health security and they had a chance to get annual health check-up. The morbidity rate relating to tuberculosis and hypertension was 3.3 per 1,000 population.

- Some campaigns should be set for foreign migrants so that they will pay more attention to health security and receive annual health check-up. There should be a support on disease surveillance among foreign migrants in a community. Ask for cooperation in each community to help improve environment to prevent and control communicable diseases in a community.

3. The results showed less than half of each household of foreign migrants received health information—both about health promotion and disease control and prevention. And less than 30% of them improved water quality before drinking.

- Reorientation and support to the foreign migrant health volunteers are needed. Continuously follow up public relations about health information provided to foreign migrants. Offer training for foreign volunteers and enhance their knowledge about how to improve water quality before drinking so that these volunteers will be a good model for the others.

4. Set up health database of foreign migrants in Samut Prakarn province be used in planning for health promotion and disease control according to the priority of their health problems.

6.3 Recommendations for Further Studies

1. The study in a group of foreign migrants who had communicable disease such as tuberculosis, sexually transmitted disease should be conducted so that data about etiology of disease care and treatment to prevent complications and spreading of diseases will be investigated. Moreover, disease control and surveillance should be also studied.

2. The study on self-care should be conducted in details by using qualitative method to collect data about self-care of foreign migrants. The understanding of their beliefs, culture and practices can help in formulating strategies to handle with foreign migrants' health problems.

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APPENDIX

APPENDIX A

The List of Instrument Expert

1. Mrs. Nawarat Suwannapong	*Position:* Associate Professor Faculty of Public Health, Mahidol University
2. Miss Chaweewon Boonshuyar	*Position:* Assistant Professor Faculty of Public Health, Mahidol University
3. Miss Oranut Pacheun	*Position:* Associate Professor Faculty of Public Health, Mahidol University

APPENDIX B

No. MU 2007-133

Documentary Proof of Ethical Clearance
The Committee on Human Rights Related to
Human Experimentation
Mahidol University, Bangkok

Title of Project: Health Status of Foreign Migrant in Samutprakan Province (Thesis for Master Degree)

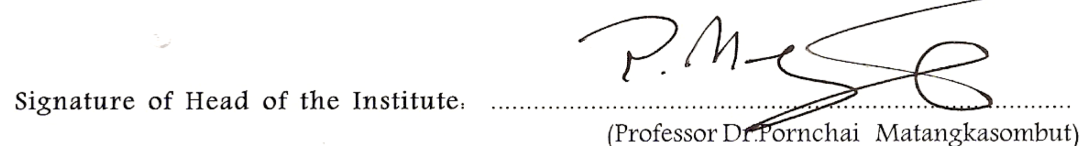
Principle Investigator: Miss Nunchana Udomyat

Name of Institution: Faculty of Public Health

Approved by the Committee on Human Rights Related to Human Experimentation

Signature of Chairman: ....

(Professor Dr.Srisin Khusmith)



Signature of Head of the Institute: ....

(Professor Dr.Pornchai Matangkasombut)

Date of Approval: 18 JUL 2007

Date of Expiration: 17 JUL 2008

APPENDIX C

แบบสัมภาษณ์ครัวเรือน

สำรวจสถานะสุขภาพผู้ย้ายถิ่นข้ามชาติในจังหวัดสมุทรปราการ

สำนักงานสาธารณสุขจังหวัดสมุทรปราการ

ออกแบบโดย ผศ.ฉวีวรรณ บุญสุยา ภาควิชาชีวสถิติ คณะสาธารณสุขศาสตร์ มหาวิทยาลัยมหิดล

แบบสัมภาษณ์ครัวเรือน

สำรวจสถานะสุขภาพผู้ย้ายถิ่นข้ามชาติในจังหวัดสมุทรปราการ

ลำดับที่ของครัวเรือน…...................................

ที่ตั้งของที่พัก บ้านเลขที่...................หมู่...........ตำบล..........................อำเภอ................................

พื้นที่สถานีอนามัย/ศูนย์สุขภาพชุมชน....................................... ชื่อชุมชน.....................................

ชื่อ-สกุล พนักงานสัมภาษณ์..

ชื่อ-สกุล ผู้ตรวจแบบสัมภาษณ์...

ผู้ให้สัมภาษณ์ เพศ ☐1.ชาย ☐ 2.หญิง อายุ...................ปี

สัมพันธภาพกับหัวหน้าครัวเรือน ☐ 1.หัวหน้าครัวเรือน ☐ 2.ภรรยา/สามี ☐ 3.บุตร

☐ 4.ญาติ ☐ 5.ผู้ร่วมอาศัย ☐ 6.อื่นๆ ระบุ...............

จำนวนสมาชิกที่พักอาศัยอยู่ในครัวเรือนปัจจุบัน ชาย............คน หญิง...........คน รวม............คน

ครอบครัวท่านใช้น้ำดื่มจากแหล่งใด ☐ 1.น้ำฝน ☐ 2.น้ำบาดาล ☐ 3.น้ำประปา

การปรับปรุงคุณภาพน้ำก่อนดื่ม ☐ 1.ไม่ทำ ☐ 2.ทำ ต้ม/กรองบางครั้ง ☐ 3.ทำ ต้ม/กรองทุกครั้ง

ชุมชนบริเวณที่พักอาศัยมีสภาพแวดล้อมเป็นอย่างไร

มีการกำจัดขยะ ☐ 1.ไม่มี ☐ 2.มี

มีน้ำเสียรอบๆ ☐ 1.ไม่มี ☐ 2.มี

มีกลิ่นเหม็น ☐ 1.ไม่มี ☐ 2.มี

มีฝุ่น/ควัน ☐ 1.ไม่มี ☐ 2.มี

มีเสียงดัง ☐ 1.ไม่มี ☐ 2.มี

เคยได้รับข่าวสารทางสุขภาพด้านการส่งเสริมสุขภาพ เช่น การออกกำลังกาย การฝากครรภ์ การวางแผนครอบครัว จาก

แผ่นพับ/โปสเตอร์ ☐ 1.ไม่ได้ ☐ 2.ได้ กำนัน/ผู้ใหญ่บ้าน ☐ 1.ไม่ได้ ☐ 2.ได้

หอกระจายข่าว ☐ 1.ไม่ได้ ☐ 2.ได้ อสม./อสต. ☐ 1.ไม่ได้ ☐ 2.ได้

หนังสือพิมพ์/นิตยสาร ☐ 1.ไม่ได้ ☐ 2.ได้ เจ้าหน้าที่สาธารณสุข ☐ 1.ไม่ได้ ☐ 2.ได้

วิทยุ/โทรทัศน์ ☐ 1.ไม่ได้ ☐ 2.ได้

เคยได้รับข่าวสารทางสุขภาพด้านการป้องกัน เฝ้าระวังโรค เช่น การตรวจมะเร็งปากมดลูก โรคเอดส์ โรคไข้หวัดนก โรควัณโรค โรคไข้เลือดออก จาก

แผ่นพับ/โปสเตอร์ ☐ 1.ไม่ได้ ☐ 2.ได้ กำนัน/ผู้ใหญ่บ้าน ☐ 1.ไม่ได้ ☐ 2.ได้

หอกระจายข่าว ☐ 1.ไม่ได้ ☐ 2.ได้ อสม./อสต. ☐ 1.ไม่ได้ ☐ 2.ได้

หนังสือพิมพ์/นิตยสาร ☐ 1.ไม่ได้ ☐ 2.ได้ เจ้าหน้าที่สาธารณสุข ☐ 1.ไม่ได้ ☐ 2.ได้

วิทยุ/โทรทัศน์ ☐ 1.ไม่ได้ ☐ 2.ได้

การดูแลรักษาเมื่อมีการเจ็บป่วย

การดูแลรักษาเมื่อสมาชิกในกลุ่มวัยต่อไปนี้ เจ็บป่วยเล็กน้อย ปานกลาง และมากเป็นส่วนใหญ่

กลุ่มวัย	ระดับการเจ็บป่วย		
	เจ็บป่วยเล็กน้อย	เจ็บป่วยปานกลาง	เจ็บป่วยมาก
เด็กก่อนวัยเรียน 0-5 ปี	1 2 3 4 5 6 7 8 9 ……….	1 2 3 4 5 6 7 8 9 ……….	1 2 3 4 5 6 7 8 9 ……….
เด็กวัยเรียน 6-14 ปี	1 2 3 4 5 6 7 8 9 ……….	1 2 3 4 5 6 7 8 9 ……….	1 2 3 4 5 6 7 8 9 ……….
วัยแรงงาน 15-59 ปี	1 2 3 4 5 6 7 8 9 ……….	1 2 3 4 5 6 7 8 9 ……….	1 2 3 4 5 6 7 8 9 ……….
วัยสูงอายุ 60+ปี	1 2 3 4 5 6 7 8 9 ……….	1 2 3 4 5 6 7 8 9 ……….	1 2 3 4 5 6 7 8 9 ……….

1= ปล่อยให้หายเอง ปล่อยตามบุญตามกรรม 2= สมุนไพร หมอแผนโบราณ 3= ซื้อยากินเองจากร้านขายของใกล้บ้าน 4= ซื้อยากินเองจากร้านขายยา 5= สถานีอนามัย/ศูนย์สุขภาพชุมชน 6= โรงพยาบาลของรัฐ 7= คลินิกเอกชน 8= โรงพยาบาลเอกชน 9= อื่นๆ ระบุ…………

ต่อไปนี้ขอสอบถามข้อมูลเกี่ยวกับสถานะสุขภาพของบุคคลที่พักอาศัยอยู่ในครัวเรือนนี้ แต่ละคนที่มาพักอาศัยในจังหวัดสมุทรปราการอย่างน้อย 3 เดือนขึ้นไป ยกเว้นผู้ย้ายถิ่นข้ามชาติที่สมรสกับคนไทยตามกฎหมาย ให้พนักงานสัมภาษณ์พยายามสอบถามข้อมูลจากเจ้าตัว ถ้าเป็นบุคคลที่อายุไม่ถึง 18 ปี ให้ขออนุญาตผู้ปกครองและให้ผู้ปกครองเป็นผู้ร่วมให้ข้อมูลด้วย โดยอธิบายชี้แจงโครงการวิจัยให้ผู้ถูกสัมภาษณ์เข้าใจและลงนามในเอกสารใบยินยอมให้ทำการวิจัยทุกราย กรณีเด็กอายุไม่ถึง 18 ปี ถ้าเขียนชื่อได้แล้วต้องขอให้ลงนาม พร้อมขอความยินยอมจากผู้ปกครองด้วย

มีกลุ่มเป้าหมายต่อไปนี้หรือไม่ (0. ไม่มี 1. มี)		ลำดับที่	ชื่อ - สกุล (ใช้แทนชื่อจริง)	สัญชาติ 1. พม่า 2.ลาว 3.เขมร	เพศ	อายุ ปี	อายุ เดือน	การรู้ภาษาไทย	สถานภาพสมรส	อาชีพหลัก (ถามอายุ 15 + ปี)		รายได้ต่อเดือน
1. เด็ก 0 - 11 ด	0 / 1			1 2 3	ช / ญ							
				1 2 3	ช / ญ							
2. เด็ก 12 - 23 ด** ถามการได้รับวัคซีนด้วย	0 / 1			1 2 3	ช / ญ							
				1 2 3	ช / ญ							
3. เด็ก 24 ด - 6 ป	0 / 1			1 2 3	ช / ญ							
				1 2 3	ช / ญ							
				1 2 3	ช / ญ							
4. ช / ญ 7 - 14 ป	0 / 1			1 2 3	ช / ญ			1 2 3 4				
				1 2 3	ช / ญ			1 2 3 4				
				1 2 3	ช / ญ			1 2 3 4				
				1 2 3	ช / ญ			1 2 3 4				
5. ช 15 - 59 ป	0 / 1			1 2 3	ช			1 2 3 4	1 2 3	1 2 3 4 5 6 7 8 9 10 11 12.............		...............บาท
				1 2 3	ช			1 2 3 4	1 2 3	1 2 3 4 5 6 7 8 9 10 11 12...............		...............บาท
				1 2 3	ช			1 2 3 4	1 2 3	1 2 3 4 5 6 7 8 9 10 11 12...............		...............บาท
6. ญ 15 -59 ป ให้ถามการวางแผนครอบครัวฯ (ต่อ)	0 / 1			1 2 3	ญ			1 2 3 4	1 2 3	1 2 3 4 5 6 7 8 9 10 11 12...............		...............บาท
				1 2 3	ญ			1 2 3 4	1 2 3	1 2 3 4 5 6 7 8 9 10 11 12...............		...............บาท
				1 2 3	ญ			1 2 3 4	1 2 3	1 2 3 4 5 6 7 8 9 10 11 12...............		...............บาท
				1 2 3	ญ			1 2 3 4	1 2 3	1 2 3 4 5 6 7 8 9 10 11 12...............		...............บาท
7. ช / ญ 60+ป	0 / 1			1 2 3	ช / ญ			1 2 3 4	1 2 3	1 2 3 4 5 6 7 8 9 10 11 12...............		...............บาท
				1 2 3	ช / ญ			1 2 3 4	1 2 3	1 2 3 4 5 6 7 8 9 10 11 12...............		...............บาท
				1 2 3	ช / ญ			1 2 3 4	1 2 3	1 2 3 4 5 6 7 8 9 10 11 12...............		...............บาท
				1 2 3	ช / ญ			1 2 3 4	1 2 3	1 2 3 4 5 6 7 8 9 10 11 12...............		...............บาท

การรู้ภาษาไทย
1. พูดและเขียนไทยไม่ได้
2. พูดและเขียนได้เล็กน้อย
3. พูดได้ เขียนไม่ได้
4. พูดและเขียนได้ดี

สถานภาพสมรส
1. โสด 2. สมรส / อยู่กินฉันท์สามี ภรรยา 3. หม้าย หย่า แยก

อาชีพหลัก
1. ไม่ได้ทำงาน/อยู่บ้าน 2. ว่างงาน/กำลังรองาน
3. รับจ้างตามบ้าน 4. รับจ้างร้านอาหาร
5. ออกเรือประมง 6. กิจการเกี่ยวเนื่องประมง
7. รับจ้างอุตสาหกรรมห้องเย็น 8. รับจ้างอุตสาหกรรมสิ่งทอ
9. รับจ้างอุตสาหกรรมทั่วไป 10. ก่อสร้าง
11.รับจ้างงานเกษตรกรรม 12. อื่น ๆ..........................

สุขภาพทั่วไป		การเจ็บป่วย 1 เดือนที่ผ่าน		ความเครียด ใน 1 เดือน ที่ผ่านมา	การได้ตรวจสุขภาพในรอบ 1 ปี ที่ผ่านมา			หลักประกันสุขภาพในรอบ 1 ปี			พฤติกรรมสุขภาพ (สำหรับอายุ > 15 ปี)			
1.ไม่ดี 2.พอใช้ 3.ดี 4.ดีมาก	มีโรคประจำตัว ระบุ.......	0. ไม่มี 1. มี	ถ้ามี ระบุ	0. ไม่มี 1. มี	0. ไม่เคย 1. เคย	ถ้าเคยตรวจสุขภาพพบโรค ดังนี้ 0.ไม่พบโรค 1.โรควัณโรค 5. โรคมาลาเรีย 2. โรคทางเพศสัมพันธ์ 6.โรคความดันโลหิตสูง 3. โรคเรื้อน 7. โรคเบาหวาน 4.โรคเท้าช้าง 8. อื่น ๆ ระบุ.........	การรักษา 0. ไม่รักษา 1. รักษา ระบุที่รักษา.........	**การมีสิทธิบัตร** ประกันสุขภาพ 0. ไม่มี 1. มี	**ใช้สิทธิบัตร** ประกันสุขภาพ 0. ไม่ใช้ 1. ใช้	ถ้าเคยไปใช้ ความพึงพอใจต่อบริการที่ได้รับ	ออกกำลังกาย	สูบบุหรี่	ดื่มเครื่องดื่มที่มีแอลกอฮอล์	ใช้สารเสพติด
		0 / 1			0 / 1	0 1 2 3 4 5 6 7 8	0 1...........	0 / 1	0 / 1					
		0 / 1			0 / 1	0 1 2 3 4 5 6 7 8	0 1...........	0 / 1	0 / 1					
		0 / 1			0 / 1	0 1 2 3 4 5 6 7 8	0 1...........	0 / 1	0 / 1					
		0 / 1			0 / 1	0 1 2 3 4 5 6 7 8	0 1...........	0 / 1	0 / 1					
		0 / 1			0 / 1	0 1 2 3 4 5 6 7 8	0 1...........	0 / 1	0 / 1					
		0 / 1			0 / 1	0 1 2 3 4 5 6 7 8	0 1...........	0 / 1	0 / 1					
		0 / 1			0 / 1	0 1 2 3 4 5 6 7 8	0 1...........	0 / 1	0 / 1					
		0 / 1			0 / 1	0 1 2 3 4 5 6 7 8	0 1...........	0 / 1	0 / 1					
		0 / 1			0 / 1	0 1 2 3 4 5 6 7 8	0 1...........	0 / 1	0 / 1					
		0 / 1			0 / 1	0 1 2 3 4 5 6 7 8	0 1...........	0 / 1	0 / 1					
		0 / 1			0 / 1	0 1 2 3 4 5 6 7 8	0 1...........	0 / 1	0 / 1					
1 2 3 4		0 / 1		0 / 1	0 / 1	0 1 2 3 4 5 6 7 8	0 1...........	0 / 1	0 / 1	1 2 3 4 5	0 1 2	0 1 2	0 1 2	0 1
1 2 3 4		0 / 1		0 / 1	0 / 1	0 1 2 3 4 5 6 7 8	0 1...........	0 / 1	0 / 1	1 2 3 4 5	0 1 2	0 1 2	0 1 2	0 1
1 2 3 4		0 / 1		0 / 1	0 / 1	0 1 2 3 4 5 6 7 8	0 1...........	0 / 1	0 / 1	1 2 3 4 5	0 1 2	0 1 2	0 1 2	0 1
1 2 3 4		0 / 1		0 / 1	0 / 1	0 1 2 3 4 5 6 7 8	0 1...........	0 / 1	0 / 1	1 2 3 4 5	0 1 2	0 1 2	0 1 2	0 1
1 2 3 4		0 / 1		0 / 1	0 / 1	0 1 2 3 4 5 6 7 8	0 1...........	0 / 1	0 / 1	1 2 3 4 5	0 1 2	0 1 2	0 1 2	0 1
1 2 3 4		0 / 1		0 / 1	0 / 1	0 1 2 3 4 5 6 7 8	0 1...........	0 / 1	0 / 1	1 2 3 4 5	0 1 2	0 1 2	0 1 2	0 1
1 2 3 4		0 / 1		0 / 1	0 / 1	0 1 2 3 4 5 6 7 8	0 1...........	0 / 1	0 / 1	1 2 3 4 5	0 1 2	0 1 2	0 1 2	0 1
1 2 3 4		0 / 1		0 / 1	0 / 1	0 1 2 3 4 5 6 7 8	0 1...........	0 / 1	0 / 1	1 2 3 4 5	0 1 2	0 1 2	0 1 2	0 1

การออกกำลังกาย
0. ไม่เคย 1. นาน ๆ ครั้ง 2. ออกเป็นประจำ

การสูบบุหรี่
0. ไม่สูบ 1. นาน ๆ ครั้ง 2. สูบเป็นประจำ

การดื่มเครื่องดื่มที่มีแอลกอฮอล์
0. ไม่ดื่ม 1. นาน ๆ ครั้ง 2. ดื่มเป็นประจำ

การใช้สารเสพติดในรอบ 6 เดือนที่ ผ่านมา
0. ไม่เคย 1. เคย ระบุ...................

การได้รับภูมิคุ้มกันโรคสำหรับเด็กอายุ 12 -23 เดือน

1	2	3	4	5	6	7	ถ้ามีบัตรบันทึก ให้คัดลอก วัน / เดือน / ปี ที่ได้รับวัคซีนต่อไปนี้ และให้บันทึกสถานที่รับวัคซีน และสอบถาม							ถ้าไม่มีบัตรบันทึก ให้สอบถามว่า			
เด็กคนที่	ชื่อ	ว/ด/ป เกิด	อายุ เดือน	ลำดับที่การเกิด	เพศ	มีบัตรบันทึกการได้รับภูมิคุ้มกันโรคหรือไม่		8	9	10	11	12	13	14	15	16	17
								แรกเกิด		*2 เดือน*	*4 เดือน*	*6 เดือน*	*9 เดือน*	1. เด็กคนนี้คลอดที่ไหน	2. เคยพาเด็กคนนี้ไปรับวัคซีนหรือไม่	3. เคยพาเด็กคนนี้ไปรับวัคซีนที่ไหน	4. ความพึงพอใจต่อบริการที่ได้รับ (น้อยไปมาก)
								BCG	**ตับอักเสบบี 1 (HB 1)**	**DTP1 / OPV1 /HB2**	**DTP2 /OPV2**	**DTP3 / OPV3 /HB3**	**M หรือ MMR**				
1	......		....ด	....	ช	❑ 1. ไม่มี	ว /ด/ ป รับวัคซีน	..../... /....	..../... /....	..../... /....	..../... /....	..../... /....	..../... /....	❑ 1. รพ./สอ.	❑ 1. เคย ทุกครั้งที่นัด	❑ 1.สอ./PCU	1 2 3 4 5
					/ ญ	(ข้ามไป	สถานที่รับวัคซีน	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	❑ 2. ที่บ้าน	❑ 2. เคย แต่	❑ 2. รพ.รัฐ	1 2 3 4 5
						สดมภ์ 14)	สถานที่รับวัคซีน 1. สถานีอนามัย / ศูนย์สุขภาพชุมชน 2. รพ.รัฐ 3. คลินิกเอกชน 4. รพ.เอกชน 5. ที่ประเทศต้นทาง							❑ 3. อื่น ๆ	ไม่ทุกครั้งที่นัด	❑ 3. คลินิก	1 2 3 4 5
						❑ 2. มี	ความพึงพอใจ	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5		❑ 3. ไม่เคย	❑ 4. รพ.เอกชน	1 2 3 4 5
							(น้อยไปมาก)									❑ 5. อื่น ๆ ระบุ	1 2 3 4 5
2	....		....ด	....	ช	❑ 1. ไม่มี	ว /ด/ ป รับวัคซีน	..../... /....	..../... /....	..../... /....	..../... /....	..../... /....	..../... /....	❑ 1. รพ./สอ.	❑ 1. เคย ทุกครั้งที่นัด	❑ 1.สอ./PCU	1 2 3 4 5
					/ ญ	(ข้ามไป	สถานที่รับวัคซีน	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	❑ 2. ที่บ้าน	❑ 2. เคย แต่	❑ 2. รพ.รัฐ	1 2 3 4 5
						สดมภ์ 14)	สถานที่รับวัคซีน 1. สถานีอนามัย / ศูนย์สุขภาพชุมชน 2. รพ.รัฐ 3. คลินิกเอกชน 4. รพ.เอกชน 5. ที่ประเทศต้นทาง							❑ 3. อื่น ๆ	ไม่ทุกครั้งที่นัด	❑ 3. คลินิก	1 2 3 4 5
						❑ 2. มี	ความพึงพอใจ	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5		❑ 3. ไม่เคย	❑ 4. รพ.เอกชน	1 2 3 4 5
							(น้อยไปมาก)									❑ 5. อื่น ๆ ระบุ	1 2 3 4 5

คำถามสำหรับ หญิง 15 - 59 ปี (ต่อ)

ลำดับที่	ชื่อ - สกุล	การวางแผนครอบครัว และการตั้งครรภ์ในปัจจุบัน (สำหรับหญิงที่มีคู่แล้ว)							
		การคุมกำเนิด				อายุครรภ์และการฝากครรภ์			
		0. ไม่คุม 1. คุม	ถ้าคุม ระบุวิธี........	ใช้บริการที่ไหน	เหตุผลที่ไม่คุม	ถ้าเหตุผลที่ไม่คุม คือการตั้งครรภ์ อายุครรภ์ (เดือน)	การฝากครรภ์ (ของหญิงที่กำลังตั้งครรภ์)		ความพึงพอใจต่อบริการ น้อย ไป มาก
							0. ไม่ฝาก 1. ฝาก	ถ้าฝาก ระบุสถานที่	
		0 / 1	1 2 3 4 5 6 7 8	1 2 3 4 5 6	1 2 3 4 5	...................ด.	0 / 1	1 2 3 4 5	1 2 3 4 5
		0 / 1	1 2 3 4 5 6 7 8	1 2 3 4 5 6	1 2 3 4 5	...................ด.	0 / 1	1 2 3 4 5	1 2 3 4 5
		0 / 1	1 2 3 4 5 6 7 8	1 2 3 4 5 6	1 2 3 4 5	...................ด.	0 / 1	1 2 3 4 5	1 2 3 4 5
		0 / 1	1 2 3 4 5 6 7 8	1 2 3 4 5 6	1 2 3 4 5	...................ด.	0 / 1	1 2 3 4 5	1 2 3 4 5

วิธีคุมกำเนิด 1. ถุงยางอนามัย 2. ยาเม็ดคุมกำเนิด 3. ยาฉีดคุมกำเนิด 4. ห่วงอนามัย 5. ยาฝังคุมกำเนิด 6. หมันหญิง 7. หมันชาย 8. คุมธรรมชาติ

สถานบริการ 1. ร้านขายยา 2. สถานีอนามัย/ศสช. 3. รพ.รัฐ 4. คลินิกเอกชน 5. รพ.เอกชน 6. จากประเทศต้นทาง

คำถามสำหรับ หญิง 15 - 59 ปี (ต่อ)

การฝากครรภ์ (ของหญิงที่มีลูกอายุ < 12 เดือน)			การคลอด และการดูแลหลังคลอด (ของหญิงที่มีลูกอายุ < 12 เดือน)						การตรวจมะเร็งปากมดลูก (หญิงอายุ 15 - 59 ปี)		การตรวจ มะเร็งเต้านม
0. ไม่ฝาก เพราะ......... 1. ฝากไม่ครบตามนัด เพราะ... 2. ฝากครบนัดทุกครั้ง	ถ้าฝาก		คลอดที่ไหน	ความพึงพอใจต่อบริการ น้อยไปมาก	ดูแลหลังคลอด(ภายใน wk หลังคลอด)						
	ฝากที่ใด	ความพึงพอใจต่อบริการ น้อยไปมาก			แม่		ลูก				
					0. ไม่ได้รับ 1. ได้รับ				0. ไม่เคย 1. เคย ปกติ 2. เคย ผิดปกติ	ครั้งสุดท้าย ตรวจ ปี พ.ศ........	0. ไม่เคยตรวจ 1. นาน ๆ ครั้ง 2. ตรวจทุกเดือน
					1 - 2 wk	4 - 6 wk	1 - 2 wk	4 - 6 wk			
0 1 2	1 2 3 4 5 6 ...	1 2 3 4 5	1 2 3 4 5 6 ...	1 2 3 4 5	0 / 1	0 / 1	0 / 1	0 / 1	0 1 2	พ.ศ......	0 1 2
0 1 2	1 2 3 4 5 6 ...	1 2 3 4 5	1 2 3 4 5 6 ...	1 2 3 4 5	0 / 1	0 / 1	0 / 1	0 / 1	0 1 2	พ.ศ......	0 1 2
0 1 2	1 2 3 4 5 6 ...	1 2 3 4 5	1 2 3 4 5 6 ...	1 2 3 4 5	0 / 1	0 / 1	0 / 1	0 / 1	0 1 2	พ.ศ......	0 1 2
0 1 2	1 2 3 4 5 6	1 2 3 4 5	1 2 3 4 5 6 ...	1 2 3 4 5	0 / 1	0 / 1	0 / 1	0 / 1	0 1 2	พ.ศ......	0 1 2

สถานที่คลอด / ฝากครรภ์ 1. สถานีอนามัย / ศูนย์สุขภาพชุมชน 2. รพ.รัฐ 3. คลินิกเอกชน 4. รพ.เอกชน 5. ที่ประเทศต้นทาง 6. อื่น ๆ ....

เหตุผลที่ไม่คุมกำเนิด 1. ตั้งครรภ์ 2. ต้องการมีบุตร 3. เป็นหมัน 4. ปัญหาสุขภาพ 5. อื่น ๆ

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