

**FACTORS RELATED TO THE CONTRACEPTIVE USE AMONG  
MARRIED MIGRANT WOMEN OF REPRODUCTIVE AGE  
IN MAESOT, TAK PROVINCE, THAILAND**



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**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
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MAHIDOL UNIVERSITY**

**2008**

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entitled

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**ABSTRACT**

This cross-sectional study was conducted on factors related to the contraceptive use among the married migrant women of reproductive age in Maesot, Tak Province, Thailand. The aims were to identify socio-demographic characteristics, knowledge, attitude, availability and accessibility as factors related to the contraceptive use, and explore the association between these factors and use of contraceptives. A total of 185 married women of reproductive age were interviewed using a structured questionnaire from five randomly selected clusters during January 2008. Results were presented in frequency and percentage, chi-square test and multiple logistic regressions was applied to show the association between independent and dependent variables.

The results of the study revealed that the prevalence of contraceptive use was 72.97%. The majority of the current users stated, "Poor economic condition" as a reason for using contraceptive and oral pills were the most popular methods. More than half of the respondents had fair knowledge, and had a good attitude toward contraception. Most of the respondents who received service from the service centers resided less than 3 km from the service center. The findings also showed that there was a significant relation between contraceptive use and husband agreement on contraceptive use (p-value <0.001) and payment for the service (p-value =0.031).

This study indicates that counseling, effective communication and appropriate strategy is essential for increasing contraceptive use among Myanmar migrants in Maesot, Thailand. The joint cooperation of local authorities and provincial health officers should emphasize on budgeting and promotion of health education on contraception, especially for migrants in that area.

**KEY WORDS: CONTRACEPTIVE USE/ REPRODUCTIVE AGE/  
MIGRANTS WOMEN/ THAILAND**

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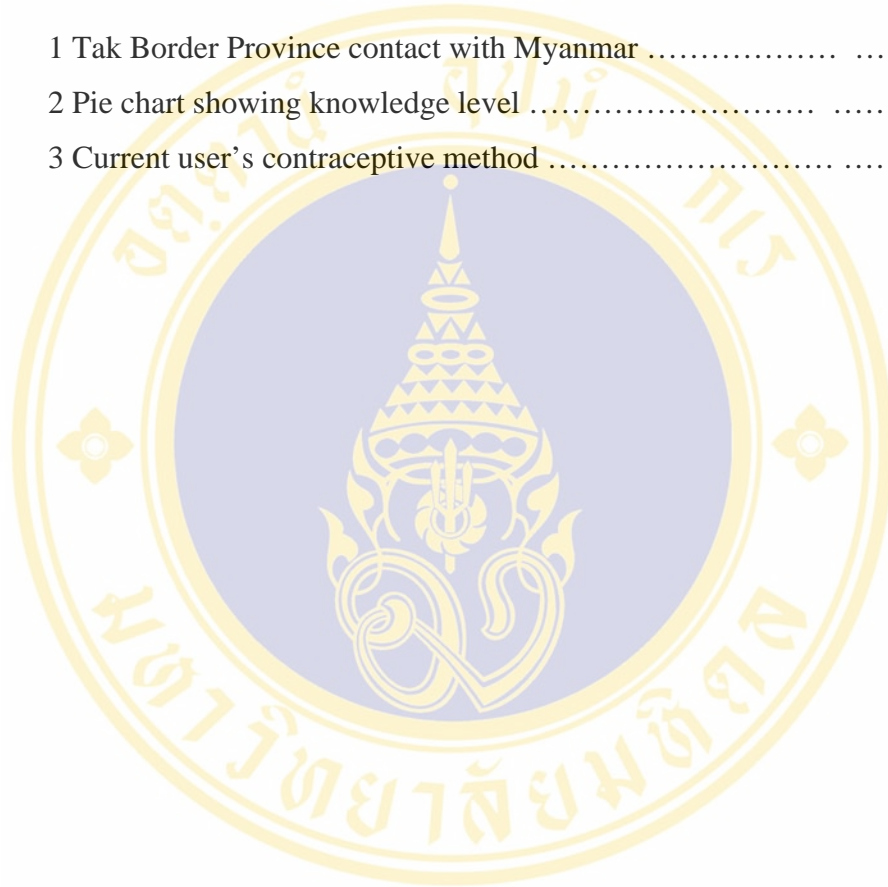
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## LIST OF ABBREVIATIONS



DHS	:	Demographic and Health Survey
AIDS	:	Acquired Immune Deficiency Syndrome
FRHS	:	Fertility and Reproductive Health Survey
HIV	:	Human Immunodeficiency Syndrome
IUD	:	Intrauterine Device
MCH	:	Maternal and Child Health
MMR	:	Maternal Mortality Ratio
MOH	:	Ministry of Health
MOPH	:	Ministry of Public Health
MWRA	:	Married Women of Reproductive Age
NGO	:	Non Government Organization
PAC	:	Post Abortion Care
STI	:	Sexually Transmitted Infection
UNFPA	:	United Nation Population Fund
UNICEF	:	United Nation Children Fund
WHO	:	World Health Organization

# CHAPTER 1

## INTRODUCTION

### 1.1 Rationale and justification of the study

#### Global Situation

World population in 2006 was 6.6 billion and was growing at a rate of about 1.2 percent annually. World population is growing today because births exceed deaths by a wide margin-by 81 million in 2006. Net migration, of course, is not a factor in world population growth, and it never will be unless colonizing other planets becomes a reality (1).

The actual world population in 2050 or thereafter is unknown. But demographers can project the future population of the world or a country. Beginning with the current estimates of population size and growth rates, they make assumptions-really educated guesses-about how much fertility, mortality, and migration rates will change. A country's projected population in 2050, for example, equals its current size plus the total births and immigrants expected from now until 2050 (under the assumed rates), minus the expected deaths and emigrants. Using these basic principles, the united Nations recently projected that world population will be about 9.1 billion by 2050, assuming continued declines in fertility and mortality rates (2).

Rapid population growth not only threatens the future welfare of the society as a whole, but also currently impedes the economic development of the world's poorest nations (3).

Every year almost 515,000 women die from problems linked to pregnancy and child birth, and approximately 30 more develop serious disabling problems. Family planning could prevent many of these deaths and much of this disability. For

example, delaying a first pregnancy until a girl is 18 years of age. This will help to ensure a safer pregnancy and delivery, and it will reduce the risk of her baby being born underweight. Childbirth is more likely to be difficult and dangerous for an adolescent than for an adult. Babies born to very young mothers are more likely to die in the first year of life. The younger the age of the mother, the greater the risk for her and her baby. Young women and their families should be given information about the risks of early pregnancy and how to avoid them (4).

Every minute, one woman dies during pregnancy and birth because she did not receive adequate care and prompt treatment. By increasing interventions for safe motherhood, we can save the lives of half a million women and seven million infants, and prevent millions of women from suffering from infections, injury and disability each year (5).

Fertility rate in the developing countries remains high, not only as a result of irrational behavior on the part of the people living in these countries, but also as a result of their rational response to high infant mortality rates. Fertility rates will remain high unless the education, health and social environment in which these families live is improved.

Economic development and population growth are intimately related. Development reduces the death rates resulting in increase population growth, which in turn reduces per capital income. In order to reduce the population growth rate, as well as the risk of women and children and the poverty level of the society, contraceptives methods have been used as an effective measure in family planning all over the world. We must also step up efforts for family planning, which has a direct impact on maternal health. When couples can choose the number, timing and spacing of their children, they are better able to ensure there are enough resources for each family member to prosper and thrive. Worldwide, families are having half as many children today as they did in the 1960s, but fertility remains high in the poorest countries.

There are many methods of contraception, which have been used such as the oral pill, injection, condoms, intra uterine device, sterilization, Norplant, rhythm method, and withdrawal, but the rate of using the method is very different among different countries. Contraceptive method choice is important in increased contraceptive use and continuation of using. Informed choice is a process in which family planning clients make their decisions about contraceptive use based on adequate information (6).

The knowledge of contraception is important in choosing of contraceptive methods for the clients. Restricted choice of contraceptive methods has constrained the opportunity of individual couples to obtain a method that suits their needs, resulting in lower levels of contraceptive prevalence (7).

### **Contraceptive Use Rises, But Unmet needs Remain**

Most women today want two, three or four children - fewer than in previous generations. The use of modern contraceptive methods, including voluntary sterilization, has increased rapidly over the past 30 years, especially in countries with strong family planning programmes. In less developed regions, contraceptive use approaches 60 per cent of couples.

Most of this increase reflects greater contraceptive use by women. But in many countries, poverty and profound inequalities between men and women limit women's ability to plan their pregnancies. So does lack of access to effective contraceptive protection.

Differing patterns of contraceptive use may not reflect women's personal preferences as much as political and economic decisions made by governments to emphasize certain methods, the attitudes of medical professionals, cost, the limited range of methods offered in some countries or an uneven availability of contraceptive supplies (5).

Demographic and Health Survey (DHS) data on pregnancy history, use of family planning and fertility preferences collected in 2003 from women in three Sub-Saharan African countries: Burkina Faso, Ghana and Kenya, show that unmet need varied across the three countries.

Among Kenya women in 2003, 14% had an unmet need for means of delaying births and 10% had unmet need for means of limiting births. In Ghana, 22% of women had an unmet need for means of delaying births and 12% had an unmet need for means of limiting births. In Burkina fuso, 22% of women had an unmet need for means of delaying but only 7% had an unmet need for means of limiting childbearing (8).

### **Widening the Options**

Two new contraceptives for women: once-a-month injection and the female condom have become available since 1994. Fewer than 5 per cent of couples in the majority of developing countries rely on modern male methods (the condom or vasectomy).

The level of unintended pregnancy is lowest in countries with greatest access to effective methods of contraception and where women play a major role in family decision-making. This goal of universal access to services needed to allow couples to exercise their full reproductive rights remains elusive: one evaluation found that family planning services are routinely made available to women at a reasonable cost in only 14 of 88 developing countries studies.

### **Moving Forward**

UNFPA supports family planning services that:

- offer a wide selection of methods
- reflect high standards of medical practice
- are sensitive to cultural conditions
- provide sufficient information about proper use or possible side effects
- address women's other reproductive health needs

UNFPA is committed to closing the gap between the number of individuals who use contraceptives and those who would like to space or limit their families. The Fund rejects any form of coercion with respect to family planning, including the use of targets or quotas for the recruitment of clients.

### **The Consequences of the problem**

At least 200 million women want to use safe and effective family planning methods, but are unable to do so because they lack access to information and services or the support of their husbands and communities. And more than 50 million of the 190 million women who become pregnant each year have abortions. Many of these are clandestine and performed under unsafe conditions. The need for family planning is growing fast, and it is estimated that the 'unmet need' will grow by 40 per cent during the next 15 years. But even though it is an economically sound investment, family planning has been losing ground as an international development priority. Funding is decreasing, and the gap between the need and the available resources is growing (5).

Unintended pregnancy is a worldwide problem that affects women, their families and society. An unintended pregnancy is a pregnancy that is either mistimed or unwanted at the time of conception. It is a core concept in understanding the fertility of populations and the unmet need for contraception. Unintended pregnancy is associated with an increased risk of morbidity for women, and with health behaviors during pregnancy that are associated with adverse effects. For example, women with an unintended pregnancy may delay prenatal care, which may affect the health of the infant. Women of all ages may have unintended pregnancies, but some groups, such as teens, are at a higher risk (9).

Another serious consequence of unintended pregnancy is abortion, which may lead to long-term negative health effects including infertility and maternal death. According to a World Health Organization (WHO) publication "Abortion in the developing world" out of nearly 50 million performed in the world each year.

Many of these are clandestine and performed under unsafe conditions. Complication from spontaneous and induced abortion—primarily hemorrhage, infection and injury to cervix and remain a major cause of maternal death in many countries and contribute to the poor overall health of women in the developing countries. Up to 15% of maternal mortality globally is due to the complications of abortion.

Unsafe abortion may be a problem leading to high levels of maternal morbidity and mortality. Many women suffer chronic and often irreversible health problems as a result of complications from unsafe abortion.

Globally, an estimated of 46 million abortions are performed in countries where abortions are performed, of which 20 million are performed in countries where abortion is restricted or prohibited by law. Illegal abortions are more likely to be performed by untrained people, in unsanitary conditions, or with unsafe surgical procedures or drugs. As a result, illegal abortion accounts for an estimated 78,000 deaths worldwide each year, or about one in seven pregnancy-related deaths. In some African countries, illegal abortion may contribute to up to 50 percent of pregnancy-related deaths. In countries where abortion is legal, less than 1 percent of pregnancy-related deaths are caused by abortion. High fertility not only gives rise to high population growth but also contributes to high infant and maternal mortality (10).

The ICPD Programme of Action states, "In no case should abortion be promoted as a method of family planning." UNFPA does not provide any support for abortion or abortion-related activities. UNFPA seeks to prevent abortion by increasing access to family planning services, and to reduce maternal deaths through better management of complications of unsafe abortions.

### **Situation in Myanmar**

In Myanmar, contraceptive prevalence rate is only 37% in 2001 fertility and reproductive health survey (FRHS) report. This is quite low compare to South East Asia countries. Among married women of reproductive age, 96% of women know a

contraceptive method in Myanmar. Despite of very high percentage of knowledge of contraception, the actual utilization of contraception is only 37 %. There are six contraceptive methods such as daily pill, three monthly injectable, intrauterine device (IUD), condom, female and male sterilization provided by public sector birth spacing services in Myanmar. The preference of contraceptives among married women of reproductive age is injectable(14.9%)and pill(8.6%) in Myanmar. There is low percentage in using IUD (1.8%), condom (0.3%) and female sterilized (4.7%) (11).

Among married women of reproductive age, most of the women are using in injectable and followed by pill. There are various factors that influence preference of the users for a particular method of contraception. The injection is the preferred contraceptive for many women, due to its convenience, efficacy and availability.

There is high percentage of knowledge of contraception among Myanmar women but they don't know how to use contraception correctly and worried about side effect of contraception. There is still underutilization in condom, IUD and female sterilization and National birth spacing Program wants to promote long term methods and permanent method in order to achieve optimum method choice .Another reason is high maternal mortality rate and it is presumably related to induced abortion due to inconsistent use, non-use of contraceptive and contraceptive method failure.

In Myanmar, MMR was 210 per 100,000 live births. The major cause of maternal deaths is the complications of induced abortion The causes of unwanted pregnancies are contraceptive method failure, inconsistent use, and non use of contraceptives (12).

In appropriate contraceptive choice probably contributes to the high rate of unintended pregnancy and ended in abortion (13).Thus, the availability and correct use of appropriate methods to meet different women's need may reduce unwanted pregnancy and abortion. A little information is known about the factors that influence the couples to pick up a particular method of contraception in Myanmar.

### **Situation of Birth spacing program in Myanmar**

The population of Myanmar in 2005 is estimated at 55 million with the growth rate of 2.02 percent (MOH, 2005). The unmet need for contraceptive was large (20.6%) among currently married women, leading to unregulated and unwanted fertility which was placing to a significant burden on the reproductive health of women, particularly in terms of maternal morbidity and mortality (14).

Before 1991, contraceptive services were not provided in the public sector, but private sector services had been available for many years. In 1991, before the government introduced a public birth spacing services, contraceptive prevalence rate was 16.8 (PCFS). Birth spacing has been introduced in Myanmar as part of the maternal and child health services aiming to reduce maternal and childhood mortality and morbidity (14). One study in Myanmar found that the effect of birth spacing has significant effect on the weight-for-age of the children and episodes of acute respiratory tract infection and diarrhea (15).

The National program of Action goals in the area of reproductive health include reducing of maternal mortality rate to 70 per 100,000 births and ensuring universal access to information and services relating to birth spacing (16).

In order to address the National Program of Action Goals, National Birth spacing programs through the public sector were started in 1991 with the support of FPIA. Since the start of the government's birth spacing program, contraceptive prevalence has increased substantially in recent years. By early 1996, national birth spacing programs were taking place in 33 of the 320 townships of Myanmar, representing about 15% of total population. In 1997, Government of Myanmar and UNFPA supported the birth spacing services in an additional 46 townships representing a rapid extension of the public sector provision of contraception. In 2002, there are 118 townships retained birth spacing program among 320 townships.

In 2004, the first Reproductive Health Strategic Plan (2004-2008) was launched by the Ministry of Health in collaboration with WHO, UNFPA and

UNICEF. It will expand and strengthen partnerships so that reproductive health needs can be addressed in a more effective and comprehensive manner (3).

### **International Migration**

In recent decades, international migration streams of one sort or another have made headlines around the world—the dramatic influx of Rwandan refugees into Zaire and Tanzania, Haitians sailing to the United States in flimsy boats, and Bosnians fleeing to Germany and other parts of Europe. An estimated 190 million people lived outside their country of birth in 2000—about 3 percent of the world's population (17).

Today, half of all international migrants—95 million—are women and girls. Yet, despite substantial contributions to both their families at home and communities abroad, the needs of migrant women continue to be overlooked and ignored. The State of World Population 2006 report, *A Passage to Hope: Women and International Migration*, examines the scope and breadth of female migration, the impact of the funds they send home to support families and communities, and their disproportionate vulnerability to trafficking, exploitation and abuse.

Thailand is a major receiving country for migrants in Southeast Asia. In July 2004, 1,276,837 migrants including laborers and their family members attempted to register under the state registry of Thailand known as the Tor-Ror 38/1. Of that number, 1,161,013 officially completed their registration. Estimates by Government and NGOs, however, point to the actual number of migrants present, including those registered, as possibly exceeding two million (not including the 117,000 official refugees). Of those migrants working in Thailand, 849,552 registered for a work permit in 2004, and only 810,730 fully completed the issuing process for work permits. Many more migrant laborers do not have work permits, and new migrants are crossing the border for work every day. Migrants in Thailand predominantly come from the neighboring countries of Myanmar (Burma), Cambodia and Lao PDR (18).

## Myanmar Migrants in Thailand

Over 900,000 of the migrants registered under Thailand's state registry, including dependents and family members, come from Myanmar, and there are many more present who are undocumented. Migrants coming from Myanmar encompass the variety of cultures and languages present in Myanmar's multi-ethnic landscape. Although Burmese has been imposed on the country as a lingua franca, many ethnic nationalities still prefer to speak their indigenous language. Purportedly, there is a literacy rate of 85 percent in Myanmar (UNICEF, 2001); however, it seems that migrants who come from poorer areas generally have low education levels, as indicated by a 35% gross-secondary school enrolment rate for both males and females (18).

Tak province had a population of 503,042 as of December 2003. As of December 2004, there were 124,618-registered migrants, of which 50,961 had work permits, in Tak province. Health authorities and international health workers estimated that there were 50,000 to 100,000 non-registered migrants in the province. These migrants were concentrated in Mae Sot, an official cross-border point along Thai-Myanmar border. More than 150 garment factories are concentrated in Mae Sot. These factories primarily rely on migrant laborers from Myanmar, some of whom cross the border daily. Garment factories, a considerable number of which are foreign owned, employ 1,000 to 5,000 workers per factory; the majority of laborers (almost 70 percent) are young unmarried females (18).

In factory dormitories at Mae Sot, reports of over-crowding and poor ventilation are common. Migrants have reported that some factories have seven to twenty people living in a three and a half square meter room without windows; whereas other factories have hundreds of people living in rows of bunk beds in a single, open room on an upper floor of a dusty warehouse with only curtains separating them (18).



Map of Thailand highlighting [Tak](#) province

**Figure 1** Tak Border Province contact with Myanmar and labour migrations. (highlighted)

Due to a lack of traditional social controls and being independent at a young age, adolescent migrants may have sex at an early age, making them susceptible to unplanned pregnancy, STIs and accompanying health problems. (Nopachai, 2004) Many migrant men are vulnerable to STIs due to their sexual behavior. Due to almost negligible rates of condom use between spouses and intimate partners, this makes migrant women also highly vulnerable to STIs as well as a broad range of reproductive health problems that have serious health implications. Compounding this, migrant women have limited access to appropriate information and reproductive health services, further compromising their reproductive health.

According to MOPH, abortion rates among the migrant women were 2.4 times higher than among Thai women in 2000. A multi-stage cluster survey among 514 migrant women aged between 15 and 44 years (of whom 309 were married women) conducted by the Ministry Of Public Health in Mae Sot District in 2000, showed that only 53.7% of married women reported using some form of contraception, and 18.7% of women surveyed reported at least one miscarriage. Sentinel surveillance data of Mae Sot hospital in 2005 revealed that contraceptive prevalence among Myanmar

migrant women was 75.7 % (n=259). Maternal mortality ratio among Myanmar migrant was 1.02 in 2005 according to Maesot general hospital report 2005.

**Table 1** Mae Tao Clinic: services provided and admissions

	1999	2000	2001	2002	2003	2004	2005
Deliveries	356	489	769	961	1413	1639	1520
Complications of abortion*	277	213	260	297	341	439	433
Family Planning visits	1503	2376	3723	3966	6469	7534	6948
% Abortion per 100 deliveries	<b>77,8</b>	<b>43,5</b>	<b>33,8</b>	<b>30,9</b>	<b>24,1</b>	<b>26,7</b>	<b>28,4</b>

Maternal death reviews from Mae Tao Clinic revealed in 2005 unsafe abortion was the main cause. Two out of five deaths were related to complications from induced abortion: a mother of 6 living children aged 35 and a mother of 5 living children, aged 3412. Analyzing post abortion care (PAC) data from RH IPD show that they are mostly grand multi-gravidas that undergo abortion. In 2004, out of 439 admitted abortion complications were 94 primiparas, 147 had two or three pregnancies, and the majority of 198 had 4 or more pregnancies.

### **Barriers to Accessing Health Services**

Numerous barriers limit migrants' access to health services, and increase migrants' vulnerability to HIV/AIDS and reproductive health problems. Some of the most prominent barriers to accessing health services include:

- Language barriers that frustrate proper treatment (explaining symptoms or receiving instructions on treatment)
- Health insurance regulations, such as the requirement of going to "assigned health providers," may not be explained to migrants or may be confusing
- Assigned health service providers (to obtain flat fee of 30 Baht) may be inconvenient to reach or far away, adding the expense and arrangement of transportation

- Time of service provision by health providers may conflict with working hours of migrants
- Many employers keep migrants' ID cards as a form of "insurance," restricting migrants' mobility and making them reliant on their employers to receive the benefits of the health insurance they have paid for
- Fear of arrest or harassment deters some migrants, especially those who are undocumented
- Negative attitudes of health providers towards migrants makes migrants reluctant to seek treatment from public service providers

Facing these barriers, migrants often resort to traditional remedies, which may result in delayed treatment for conditions such as malaria or TB, or they may seek out traditional healers, some of who may have unsafe practices. Migrants also go to private clinics, which are convenient but expensive, or to NGO clinics, which, although are inexpensive and convenient, are few and far between. Due to barriers in accessing public health services, it is difficult for migrant women to pursue effective courses of contraception, resulting in high rates of unplanned pregnancy and related reproductive health problems, including unsafe abortion. Access to a standard set of health services is limited, making it that much more difficult to obtain specialized services (18).

## 1.2 Research Questions

- What is the contraceptive prevalence in migrant community in Maesot?
- What are the different methods of contraceptive use among migrant married women of reproductive age in Maesot?
- What are the factors related to the contraceptives use among migrant married women of reproductive age in Maesot?

### 1.3 Research Objectives:

#### 1.3.1 General objective

To identify the factors related to the contraceptive use among migrant married women in Maesot, Tak Province.

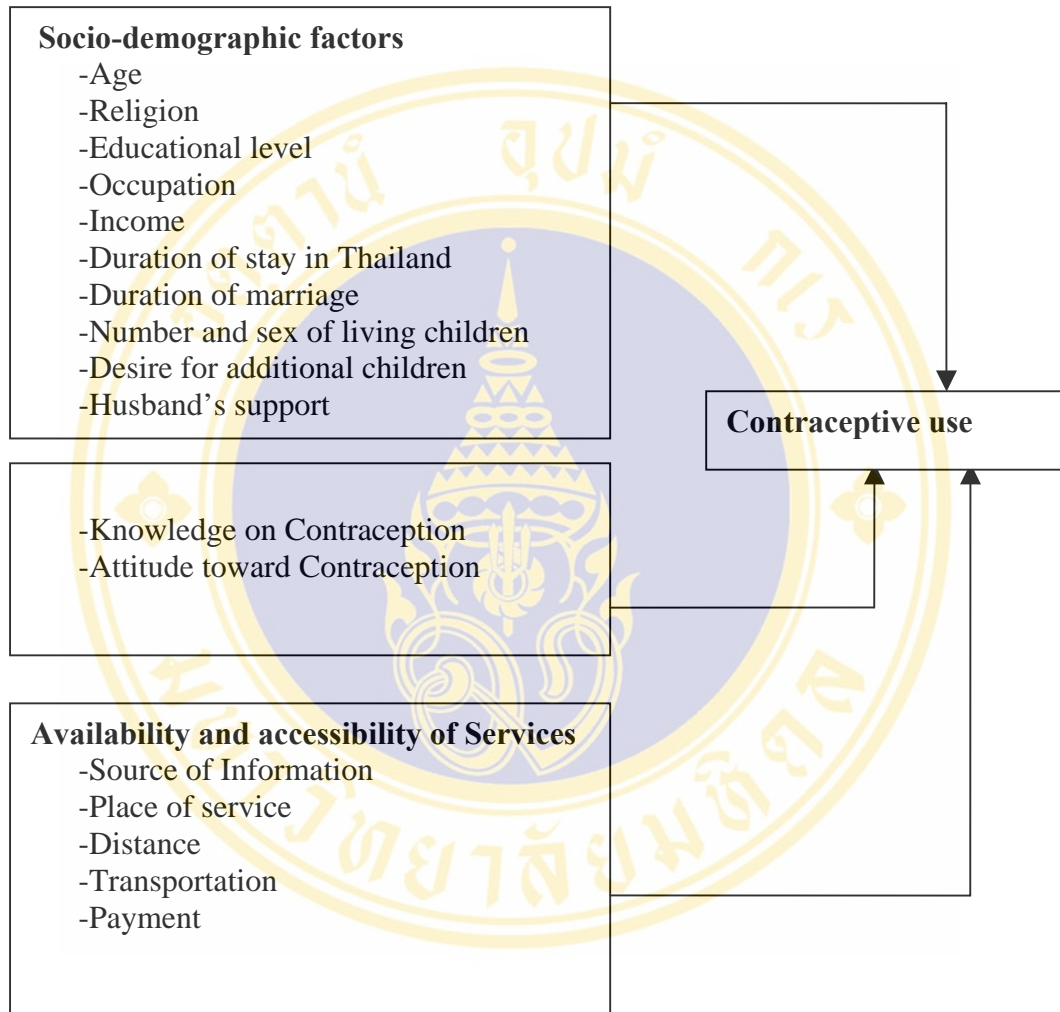
#### 1.3.2 Specific Objectives:

1. To identify the prevalence and pattern of contraceptive methods use.
2. To describe the socio-demographic factors toward contraceptive use among migrant married women.
3. To determine which factors related to the contraceptive use among migrant married women.

### 1.4 CONCEPTUAL FRAMEWORK

Independent variable

Dependent variable



## 1.5 Operational definition of study variables

### **Contraceptive:**

Contraceptive means the various method of family planning such as: Oral pill, Condom, Intra Uterine Device (IUD), Injection, Norplant, Tubel ligation, Vasectomy and some other methods.

### **Socio-demographic factors:**

Socio-demographic factors of married women of reproductive age can be measured by age, duration of marriage, duration of stay in Thailand, occupation ,education income, number and sex of living children, desire for additional children, child's sex preference, husband's support.

#### **Age:**

Age was determined as complete years of women at the time of interview.

#### **Income:**

Refers to the monthly total family income of all the family members.

#### **Education:**

The level of education of Married Women of Reproductive Age( MWRA) will be classified as never attend school, primary school, and high school and higher.

#### **Occupation:**

Refers to the present job of MWRA at the time of interview.

#### **Number and sex of children:**

The total number of children the married women had at the time of interview and the sex of the children will also counted.

#### **Desire for additional children:**

The desire of the couple to have more children in the future.

**Husband's support:**

The approval, facilitation and cooperation of husband for the women in practicing family planning or husband himself practicing any method of contraceptive.

**Knowledge on contraception:**

Refers to knowledge of respondents on contraception, including type of contraceptive methods use, principle, condition, benefit and side effect of contraceptive.

**Attitude toward contraception:**

Refers to the feeling, belief and intention of the respondents regarding the contraceptive methods and usage.

**Availability and accessibility:**

Availability includes place of service that the women can obtain contraceptive. Accessibility refers to the sources of information about contraception, traveling distance, payment for service and convenience of the women for getting contraceptive method.

**Source of information:**

Message about the use of contraceptive through media or inter personal conversation.

**Contraceptive Use:**

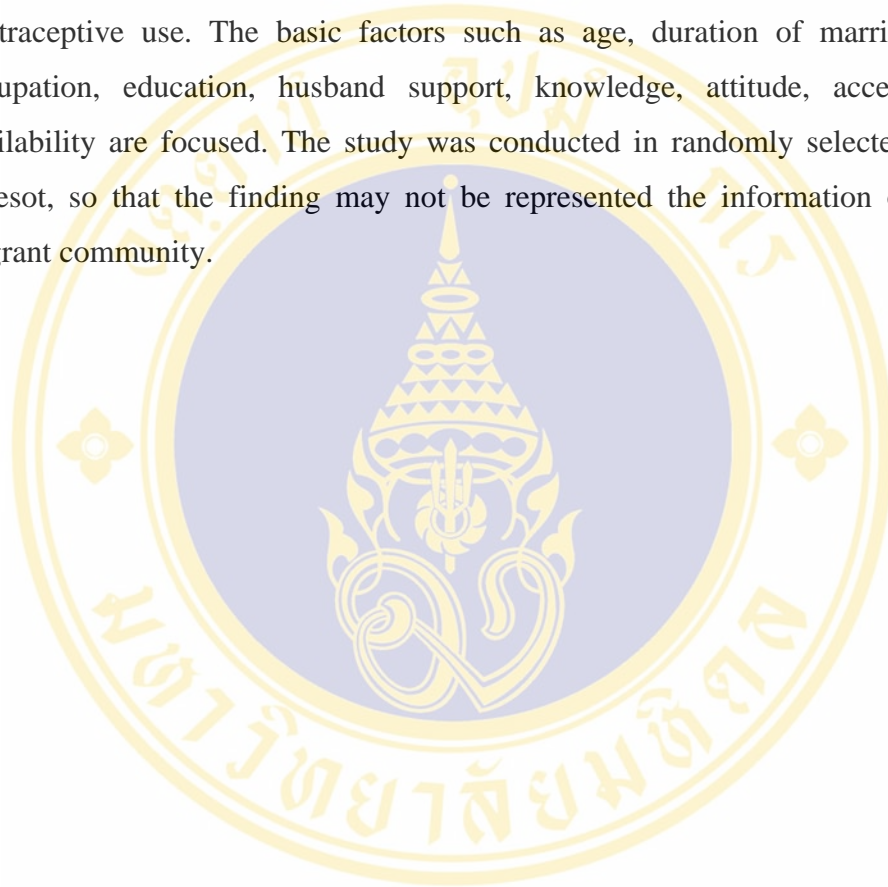
Refers to the current use of any type of contraceptive methods.

**Current User:**

Those who was using a contraceptive method at the time of interview.

### 1.6 Limitation of the study

This study was conducted in five randomly selected clusters of Maesot District, Thailand. Thus it would be rather difficult to predict the results to all Myanmar Migrant Communities in Thailand. There are many factors related to the contraceptive use. The basic factors such as age, duration of marriage, income, occupation, education, husband support, knowledge, attitude, accessibility and availability are focused. The study was conducted in randomly selected clusters of Maesot, so that the finding may not be represented the information of the whole migrant community.



## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 General literature review of the study

The health of any migrant is affected by gender, socio cultural and ethnic background, type of occupation and legal status, as well as the degree to which he or she can cover costs and access services, transportation and health insurance. Prior exposure to relevant health education and services will also affect a migrant's capacity to make informed health decisions.

If a migrant cannot speak the language, she or he is more likely to encounter problems accessing health care. Low-paying and exploitative labour also has an impact, as does the degree to which the migrant and his or her community are integrated into the mainstream society. Discrimination and racism on the part of health-care providers only adds to cultural and linguistic barriers.

Both the host country itself and immigrant women will benefit from improved access to reproductive health information and services—including pregnancy-related services and the prevention and treatment of HIV and other sexually transmitted infections. However, migrant women often come from countries where poor health is a fact of life. Many possess little information regarding health matters and tend to be poorer and less educated than their native counterparts. Health status may be further compromised by the stress of adjusting to a new country and/or violence and sexual exploitation (19).

Pregnancy-related problems among migrants have been a major problem throughout the EU, where studies have found that migrants receive inadequate or no antenatal care and exhibit higher rates of stillbirth and infant mortality. One United Kingdom study found that social exclusion and being non-white were among the main predictors of severe maternal morbidity. Other research in the country reveals that

babies born of Asian women had lower birth weights and that perinatal and post-natal mortality rates were higher among Caribbean and Pakistani immigrants than in the general population. Hospital-based studies also show that African women delivering in France and Germany had higher rates of pregnancy complications and perinatal death than their native counterparts. (Turkish immigrants in Germany also had higher rates of perinatal and neonatal mortality, and rates of maternal mortality tended to be higher overall among immigrant women.

Immigrant women often have a higher incidence of unplanned pregnancies owing to poor access and a lack of information regarding contraceptives and how to obtain them. Research in Latin America shows that migrant women report more unintended pregnancies, have lower contraceptive use, and generally utilize reproductive health services less often than do non-immigrants. Throughout Western Europe the story is the same. In Germany, researchers attribute low contraceptive use to the fact that programmes are geared towards German speakers and that immigrants often come from countries where family planning information is simply not available. Socio-cultural pressures may also prevent migrant women from accessing services for fear of being discovered by family members.

Higher abortion rates among immigrants reflect women's limited decision-making power and lack of access to quality family planning services. In Spain, requests for abortions tend to be twice as common among immigrant women—especially those from North and sub-Saharan Africa. In Norway, non-western women account for more than one quarter of all abortion requests—although they represent only 15 per cent of the population. In one Italian region, a study found that foreign-born women were three times more likely to undergo an induced abortion than local women (19).

A commonly held view that can serve to fuel anti-immigrant sentiment is that migrants have higher fertility rates than non-migrants. But this very much depends on the migrant community, host country context, the woman's socio-economic status, cultural fertility norms and access to reproductive health services. Generally speaking, when immigrants (especially those from developing countries) first arrive, they tend

to have more children than natives but will have fewer over time. This is because many migrants eventually adopt host country childbearing norms, which results in fertility rates similar to that of the host population (20).

Delayed marriage, separation from partners, economic pressures, the costs of raising children, female autonomy, the evolution of values and norms, and pressures to gain legitimacy through assimilation can all contribute to fertility declines. A study of 24 migrant groups undertaken in Australia over a 14-year period, showed that fertility rates in all groups except two (Lebanese and Turks) nearly converged or declined to lower than that of the host population. The survey included migrant communities from Egypt, Greece, Malta, New Zealand, Poland, South Africa, and Viet Nam—among many others. In Sweden, a study of immigrants from 38 origin countries found that those who had been living in the country for at least five years showed fertility levels similar to that of the native population. There are, however, variations—according to ethnic group, and a complex interplay of socio-economic, cultural and political factors. In the United Kingdom, for example, census data showed that all main ethnic minority groups had more children than the native population—especially among migrants originating from Bangladesh, India, and Pakistan (21).

Migrant women also tend to have fewer children than their counterparts in countries of origin. For example, although in Belize, Costa Rica, the Dominican Republic and El Salvador, immigrant women tend to give birth to more children than native women (in Costa Rica, immigrant fertility rates are 40 per cent higher), their fertility rates are still lower than those of compatriots living in their countries of origin. African immigrants in Spain have fertility levels slightly higher than the native-born population, but far lower than those in their countries of origin.

Migrant fertility can also depend on age and educational level and the migration stream to which immigrant women belong. Migration can cause spousal separation, which may result in delayed childbearing. Once reunited, however, childbearing rates increase. In Australia, skilled immigrant women have lower fertility than natives, whereas those entering as refugees or for family reunification tend to

have more children. Women who migrate at an early age may adapt faster to the childbearing norms of their host society: In France, immigrant women who entered the country before the age of 13 had only slightly higher fertility than French women. But women who were 25 to 29 years of age at the time of migration, showed notably higher fertility rates (19).

Many migrant women seize the opportunity to access family planning services with a zeal that speaks to their relatively disadvantaged state in countries of origin. In Belgium, for example (as with several other countries), immigrant women have higher contraceptive use than women in source countries—with modern methods replacing traditional. This is confirmed by one study that found that 79 and 71 per cent, respectively, of 25- to 29-year-old married Turkish and Moroccan migrant women used contraception compared to only 44 per cent and 35 per cent in their origin countries (20).

More and more countries are working to improve the reproductive health of migrant women. In a study conducted among Myanmar immigrants in two Thai provinces following the 2004 tsunami, researchers discovered that one in four mothers delivered without a skilled birth attendant; 55 per cent of all infants had not been immunized and only half of all married women were using contraception. The survey also found that fully 50 per cent of all adults interviewed lacked basic knowledge about HIV, despite the relatively high incidence (30 per cent) of unmarried males who reported paying for sex without consistently using condoms. In response, the NGO World Vision, with UNFPA support, recently expanded a programme serving immigrant communities. To date, project personnel have established mobile health clinics, a health education campaign and have hired Burmese-speaking medical staff (19).

At least 200 million women want to use safe and effective family planning methods, but are unable to do so because they lack access to information and services or the support of their husbands and communities. And more than 50 million of the 190 million women who become pregnant each year have abortions. Many of these are clandestine and performed under unsafe conditions. The need for family planning

is growing fast, and it is estimated that the 'unmet need' will grow by 40 per cent during the next 15 years. But even though it is an economically sound investment, family planning has been losing ground as an international development priority. Funding is decreasing, and the gap between the need and the available resources is growing (3).

Since 1994, family planning use has increased globally from 55 per cent of married couples to around 61 per cent; it has grown by at least 1 percentage point per year in 68 per cent of countries with available data and by at least 2 points per year in 15 per cent of these countries. Use varies regionally, ranging from about 25 per cent in Africa to nearly 65 per cent in Asia (where high use in China raises the average), and 70 per cent in Latin America and the Caribbean and in the developed regions.

However, many countries, particularly the poorest, still have restricted contraceptive access and choice. When China (with a large population and high prevalence) is left out of the calculations, only 46 per cent of married women in Asia are using contraception. In the least-developed countries, the average is much lower.

Government support for methods of contraception—through government-run facilities, such as hospitals, clinics, health posts and health centers, and through government fieldworkers—has increased steadily since the 1970s. By 2001, the governments of 92 per cent of all countries supported family planning programmes (22).

### **2.1.1 The precede-proceed model**

The precede-proceed model is a framework for the process of systematic development and evaluation of health education programs designed by Lawrence Green and Marshall Kreuter(1998).

The model consists of 9 phases as follow:

- Phase 1 social Diagnosis
- Phase 2 Epidemiological Diagnosis
- Phase 3 Behavioral and Environmental Diagnosis
- Phase 4 Education and Organizational Diagnosis

- Phase 5 Administrative and Policy Diagnosis
- Phase 6 Implementation
- Phase 7 Process Evaluation
- Phase 8 Impact Evaluation
- Phase 9 Outcome Evaluation

**Predisposing factors:**

Predisposing factors: are factor antecedent to behavior that provide the rational or motivation for the behavior. Include a person's or populations' knowledge, attitudes, beliefs, values and perceptions that facilitate or hinder motivation for changing.

**Enabling factors:**

Enabling factors are factor antecedent to behavior that allows a motivation or aspiration to be realized. Include personal skills, resources or barriers that can help or hinder the desired behavioral change as well as environmental change. Those antecedents to behavior that enables a motivation to be realized including the availability, accessibility, and affordability of health care and community resources which recourses may be ample or inadequate, as may income or health insurance, and laws and statues may be supportive or restrictive.

**Reinforcing factors:**

Reinforcing factor: are factors subsequent to behavior that provide the continuing reward, incentive, or punishment for a behavior and contribute to its persistence or extinction. Include social support, praise, reassurance, and symptom relief might all be reinforcing factors (23).

The four remain phases in Precede-proceed are implementation and evaluation (process, impact, and outcome), with emphasis on using the later to improve the former. Evaluation of the process begins as soon as implementation does, in order to detect problems early so they can be corrected. As implementation proceeds, the planer starts evaluating in the order in which program effects are expected.

Theory is most likely to be informative during phase 4 of the planning process suggested by Precede-proceed, or the educational and organizational diagnosis. According to the PRECEDE framework, three categories: predisposing, reinforcing and enabling factor effect individual or collective behavior.

## **2.2 The need for Birth Control**

UNFPA works to make reproductive rights a reality by supporting family planning services throughout the developing world. These services, as well as the information needed to make good choices, are usually provided as part of a constellation of reproductive health services.

World wide, at the present time, policy makers recognize the importance of contraceptive use to women's health. Family planning programs are an important measure contributing to the goal of reducing global population growth rate and promoting "Health For All" in the coming year (24).

A study by the researcher at the Demographic Health Surveys program found that children born 3 years or more after a previous birth are healthier at birth and more likely to survive at all stages of infancy and childhood through age five. The study uses data from 18 countries in four regions and assesses outcomes of more than 430,000 pregnancies. Among the findings: compared with children born less than 2 years after a previous birth, children born 3 to 4 years after the previous birth are:

- 1.5 times more likely to survive the first week of life;
- 2.2 times more likely to survive the first 28 days of life;
- 2.3 times more likely to survive the first year of life; and
- 2.4 times more likely to survive age five (25).

## **2.3 Selected socio-demographic factors**

### **2.3.1 Age and duration of marriage**

Marriage in the most Asian societies defines the onset of the socially acceptable time for childbearing. Women who marry early will have, on average, a long period of exposure to pregnancy, often leading to a higher number of children

ever born. Marriage during the teenage years is common in developing countries. Nevertheless, the situation varies greatly by country and region. In a few developing countries, marriage by age 18 is relatively uncommon.

Biotechnology and medical advances are expanding the ages at which women can have children. But few women give birth before age 18 or after age 50. Over this roughly 35 year span, birth rates vary substantially by age. Birth rates by the age of the mother follow the same general pattern in most societies regardless of the level of fertility: Rates are low in the teens, peak in 20s, and decline thereafter (26).

A study in Thailand by Leoprapai and Thongtai (27) in 1987 found that the relationship between age and contraceptive use takes an inverted u-shape that is the proportion using modern methods varied with age, reaching the peak among those in their 30s and declining there after.

A study in Ratchburi province of Thailand done by Win Htay (28) in 1993 revealed the majority of women were married at age 20 years and below. Among those majorities were current users representing 66.1 percent of them while ever users and never users were 17.5 percent respectively. For those who married at age above 20 years, most of them were current users representing 65.8 percent while ever users and never users were 17.9 percent and 16.3 percent respectively.

### **2.3.2 Number of children**

Practice of contraception is more common after a certain number of births. The contraceptive use increase as parity rises from two to three children. A study in Thailand found that the percentage of childless women practicing contraception was still low, about 24 percent. However, the percentage of contraceptive use increased sharply to a much higher level among women with children, reaching the peaks among with 3 children declining thereafter. The relationship between current contraceptive use and the number of living children is curvilinear (27).

Win Htay (28) found that majority of women had 1-2 children. Among them, 69 percent were current users while 17.3 percent were ever users and 13.7 were never users. Among those who had 3 and more children, majority were current users representing 61.2 percent while ever users and never users were equal at 19.4 percent. There were 50 percent of never users who had no child while 33.3 percent were current users and 16.7 were ever users.

### **2.3.3 Education**

Education is the most important factor for acceptance of family planning. Usually the educated women have more awareness and opportunities to know the importance of contraceptive in respect to birth control. The educated women are more likely to marry late, to the first pregnancy to leave more time between births and have few children in total. In accordance with the many studies in El Salvador, England and Phillipines, there were a positive relation between education and contraceptive use special studies have shown this relationship (29). The 1992 world fertility survey stated that women's education have significant effect on fertility in all population survey.

A study on factors affecting family planning behavior among married women in Ratchburi province of Thailand found that majority (62%) of the respondents had primary level of education and this was followed by elementary level(17.7%).Only 2.3% had higher level and 6.35 had no education. He also not found any significant association between family planning behavior and education (28).

### **2.3.4 Occupation**

A study done by Win Htay (1993) revealed that the majority of women with current users were farmers and labors in 70.4% and 69.6% respectively and followed by housewife at 57.1 percent. It was found that there was a significant relationship between wife's occupation and family planning behavior (28). Determinants of contraceptive use in rural Myanmar, study of Khin Thet Wai (1995) (30) it was found that women who worked outside their home used contraceptives more and had lower

fertility than women who did not work outside their home, and who were engaged in agricultural and non-agricultural occupations were 28 and 24 percent less likely to use contraception, compared with those women who were not working.

### **2.3.5 Income**

It was found that high-income status is being more exposed to family planning communication and having greater access to medical facilities, will be more likely to have contraception and continue such practice and to practice more effectively than others (31).

A study in Sakeo province, Thailand found that women who live with the insufficient income were more likely to accept contraceptive than those who had sufficient income group with significant association between family income and acceptance of contraceptive (32).

### **2.3.6 Husband's support**

In traditional conservative societies husband is a dominant partner. They are seen to influence not only women's decision to adopt family planning but also the contraceptive method she chooses.

Husband's support plays an important role in the practice of contraception. Syed Ithram shabbir, study acceptance of contraceptive among married women of reproductive age in Thailand 2000(33) and revealed that the women in the group who did not have their husband's agreement had very low contraceptive use. The husband support does not mean that only his agreement with women to practice contraceptive method, but it should be the cooperation that he himself helps the couple in practicing contraceptive method like condom or vasectomy.

### **2.3.7 Duration of stay in Thailand (Migration Factor)**

During preparations for migration and the first years of settling into a new country, female immigrants may delay childbearing and focus more on securing work,

but, after a few years, decide to start a family. This is illustrated in the case of Ecuadorians who migrate to Spain. In recent years, the country has received large numbers of young South American immigrant women. In 1999, children born to Ecuadorian women accounted for only 4.9 per cent of all foreign births but by 2004, they accounted for 19.5 per cent (19).

#### **2.4 Knowledge of contraception**

Remarkable progress has also been made in extending the knowledge and means of family planning. The proportion of married women using modern methods of family planning has increased from less than 10% to approximately 50%. The speed of this change is unprecedented in demographic history, with some 17 nations succeeding in having lower fertility rates in only one generation.

A woman must have at least some knowledge about certain contraceptive methods and the source where she can obtain service before she can acquire it for use. Win Htay (1993) revealed that majority of women had high knowledge of family planning. 75.9 percent of the women with high level were current users while ever users and never users were 16.7 percent and 7.4 percent respectively (28).

#### **2.5 Attitude towards contraception**

According to Family Planning world wide 2002 data sheet, the researchers had stated that, despite the rise in family planning use evidence in surveys, mother's attitude toward recent births around the world in late 1990s was more than one-fourth births world wide are unplanned (31).

Md. Yunus (34) found that about 52% of respondents had positive attitude and nearly 48% of negative attitude. The result also showed that among the respondents who had positive attitude, 52.71% were acceptors and among the respondents who had negative attitude, 59.63% were acceptors.

## 2.6 Availability and accessibility of contraceptive services

Availability and accessibility of family planning services is an important determinant of contraceptive use. It is widely accepted that family planning services are essential to fertility decline. The proximate determinant of ongoing fertility decline in the developing world has been the widespread adoption of contraception. In Vietnam, the ease of obtaining contraceptives has been shown to be an important factor in the success of family planning programs.

Win Htay (28) found that there was a significant association between waiting time and behavior of family planning. Approximately 85 percent of the contraceptive users got their services within 15 minutes of waiting time while 155 were ever users. And among women who spent time more than 15 minutes to get services, most of them were current users at 70.2 percent while ever users were 29.8 percent.

## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 Study Design

This study was a cross-sectional descriptive study, using structured questionnaire interviews. The main purpose was to study socio-demographic factors, Knowledge, Attitude, availability and accessibility and to identify factors related to the contraceptive use among married migrant women of reproductive age.

#### 3.2 Study Population

The study population was Myanmar married migrants women of reproductive age (15-49) years who lived with spouse in the migrant communities in Maesot district, Tak Province, Thailand, during the study period.

#### 3.3 Study place

The study was conducted in Maesot District, Tak province which is located in the north west of Thailand. Maesot is situated in a beautiful mountainous area and has a long border with Myanmar, and it is also an important town for border trade with Myanmar. Myanmar migrants, registered or unregistered, live there and work.

#### 3.4 Sample size Estimation and sampling technique

The required sample size in this study is based on the following formula.

$$n = \frac{z^2 P(1-P)}{d^2}$$

(The sample size population according to W. Daniel, foundation for analysis in Health statistics).

$n$  = Estimated sample size

$P$  = Estimated contraceptive prevalence in study Population (75 % = 0.75)(40)

$Z$  = The standard normal score set at 5% significant level ( $z = 1.96$ )

$d$  = Degree of accuracy = 6.5 % (0.065)

$$n = \frac{1.96^2(0.75)(1-0.75)}{(0.065)^2}$$

$n = 170$

Sentinel surveillance data of Mae Sot General Hospital, 2005 revealed that contraceptive prevalence among Myanmar migrant women was 75.7% ( $n=259$ ).

### Sampling technique

For the sampling technique, cluster random sampling technique was used for the specific aged group of migrant married women of reproductive age (15-45) years. It was planned to choose and interview 40 women each from selected five clusters; however in practice not enough women in some clusters were available to be interviewed at the time of the interviews and they were substituted with married women from other clusters.

### 3.5 Data collecting tools and methods

The data collection tool used in this quantitative research is structured questionnaire. In the questionnaire for married migrant women, the following topics were covered in five parts.

Part 1: Socio-demographic characteristics

Part 2: Knowledge on contraceptive

Part 3: Attitude towards the contraception

Part 4: Practice on contraception

Part 5: Availability and accessibility of services

#### Part 1: Socio-demographic characteristics

It consists of age, duration of marriage, duration of stay in Thailand, income, education, occupation, number and sex of living children, desire for additional children and husband's agreement.

**Part 2: Knowledge on contraception**

It consists of questions about the meaning of contraception, condition to use, contraindication, advantage or side-effects of contraceptive. The knowledge of respondents was measured by 10 questions; each correct answer is given a score of “1” and “0” for incorrect answer. The total score was classified into three groups, according to Benjamin bloom criteria.

1. Good knowledge :> 80% of total score
2. Fair knowledge: 60-80% of the total score
3. Poor knowledge :< 60% of the total score

**Part3: Attitude towards the contraception**

To measure the attitude of the respondents by the asking ten questions whether they agree or disagree with the statement use in Likert scale ranging from strongly agree to strongly disagree by the following criteria to give score:

Strongly agree (SA)=5, Agree(A)=4,Not sure(NS)=3, Disagree(D)=2,and Strongly disagree(SD)=1

The attitude level is assessed by percentile level dividing into good when the total score is in Q3 (>P75 ) and poor when the total score is in Q1 (<P25). The moderate or fair level is in Q2 between ( P25-P75) of the total score.

**Part 4: Availability and accessibility of contraceptive**

Measured by asking questions include sources of contraceptive information, place of service, distance from the residence to the service center, payment for contraceptive service and convenient to go to the service center.

**Part 5: Contraceptive use**

This part included practice of contraceptive method, reason for contraceptive use and reasons for stop using and not using contraceptive.

### **3.6 Pretest for reliability and validity**

Before the main data collection, the questionnaire was pre-tested for validity and reliability. As per Kuder-Richardson formula (KR 20) the reliability of the questions of knowledge part was 0.6. For the questions of attitude part the reliability was 0.67. Some questions were revised to make them clearer. From 17<sup>th</sup> January to 28<sup>th</sup> January 2008, 192 migrant married women were interviewed from five randomly selected clusters on the basis of selection criteria.

### **3.7 Ethical Issues**

Privacy, anonymity, and confidentiality were major ethical issues of concern of this study. The survey team members were trained on importance of ethical issues in the survey, how to seek informed consent and how to safeguard anonymity and confidentiality. Before the start of the interview, a language statement was read to the migrant women being interviewed. The statement outlined the objectives of the study, risks involved in the study, types of information and reasons for seeking such information.

### **3.8 Data analysis procedure and statistics used**

After data collection, the data was coded and entered into a computerized database using Epi-data and Minitab software. Descriptive statistics i.e. frequency, percentage and mean and standard deviation were used to describe socio-demographics characteristics and studied variables. The association between the independent variables of interest and dependent variable were tested by using chi-square test and logistic regression. Data was analyzed by the researcher with the guidance from the Advisor.

## CHAPTER 4

### RESULTS

One hundred and ninety two migrant married women of reproductive age from five communes of Maesot District, Tak province were interviewed from 17 to 28 January, 2008. After screening for missing data and multiple responses, 185 data were used for analysis.

The result of this study was shown in table as frequency and percentage distribution of the samples, Chi-square test and multiple logistic regressions showed the association between independent variables and dependent variable. The level of significance for all comparison was set up at p-value less than 0.05.

The association between the socio-demographic status, knowledge, attitude, accessibility and the contraceptive use of migrant married women of reproductive age (15-49) years was analyzed.

The results were present in the following tables:

**Table 2** Socio-demographic characteristics

Characteristics	Frequency n=185	Percent (%)
<b>Age groups (years)</b>		
15-24	53	28.64
25-34	94	50.81
35-49	38	20.54
Median =28.0	QD= 4.5	Min=16.0
Max=45.0		
<b>Duration of Marriage (years)</b>		
<1	12	6.49
1-5	74	40.00
6-10	47	25.41
>10	52	28.11
Median =6.0	QD= 4.5	Min=0.17
Max=29.0		
<b>Duration of stay in Thailand (years)</b>		
<1	16	8.65
1-5	91	49.19
6-10	59	31.89
>10	19	10.27
Median =5.0	QD= 3.5	Min=0.25
Max=20.0		
<b>Religion</b>		
Buddhist	135	72.97
Christian	5	2.70
Islam	43	23.24
Hindi	2	1.08
<b>Occupation of the respondents</b>		
Housewife	71	38.38
Shop keeper	13	7.03
Factory worker	65	35.14
Laborer	34	18.38
Service holder	2	1.08
<b>Husband's Occupation</b>		
Shop keeper	19	10.27
Factory worker	64	34.59
Construction worker	33	17.84
Laborer	59	31.89
Others	10	5.41
<b>Family Income</b>		
<4000 B per month	77	41.62
=>4000 B per month	108	58.38
Median=4000	QD=1000	Min=1500
Max=10000		
<b>Educational Level</b>		
No education	17	9.19
Primary school	73	39.46
Secondary school	58	31.35
High school and higher	37	20.00

Table 2 showed that the majority of women about 71.36% are in the age group of 25 years and older ;the young age group of 15-24 years covered 28.64%.The mean age of respondents was 28.54 years and Quartile deviation of 4.5 years. The youngest and the eldest of age were 16 years and 45 years respectively.

According to the duration of marriage, this study revealed that most of the respondents belonged to the duration of marriage 1-15 years; this covered 40% while the groups of 6-10 years and more than 10 years were 25.41% and 28.11% respectively. Less than one year duration was only 6.49%.The median of marriage duration was 6 years, the minimum was 2 months and maximum was 29 years.

Concerning religion, majority of respondents (72.97%) are Buddhist.23.24% devoted in Islam and Christian and Hindis are 2.7% and 1.08% respectively.

Concerning the women's occupation, majority were house wife 71(38.38%) and factory workers 65(35.14%) respectively. Only 18.38% of women worked as laborer and 7.03% were working as shop keeper.Regarding husband's occupation, Factory worker and laborer were 34.59%and 31.89% respectively.

Regarding the monthly family income of the respondents, it revealed that, the minimum family income was 1500 baht and the maximum was 10,000 baht. The majority (58.38%) of the respondents had family income 4000 baht and above.

The majority of respondents were in the primary (39.46%) and secondary level education (31.35%).Twenty percent had high school and higher education and the rest 9.19% had no education.

### Information about the children of respondents

**Table 3** Frequency and percentage of the respondents by presence of living children

Characteristics	Frequency n=185	Percent (%)
<b>Having living child</b>		
Yes	148	80.0
No	37	20.0

Table 3 showed the information about the presence of living children of the respondents. As shown in this table, majority of the respondents (80%) had living children.

**Table 4** Frequency and percentage of the respondents by number and sex of living children

Characteristics	Frequency n=185	Percent (%)
<b>Number of Living children</b>		
1 child	71	47.97
2 children	32	21.62
3 children	23	15.55
4 children	11	7.43
5 or more children	11	7.43
Median=2	QD=1	Min=1
		Max=8
<b>No of living sons</b>		
No son	46	31.08
1 son	60	40.54
2 sons	28	18.92
3 sons	11	7.43
4 or more sons	3	2.04
Median =1	QD=1	Min=0
		Max= 6
<b>No of living daughters</b>		
No daughter	45	30.41
1 daughter	73	49.32
2 daughters	20	13.51
3 daughters	5	3.38
4 daughters	5	3.38
Median=	1.0	QD=0.5
		Min=0
		Max=4

Table 4 showed that the minimum and maximum number of living children was 1 and 8 respectively. The majority 47.97% have only one child. The percentage of women, who had 2 children, was 21.62%, followed by 15.55 % and 7.43 % had 3 and 4 child respectively.

Regarding the number of living son of the married women, 40.54% had one son, followed by 18.92% had 2 sons, 7.43 % had 3 sons and 0.68% had 4 sons. The minimum and maximum number was 0 and 6 respectively.

The percentage of women having 1 daughter was 49.32%. Only 3.38% had four daughters. The minimum and maximum number of daughter was 0 and four respectively.

**Table 5** Information about the desire for additional children of the respondents

Characteristics	Frequency n=185	Percent (%)
<b>Desire of additional child</b>		
Yes	116	62.70
No	67	36.22
Not sure	2	1.08
<b>No of additional child</b>		
1child	51	43.97
2 children	45	38.79
3 children	17	14.66
4 children	3	2.59
Median= 2.0	QD= 0.5	Min=1.0
		Max= 4.0
<b>No. of children a family should have n = 185</b>		
1 child	3	1.62%
2 children	52	28.11%
3 children	93	50.27%
4 children	20	10.81%
5 children	14	7.57%
6 children	3	1.62%
Median=2.0	QD=1.0	Min=1.0
		Max=7.0

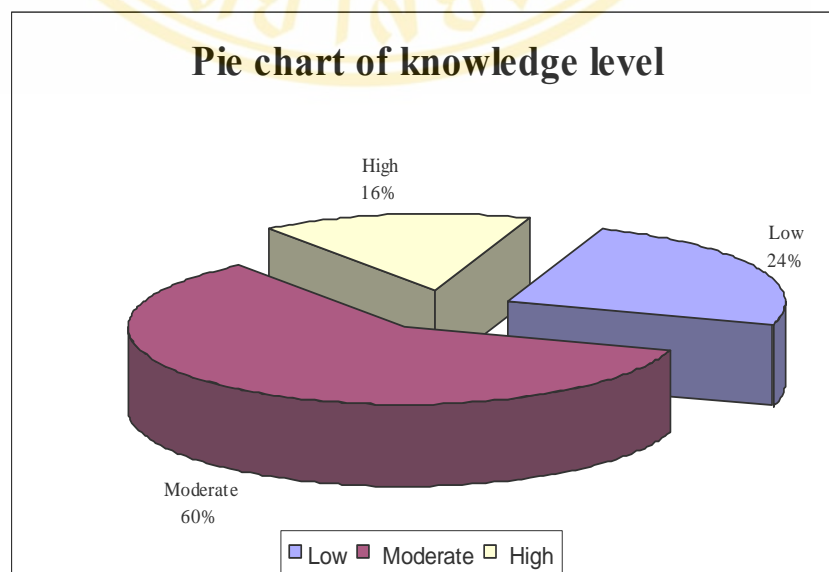
Table 5 showed that majority 62.70% would like to have additional children. 43.97% of the respondents expressed their opinion in favor of one child and 38.79% would like to have two children.

In response to the number of children a family should have, majority (50.27%) of the respondents expressed their view in favor of three children. 28.11% stated that the family should have two children.

**Table 6** Discussion and Husband agreement on contraception

Characteristics	Frequency n=185	Percent (%)
<b>Discuss with husband</b>		
Yes	169	91.35
No	16	8.65
<b>Husband agreement on contraceptive use</b>		
Yes	158	85.41
No	7	3.78
Not sure	20	10.81

Table 6 showed that 91.35% of respondents discussed with the husbands concerning contraception. The majority of respondents 85.41% had husband agreement on contraceptive use and merely 3.74% had husband disagreement. The rest of the respondents (10.81%) said they were not sure about husband agreement.



**Figure 2** Pie chart showing knowledge level

### Distribution of women's knowledge on Contraception

**Table 7** Percentage distribution of respondents by knowledge items on contraceptive use

Knowledge items	Frequency n=185	Percent (%)
<b>Meaning of Family Planning</b>		
Birth control	175	94.59
Way to avoid abortion	3	1.62
Having only one child	7	3.78
<b>Knowledge about contraceptive methods</b>		
Know all methods	43	23.24
Don't know about all methods	0	0
<b>Knowledge about single Contraceptive methods (multiple answers)</b>		
Pills	185	100.00
Condom	173	93.51
IUD	111	60.00
Tubel ligation	133	71.89
Vasectomy	133	71.89
Norplant	121	65.41
Injection	185	100.0
Safe period	72	38.92
Withdrawal	61	32.97

Concerning the meaning of the contraception in table 4.6, it showed that 94.59% of the respondents understood it as birth control and other 5.4% choose the wrong answer. Regarding the knowledge about the contraceptive methods, it found that 23.24% of respondent knew all methods used in contraception. More than 90% of the respondents knew that pills, condom and injection. More than 60% of the respondents knew IUD, Tubel ligation, vasectomy and Norplant.

**Table 8** Frequency and percentage distribution of respondents by correct score of knowledge item

Characteristics	Correct answer	
	Frequency n=185	Percent (%)
1. Oral pill can cause dizziness and nausea at beginning	160	86.49
2. Injection can prevent pregnancy for three months	174	94.05
3. Women can have children again by stopping to take pill or injection	176	95.14
4. Injection should not be used in women who have diabetes and hypertension	97	52.43
5 Women still have regular menstruation while taking pill	168	90.81
6. Breast feeding is effective method to control birth spacing	89	48.11
7. Condom use can prevent pregnancy and STIs	161	87.03
8. Safe period is the most effective method to avoid pregnancy	39	21.08
9. Tubal ligation is the effective contraceptive method for women	111	60.0
10. Women can have children again after removing norplant	106	57.30

Regarding the knowledge of advantage, side effect and contraindication of using contraceptive methods, it revealed that 95.14% of respondents knew that women can have children again by stopping pill or injection and 90.81% of the respondents knew that women still have regular menstruation while taking oral pill. The percentage of correct answer was poor in the statement of Safe period is the most effective method to avoid pregnancy (21.08%)

**Table 9** Frequency and percentage distribution by score of knowledge on contraceptive use

Characteristics	Frequency n=185	Percent (%)
<b>Knowledge on Family Planning</b>		
Good (Score>80%)	29	15.68
Fair (Score 60-80%)	111	60.00
Poor (Score <60%)	45	24.32
Median= 7	QD=1	Min=2
		Max=10

The knowledge of family planning was categorized in to three groups, good (Score>80%), Fair (60-80%) and poor (score<60%).Majority of the respondents (60%) had fair knowledge, while the percentage of good and poor knowledge were 15.68 and 24.32% respectively.

**Table 10** Frequency and percentage distribution by Attitude score toward contraceptive use

Characteristics	Frequency n=185	Percent (%)
<b>Attitude toward Family Planning</b>		
Good attitude (score=>38)	149	80.54
Moderate attitude (score13-37)	36	19.46
Median=40.0	QD=3.0	Min=29.0
		Max=50.0

Regarding attitude towards contraception, majority (80.54%) of respondents have good attitude (>P75) toward contraception.19.46% of the respondents have moderate attitude (P25-P75).None of the respondents has poor attitude (<P25 ). The attitude level is assessed by percentile level dividing into good when the total score is in Q3 (>P75 ) and poor when the total score is in Q1 (P25). The moderate or fair level is in Q2 between ( P25-P75) of the total score.

**Table 11** Percentage distribution of respondents by attitude toward contraception

<b>Attitude statements</b>	<b>Frequency n=185</b>	<b>SA %</b>	<b>A (%)</b>	<b>NS %</b>	<b>D %</b>	<b>SD %</b>
1. Contraceptive use can help a couple in selecting the number of children		42.16	52.97	2.78	1.08	0
2. Birth spacing is good for mother's health		59.46	27.03	9.73	3.24	0.54
3. Contraception should be taught before getting marriage		52.97	29.73	8.11	7.57	1.62
4. Vasectomy is a safe method to prevent pregnancy		38.92	31.35	27.03	2.16	0.54
5. Discussion on contraception is shameful among the couple		1.62	7.57	2.16	29.73	58.92
6. To prevent pregnancy, the couples should use condom during having sex		30.27	52.43	15.14	1.62	0.54
7. Oral contraceptive can be used safely to avoid pregnancy		53.51	32.97	12.43	0.54	0.54
8. IUD method disturbs sexual intercourse		1.08	14.06	75.13	5.41	4.32
9. Women can still work hard after inserting Norplant		18.92	25.95	50.27	3.78	1.08
10. Most contraceptive methods have more benefit than their side-effect		38.38	49.19	8.11	3.78	0.54

### Number and percentage distribution of married women about accessibility to contraceptive methods

**Table 12** Frequency and percentage distribution of married women by source of information about contraceptive methods

Characteristics	Frequency	Percent (%)
<b>Source of contraceptive information (multiple answers)</b>		
Relative/friends	178	96.22
Health personnel	130	70.27
NGO worker	45	24.32
Radio	6	3.24
Television	23	12.43
Drug seller	5	2.70
IEC	32	17.30

Concerning the information the majority (96.22%) of respondents received information about contraception from friends and relatives. This was followed by health personnel 70.27%, NGO worker 24.32%, Television 12.43% and IEC 17.30%.

**Table 13** Frequency and percentage distribution of married women by place of contraceptive services

Characteristics	Frequency n=185	Percent (%)
<b>Know the place of contraceptive service</b>		
Yes	184	99.46
No	1	0.54
<b>Main source of contraceptive service</b>		
Maesot hospital	12	6.52
Pharmacy	3	1.63
Private clinic	13	7.07
Health center	48	26.09
Maetao clinic	78	42.39
NGO	30	16.30

About the place of contraceptive service, 99.46% of the respondents knew the place that provides contraceptive services. Majority (42.39%) received contraceptive at Maetao clinic and 26.09% from the health center.

**Table 14** Frequency and percentage distribution of married women by distance of service center

Characteristics	Frequency n=185	Percent (%)
<b>Distance from residence</b>		
<10 minutes walking distance	64	34.78
10-30 minutes walking distance	35	19.02
>10 minutes by bicycle	12	6.52
> 15 minutes by public transport	57	30.98
>15 minutes by motorcycle	16	8.70
<b>Convenience for going to service center</b>		
Convenient	171	92.93
Inconvenient	11	5.98
Not sure	2	1.09

In terms of distance from the residence to the service center, 34.78% of the women were living less than 10 minutes working distances and 92.93% of the women said that it was convenient for going to the service center.

**Table 15** Frequency and percentage distribution of married women by transportation to service center

<b>Characteristics</b>	<b>Frequency n=184</b>	<b>Percent (%)</b>
<b>Mode of transport</b>		
Walking	99	53.80
Bicycle	12	6.52
Public transport	57	30.98
Motorcycle	16	8.70

Table 15 showed that 53.80% of women went to the service center on foot. Public transport was used by 30.98% and 6.52% used bicycle.

**Table 16** Frequency and percentage distribution of married women by payment for contraceptive service

<b>Characteristics</b>	<b>Frequency n=185</b>	<b>Percent (%)</b>
<b>Payment for service</b>		
Have to pay	19	10.33
No payment	165	89.67

Regarding the payment for the contraceptive service, Majority of the respondent (89.67%) was accessible to free service.10.33% of respondents have to pay for the contraceptive services.

### Frequency and percentage distribution of respondents by contraceptive use

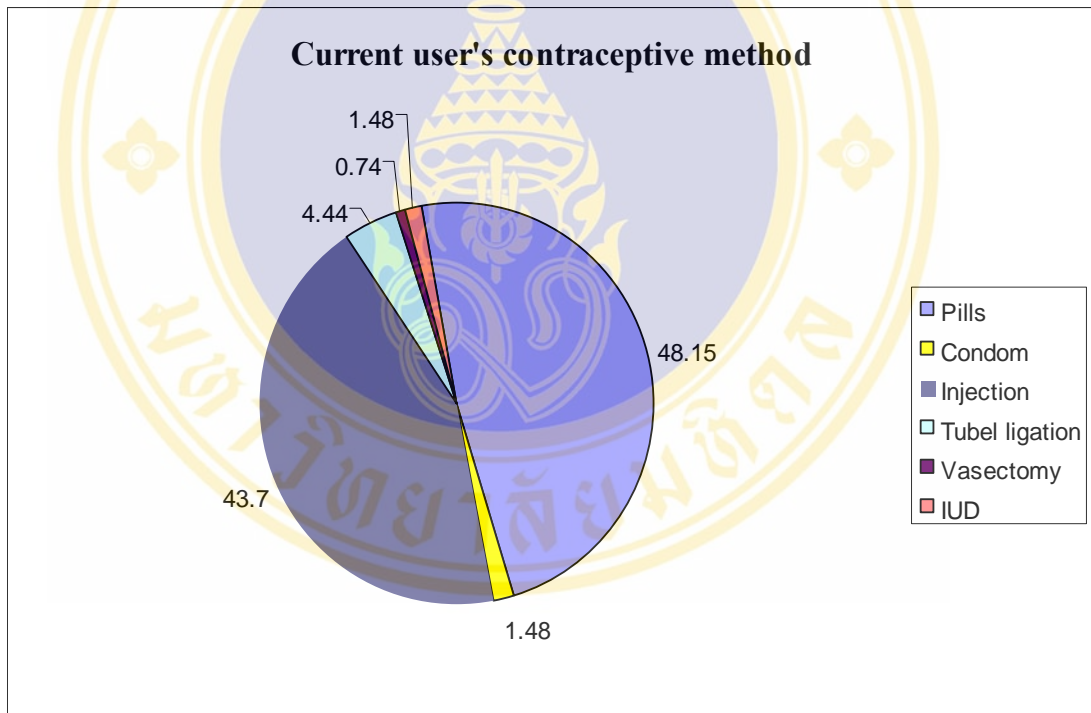
**Table 17** Frequency and percentage distribution of respondent by contraceptive use

Characteristics	Frequencies	Percent
<b>Ever use contraception</b>		
Yes	171	92.43
No	14	7.57
<b>Currently using contraceptive</b>		
Yes	135	78.95
No	36	21.05
<b>Current user's contraceptive method</b>		
Pills	65	48.15
Condom	2	1.48
Injection	59	43.70
Tubel ligation	6	4.44
Vasectomy	1	0.74
IUD	2	1.48
<b>Reason for using contraceptive</b>		
Don't want child	53	39.26
Poor economic	76	56.30
Not healthy	1	0.74
For birth spacing	5	3.70
<b>Reason for stopped using contraceptive for past user (multiple answers)</b>		
Leave it to nature	9	25.00
Want more child	25	69.44
Fear of side-effect	9	25.00
Not convenience to use	2	5.56
Health reason	3	8.33
<b>Reason for not using contraceptive for never user (multiple answers)</b>		
Leave it to nature	5	35.71
Want more child	7	50.00
Fear of side-effect	2	14.29
Husband disapprove	6	42.86
Health reason	1	7.14

Table 17 showed that 92.43% of the respondents ever use contraception and merely 7.57% never used any method. Among the ever users, 78.95% was currently using contraceptive methods, while the percentage of past users was 21.05%. Among the current users, the widely use methods were oral pills (48.15%) and Injection (43.70%). Those who used Male contraceptive methods, condom and vasectomy, were merely 1.48% and 0.74% percent.

Majority (56.30%) of the current user stated, "poor economic condition" as the reason for using contraceptive. Don't want child (39.26%) was the second reason for using contraceptive. About 3.70% of the respondents mentioned, "birth spacing" as reason for using contraceptive.

Regarding the reasons for stop using the contraceptive among the past users, 69.44% said that they want more child; 25% mentioned leaved it to nature and 8.33% had health reason. About 25% stop using contraceptive due to fear of side effect.



**Figure 3** Current user's contraceptive method

## Result of association between various independent variables of interest and dependent variables

**Table 18** Association between age, duration of marriage, occupation, income, education and current use of contraceptive

Characteristics	Current user n=135 (%)		Past & Never user n=50 (%)		$\chi^2$	P-value
<b>Age groups (years)</b>						0.462
15-24	38	71.69	15	28.31	1.546	
25-34	68	72.34	26	27.66	df = 2	
35-49	29	76.32	9	23.68		
<b>Duration of Marriage (years)</b>						0.803
<1 yr	8	66.67	3	33.33	0.992	
1-5	55	74.32	19	25.68	df = 3	
6-10	36	76.60	11	23.40		
>10	36	69.23	16	30.77		
<b>Duration of stay in Thailand (years)</b>						0.880
<1yr	13	81.25	3	18.75	0.671	
1-5	65	71.43	26	28.57	df=3	
6-10	43	72.88	16	27.12		
>10	14	73.68	5	26.32		
<b>*Religion</b>						0.708*
Buddhist	100	74.07	35	25.93		
Christian	4	80.00	1	20.00		
Islam	30	69.77	13	30.23		
Hindi	1	50.00	1	50.00		
<b>*Occupation of the respondents</b>						0.561*
Housewife	49	69.01	22	30.99		
Shop keeper	7	53.85	6	46.15		
Factory worker	53	81.54	12	18.46		
Laborer	24	70.59	10	29.41		
Service holder	2	100.0	0	0		
<b>Husband Occupation</b>						0.200
Shop keeper	12	63.16	7	36.84	5.983	
Factory worker	52	81.25	12	18.75	df=4	
Construction worker	26	78.79	7	21.21		
Laborer	39	66.10	20	33.90		
Others	6	60.00	4	40.00		
<b>Family Income</b>						0.159
<4000 B per month	52	67.53	25	32.47	1.980	
=>4000 B per month	83	76.85	25	23.15	df=1	
<b>*Educational Level</b>						0.621*
No education	10	58.82	7	41.18		
Primary school	54	73.97	19	26.03		
Secondary school	42	72.41	16	27.59		
High school or higher	29	78.37	8	21.63		

\* Fisher's exact test

Table 18 presented the practice of contraceptive method among the respondents by their socio-demographic characteristic. It revealed that the highest percentage of using contraceptive was among 25-34 age groups with statistically not

significant at p-value 0.462. The married women who had duration of married 6-10 years were using contraceptive methods more than the other groups. There was no significant relationship of contraceptive used between duration of married at p-value 0.803.

Concerning religion, Buddhist is majority. Since, there is more than 20% of the cells that have expected count less than 5, the chi-square test cannot be applied, so Buddhist and Hindus were grouped together and Christian and Muslims were grouped together and Fisher exact test performed. The relationship between Religion and contraceptive use was not found significant. (p-value = 0.708)

Concerning occupation, there is more than 20% of the cells that have expected count less than 5, the chi-square test cannot be applied, so Housewives were kept in different groups and Others were grouped together and Fisher exact test performed. The relationship between occupation and contraceptive use was not found statistically significant. (p-value = 0.561)

Regarding the contraceptive practice among married women by family income, it was found that those who had income 4,000 and more Baht were using contraceptives more than the other group. There was no significant association between family income groups and contraceptive use at p-value 0.159.

Concerning education, there is more than 20% of the cells that have expected count less than 5, the chi-square test cannot be applied, so no education and primary education were grouped together, secondary and higher education were grouped together and Fisher's exact test performed. The relationship between education and contraceptive use was not found significant. (p-value = 0.621)

**Table 19** Relationship between living children, desire for additional children and contraceptive use

Characteristics	Current user n=135 (%)		Past & Never user n=50 (%)		$\chi^2$	P-value
<b>Presence of Living children</b>						<b>0.098</b>
Yes	112	75.68	36	24.32	2.741	
No	23	62.16	14	37.84	df=1	
<b>Number of Living children</b>						0.707
1 child	52	73.24	19	26.76	0.694	
2 children	24	75.00	8	25.00	df=2	
3 or more children	36	80.00	9	20.00		
<b>*Want additional child</b>						0.396*
Yes	82	70.69	34	29.31		
No	52	77.61	15	22.39		
Not sure	1	50.00	1	50.00		
<b>Number of additional child</b>						0.226
1 child	39	76.47	12	23.53	1.468	
2 or more children	43	66.15	22	33.85	df=1	

Table 19 showed that those who had living children among them 75.68% were current user and 24.32% were past and never user. On the other hand, those who didn't have child among them 62.16% were current user and 37.84% were past and never user. The result showed that there was no significant association.

(p-value=0.098)

Regarding the number of living children it was found that, those who had one child among them, 73.24% were current user and 26.76% were past and never user. The percentage was higher among the current users when the number of children increased. But there was no significant association between number of living children and contraceptive use.

The study also revealed that those who had desire for additional children among them 70.69% were current user and 29.31% didn't use contraception. Those

who did not desire for additional children, 77.615 were current user. The relationship between additional child and contraceptive use was not found significance. Since, there is more than 20% of the cells that have expected count less than 5, the chi-square test cannot be applied, so no and not sure was grouped together and Fisher exact test performed. The relationship between additional child and contraceptive use was not found significance. (p-value = 0.396)

Regarding the number of additional children, those who had desire for 1 additional child, among them, 76.47% were currently using contraception. Those that had desire for two or more additional children, 66.15% were current user and 33.85% didn't use contraception. However, the relationship between number of additional child and contraceptive use was not found significant (p-value = 0.226).

**Table 20** Association between husband agreement and contraceptive use

Characteristics	Current user n=135 %		Past & Never user n =50 %		$\chi^2$	P-value
<b>Husband agreement</b>						0.000
Agree	123	77.85	35	22.15	17.404	
Disagree	1	14.29	6	85.71	df=2	
Not sure	11	55.00	9	45.00		

Table 20 showed the relation between the husband agreement of the respondents on contraception and contraceptive use. Those who had husband's agreement among them 77.85% were current user and 22.15% were past and never user. Those who had husband disagreement, 85.71% were non-users. Among the respondents who answer not sure, 55% is current user and 45% is past and never user. The relationship between husband agreement on contraception and contraceptive use found to be statistically significant. (P-value=<0.001)

**Table 21** Association between knowledge of respondents with contraceptive use

Characteristics	Current user n=135 %		Past & Never user n=50 %		$\chi^2$	P-value
<b>Knowledge</b>						0.064
Good (Score>80%)	21	72.41	8	27.59	5.489	
Fair (Score60-80%)	87	78.38	24	21.62	df =2	
Poor (Score<60%)	27	60.00	18	40.00		

Table 21 showed the relation between the knowledge of the respondents on contraception and contraceptive use. Those who had good knowledge among them 72.41% were current user .Those who had fair knowledge among them 78.38 % were current user. In poor knowledge group, 60% were current user and 40% were past and never user. However, the relation was not found statistically significant. (P-value = 0.064)

**Table 22** Association between attitude of respondents and contraception

Characteristics	Current User n=135 %		Past & Never user n=50 %		$\chi^2$	P-Value
<b>Attitude</b>						0.595
Good (score=>38)	110	73.83	39	26.17	0.282	
Moderate (score 13-37)	25	69.44	11	30.56	df=1	

Regarding the attitude of the respondents toward contraception, 73.83% of current user had good attitude towards contraception, which was much higher than that of past and never users (26.17%).Those who had moderate attitude, 69.44 % were current user and 30.56% were past and never user. The association between attitude of the respondents toward contraception and current use of contraceptive was not found statistically significant. (P-value = 0.595)

**Table 23** Association between distance of service center and Contraceptive use

Characteristics	Current User n=135	Past & Never user % n=50 %	$\chi^2$	P-Value
<b>Distance from residence</b>				0.256
<10 minutes walking distance	49	76.56 15	23.44	5.316 df=4
10-30 minutes walking distance	25	73.53 9	26.47	
>10 minutes by bicycle	9	75.00 3	25.00	
> 15 minutes by public transport	44	77.19 13	22.81	
>15 minutes by motorcycle	8	50.00 8	50.00	
<b>*Convenience for going to service center</b>				0.748*
Convenient	126	73.68 45	26.32	
Inconvenient	7	63.64 4	36.36	
Not sure	2	100.0 0	0	

\* Fisher’s exact test

Among the respondents, who stated that going to the service center was convenient, 73.68% were current users. Those who said inconvenient, 63.64% were current user. Since, there is more than 20% of the cells that have expected count less than 5, the chi-square test cannot be applied, so inconvenient and not sure was grouped together and Fisher exact test performed. There was no significant association.

**Table 24** Association between payment for service and Contraceptive use

Characteristics	Current User n=135		Past & Never user n=50		$\chi^2$	P-Value
<b>Pay for service</b>						0.031
Have to pay	10	52.63	9	47.37	4.664	
No payment	125	75.76	40	24.24	df=1	

Concerning payment for the contraceptive service, 52.63% of the respondents were currently using and the rest 47.37% were past and never user. Those who were accessible for free service, 75.76% were current user.

Multiple logistic regressions were performed to considering many independent variables related to the contraceptive use as shown in table 4.24.

The following significant predictors for  $\chi^2$  are included in logistic analysis.

- Husband's agreement on contraception
- Payment for contraceptive service

The following important independent variables; Duration of marriage, respondent's occupation, income, education, having living child, husband agreement, knowledge and payment for contraceptive service, were also included in logistic analysis.

After adjusted for other factors in the model, married migrant women who didn't have husband agreement; they were less likely to use contraceptive, only 0.19 time compared to those who had agreement. Concerning payment, married migrant women who had to pay for service were only 0.23 time likely to use compared to no payment group.

**Table 25** Adjusted odd ratio for contraceptive use using Multiple Logistic Regressions

Adjusted Independent Variables	Odds Ratio	95%CI for OR		P-value
		Lower	Upper	
<b>Marriage Duration</b>				0.296
=<5 yr	1.63	0.65	4.09	
>5yr	1.00			
<b>Occupation</b>				0.251
House wife	0.62	0.27	1.41	
working	1.00			
<b>Income</b>				0.233
<4000	0.63	0.29	1.35	
=>4000	1.00			
<b>Education</b>				0.622
No and primary	0.83	0.40	1.73	
Secondary & high	1.00			
<b>living child</b>				0.027
No child	0.27	0.09	0.86	
Have child	1.00			
<b>Husband agree</b>				0.001
Not agree/Not sure	0.19	0.08	0.49	
Agree	1.00			
<b>Knowledge</b>				0.151
Low	0.55	0.24	1.25	
High & Mod	1.00			
<b>Payment</b>				0.008
Pay	0.23	0.08	0.69	
No pay	1.00			

## CHAPTER 5

### DISCUSSION

The cross section study was designed to explore the factors related to the contraceptive use among the married migrant women of Maesot district of Thailand. A total of 192 women of 15-49 years were interviewed by the researcher and two trained interviewer. Out of 192 collected data, 185 were used for analysis. The rest 7 data were discarded for missing and multiple responses. There are many factors that are related to the contraceptive use, but this study focused only some selected factors such as socio-demography, knowledge, attitude, accessibility and availability.

#### **5.1 The contraceptive prevalence rate (CPR) among the married women of reproductive age in Maesot, Tak**

The study depicted that 72.97 %-married women of 15-49 years were using contraceptive at the time of interview. This result is close to the result of Maesot Hospital sentinel health Survey report 2005, which was 75.7%. It also revealed that the most popularly used family planning method was oral pill (48.15%). Shabbir I S (33) and Vanhnolrath P (36) also found that the mostly use method was oral pill, though the percentage of use varies. The widely acceptance of oral pill in different countries by the married women may be due to its availability and easy to use. A study of Kamalanathan JP (35) also showed that 55 % of the acceptors used pill. In this study, it found that the injection was the second frequently use method (43.70%). The acceptance of female sterilization was (4.44 %) which is also close to the national finding (4.7%). Regarding the reason for contraceptive use, many reasons such as “Poor economic condition: “Not healthy” and “Don’t want child” were taken into account in this study. Majority (56.30%) current users stated, “Poor economic condition” as a reason for contraceptive use.

Regarding the reason for not using contraceptive among the past users, it was found that (25%) stated, "Leave it to nature". This finding is different from the finding of Vanhnolrath P (36), who found 68.8 % of the respondents stated the same statement. About (69.44%) of respondents wanted to have more children; this finding is also different from the finding of Vanhnolrath P (36), which was about 38 %. This difference is may be due to the difference of socio-cultural context between LAO PDR and Myanmar.

Concerning the reason for not using contraceptive among the never users about (35.71%) stated, "Leave it to nature". This finding is slightly lower than the finding of Piseth S (32), which was 41.7%. Half (50%) of never user stated that "Want more children" as a reason for not using contraceptive. The finding is the same as the finding of Piseth S (32), which was 50% also.

## **5.2 Socio-demographic characteristics**

The results of this study revealed that age of the married women, duration of marriage, occupation, income, education, presence of living children, number of living children and desire for additional children were not found significant relationship with contraceptive use. On the other hand, husband agreement on contraception was significantly associated with the contraceptive use. In the rural context of Myanmar, male dominance is a usual picture.

The findings of this study showed that the non-users percent (28.31) were highest in the age group 16-24 years, while the percentage of users was (72.34%) and (76.32%) in the age group 25-34 years and 35-49 years respectively. Therefore, we can conclude from this finding that young age group is less likely to practice family planning than that of elder age group. Lower level of use among the younger women is usually attributed to their desire to have children. Similar result on relationship between age of the married women and family planning practice was found in the study of Vanhnolrath P (36) and the relation was statistically significant.

Duration of marriage plays a considerable role in the contraceptive use. The age, at which women marry, is a major factor for population growth. Late marriage permits women to achieve more education, to train for useful career, to earn money and to contribute in a more meaningful way to family, community and nation. The result of the study revealed that in the group of duration of marriage less than one year, (66.67 %) were the current users. In contrast, (25.68 %) of non-users had duration of marriage 1-5 years and the association between duration of marriage and contraceptive use was not found statistically significant. This finding was similar to the result from Banouvong V (37), who concluded that the longer the duration of marriage, the higher the use of contraceptive.

Duration of stay in Thailand was an important factor in the contraceptive use. The result of the study revealed that (81.25%) of the users had duration of stay in Thailand less than one year. In contrast, (25.68 %) of non-users had duration of stay 1-5 years and 27.12% had more than 5 years. The contraceptive use was higher among new comers as they have to adapt a new environment and have to save money. The longer the duration of stay, the lesser the use of contraceptive among the migrant women. However, the association between duration of stay and contraceptive use was not found significant.

Regarding the occupation it found that in the factory workers group, majority (81.54 %) was practicing family planning; on the other hand in the laborer group (70.59%) was using contraceptive. In the housewife group, the percentage of non-users was 30.99%. However, the relation between occupation and contraceptive use did not find significant. The percentage of housewives was (38.8%), which was slightly higher than the study of Piseth S (35.3%) (32). The difference in the percentage of occupation may be due to difference in socio-cultural context. Concerning husband occupation, (34.59 %) were factory workers and 31.89% were Laborer. However, there was no significant association found between occupation of husband and contraceptive use.

Regarding monthly family income, 67.53% from income group less than 4000 baht were currently using and in the income group more than 4000 Baht, majority (76.85%) were current users. There was no significant association found between income and contraceptive use. It should be mentioned that Vanhnolrath P (36) also did not find any significant association between monthly income and family planning practice.

Concerning education of the respondents, it found that majority of the respondents had primary education (39.46%). Among the respondents of primary education group, there were (73.97%) current users. In no education group, 58.82% were currently using and 78.37% from those who had high school or higher education were using contraceptive. However, the association between education status of the respondents and contraceptive use was not significant. Piesth S (32) and Md Yunus (34) also found no association like the present study.

Regarding the presence of living children, the study revealed that (75.68%) of current users belonged to the group, having living children. In contrast, (37.84 %) of non-users belonged to the group, having no child. The relationship between presence of living children and contraceptive use was not significant. It can conclude from the finding of this study that majority of the non-users don't practice family planning as they want children.

Not only the presence of living children, but also the number of living children is an important factor for contraceptive use. The result of this study showed that among those who had 1 child, (73.2 %) were current users, 80% of the respondents who had 3 or more child were using contraceptive and the Laing JE (38) revealed that a woman who had several children was likely to be more motivated to continue contraception and practice contraceptive more effectively than a woman who had relatively fewer children. Significant association was not found between number of living children and contraceptive use. But Win H (28) and Vanhnolrath P (36) found significant association between number of living children and acceptance of family planning.

Regarding desire for additional children, it showed that the respondents, who opined to have additional children in future among them, (70.69%) were current users. In contrast, the respondents who said, “No” regarding the need of additional children in future among them, 77.61% were current users. The relationship between desire for additional children and contraceptive use was not statistically significant.

Concerning the number of additional children, the study explored that among the respondents who opined to have one additional child, (23.53 %) were non-users and those were in favor of two or more children, (33.85 %) of them were non-users. However, the association between number of additional children and acceptance of family planning was not found statistically significant. It should be mentioned here that so far literature was reviewed among those none of the studies explored for the number of additional children.

Husband agreement on contraception play important role in contraceptive use. Those who had husband agreement, 77.85% were current users and in contrast 85.71% were non-users from husband disagreement group. The relationship between husband agreement and contraceptive use was found to be statistically significant. Syed Inram shabbir (33), study acceptance of contraceptive among married women of reproductive age in Thailand 2000 and revealed that the women in the group who did not have their husband's agreement had very low contraceptive use.

### **5.3 Knowledge of married women on family planning**

Concerning the knowledge of the married women on contraception, it found that (23.24 %) knew about the all modern contraceptive methods and most of the respondent knew about the contraceptive methods.

Regarding the level of knowledge, the result from this study found that (15.68%) had good knowledge. The study of Vanhnolrath P (36) found that (34.3%) respondents had good knowledge. Moreover, the present study revealed that (60%) had fair and (24.32 %) had poor knowledge. The result from the work of Nhan DT

(39) showed that the percentage of fair and poor knowledge was (48.8) and (32.8) respectively. The higher percentage of fair knowledge level and the lower percentage of poor knowledge level of the present study than that of Nhan DT (39). It also found that among the respondents who had poor knowledge, (40 %) were non-users. The association between knowledge and acceptance of family planning was not significant. Piseth S (32) did not find any significant difference as present study.

#### **5.4 Attitude of the married women towards family planning**

Considering the investigation of married women attitude, it revealed that about (80.54 %) respondents had good attitude and (19.46%) had moderate attitude. The result also showed that among the respondents who had good attitude, (73.83%) were current users and among the respondents who had moderate attitude, (69.44 %) were current users. Nhan DT (39) had found significant association between attitude of married women toward family planning and acceptance family planning.

#### **5.5 Accessibility, availability and source of knowledge of contraceptive services among married women**

To explore the accessibility and availability of contraceptive service, questions were asked regarding place, distance, convenience, mode of traveling, and source of knowledge about the methods. It found that (99.46 %) of the respondents knew the place of service It should be mentioned here that Piseth S (32) also found that 100% married knew the place of service delivery.

Concerning the distance from residence to contraceptive service center, it found that (53.8 %) of the respondents reside less than 30 minutes working (3 km) distance from the service center. This percentage is less than the finding of Piseth S (32) who found 71.1% respondents of his study population reside within 1-2 km from the service center, and the association was statistically significant. The average distance that women must travel to the nearest clinic providing family planning services varies greatly, ranging from one kilometer in Egypt to 19 kilometer in

Uganda. However, this study did not find any significant association between distance from the residence to service center and contraceptive use.

In terms of convenience for going to the service center, it was found that (92.93%) of respondents opined that it was convenient to go to service center. The study of Vanhnolrath P (36) found that 89.1% opined that it was convenient to go to service center. However, the finding of the present study was not statistically significant.

Regarding mode of traveling to service center, it was found that (53.80%) of respondents went to service center by walking. This finding is close to the finding of Vanhnolrath P (36) who found that 57.9% of respondents went to service center by walking.

Concerning payment for the service, 10.32% of the respondents have to pay for the service. Among them (52.63%) were current users. Those who were accessible to free service, 75.76% were current users. The relationship between payment for the service and contraceptive use found to be significant.

## CHAPTER 6

### CONCLUSION AND RECOMMENDATION

#### 6.1 Conclusion

Family planning is one of the essential elements of primary health care and plays a significant role in health and socio-economic development. This study has highlighted some of the factors related to the contraceptive use in Maesot, official cross border town in Thai-Myanmar border. In particular, it has shown how the socioeconomic characteristics of the sampled married migrant women relate to contraceptive use. The results indicate that 72.97% of the respondents were currently using contraceptive, and the finding is consistent with sentinel surveillance data of Maesot hospital, 2005 finding (40).

The result of this study revealed that age of the married women, duration of marriage, occupation, income, education, presence of living children, number of living children and desire for additional children were not found significant relationship with contraceptive use. On the other hand, Husband agreement on contraception was significantly associated with the contraceptive use. Long term and permanent methods had limited use. The main reason for contraceptive use was, “poor economic condition”. On the other hand, the majority of the non-users said want more child as a reason for not using contraceptive.

Among the respondents who had poor knowledge and moderate attitude, the percentage of non-users was higher. Presence of living child, number of living children and desire for additional children had no significant relationship with contraceptive use.

The study revealed that there was significant relationship between payment for the service and contraceptive use. However, no significant association found with regard to place of service, distance and convenient to go to the service center.

It can be inferred from the findings of the survey that family members, friends and neighbors of the respondents have considerable influence on the female respondent's use of contraception. Thus, peer education strategy of World Vision foundation Thailand and MAP foundation and trainings on family planning provided to Peer Trainers and Community Health Volunteers who are family members or neighbors of potential family planning users were appropriate to promote family planning among target beneficiaries. Moreover, health staff and health talk have a positive effect on contraceptive use. It can be seen that 70.27% of the respondents said that they got information concerning contraception from health workers.

## **6.2 Recommendation**

In this study according to the efficiency of health care policy in Thailand, the effective and dynamic family planning program have increased contraceptive use among migrant married women. But as the number of migrant women of reproductive age is increasing every year, there is a need to maintain and expand a good quality of contraceptive service delivery to new clients and to make it more cost effective in order to cover the increasing migrant population.

On the basis of the findings of this study the following recommendations can be made:

1. Husband agreement play important role in contraceptive use. Those who had husband's agreement among them 77.85% were current user and 22.15% were past and never user. Those who had husband disagreement, 85.71% were non-users. Among the respondents who answer not sure, 55% is current user and 45% is past and never user. Moreover, the results also shown that men shared their responsibility in family planning very low, only 2 (1.48%) used condom and one man (0.74%) practiced vasectomy. Therefore health service provider should pay attention to identify the reason for not using male contraceptive methods and efforts should be

taken to gear up counseling and health education to the men. The men should be able to understand on negative impacts of not adopting family planning and positive impacts of adopting family planning and participating in contraceptive use because family planning are also the part of them and the methods are effective and less harm to the men.

2. Attention should be given to motivate non-users who had low knowledge level because 40% from low knowledge group were non-users. Use of audio-visual media containing drama, serials and discussion on family planning should be exhibited at the health centers and NGO centers to encourage contraceptive use. Family Planning brochures, which contain messages on negative impacts of not adopting family planning and positive impacts of adopting family planning, Reproductive Health organs and their functions, mechanism of action, benefits and side-effects, how to solve problems encountered during use of each method, should be produced and distributed to the target beneficiaries.

3. Strategy should be taken to increase the use of long term and permanent methods because the result showed that use of long term and permanent methods such as IUD, Norplant and male and female sterilization were very low.

4. Although majority of the respondents were accessible to free service, some respondents have to pay for the service and it had negative effect on contraceptive use. Extensive net work and sufficient number of health workers and family planning workers from NGO is one of the important factors .To increase contraceptive use and to reduce the gap between client and service providers' communication and counseling skill of the works need to be increased. Oral contraceptive pills appeared at the top of contraceptive methods, which were being used by the respondents at the time of interview. Oral contraceptive pills distribution from NGO should be continued together with family planning counseling and referrals. Counseling to oral contraceptive pills users should address correct and regular use of pills and measures to be taken when they forget to take the pills.

5. Outreach clinics for contraceptive use should be provided to educate married migrants, both males and females, about usefulness of contraception and how to practice each contraceptive method.

6. This study identified the limited socio-demographics factor, knowledge, attitude, availability and accessibility of contraceptive use. The sample size was small and the information gathered was not conclusive. Therefore the following measures suggest for the further study.

- A study with larger sample size could be conducted in order to get more reliable and more meaningful results.
- The study should be carryout to measure the knowledge and attitude of male participation regarding practicing contraceptive methods.
- Another qualitative research should be conducted to identify the reason for not using long term and permanent methods

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## APPENDIX

### QUESTIONNAIRES

#### FACTORS RELATED TO THE CONTRACEPTIVE USE AMONG MARRIED MIGRANT WOMEN OF REPRODUCTIVE AGE IN MAESOT, TAK PROVINCE, THAILAND

Your response will be kept secret and will not be exposed to any other purpose. Your cooperation in completing the questionnaire is greatly appreciated.

Date of Interview:

Interviewer:

ID:.....

#### **Part I .Socio-demographic Characteristics**

**Please fill (√) in the blank that you think is appropriate**

1. How old are you ?.....years
2. How long have you been married?.....months/years
3. How long have you been in Thailand ?.....months/year
4. What is your religion?
  1. Buddhist
  2. Christian
  3. Muslim
  4. Hindu
  5. Others (Please specify.....)
5. What is your occupation?
  1. House wife
  2. Shop keeper
  3. Factory worker
  4. Laborer
  5. Others (Please specify.....)

6. What is the occupation of your husband?
- 1. Shop keeper
  - 2. Factory worker
  - 3. Construction worker
  - 4. Laborer
  - 5. Others (Please specify.....)
7. How much is your total monthly family income ?.....Baht
8. What is your educational level?
- 1. No education
  - 2. Primary school
  - 3. Secondary school
  - 4. High school
  - 5. College
  - 6. Others (Please specify.....)
9. Do you have any child?
- 1. Yes
  - 2. No. (Skip to Q 12)
10. How many children do you have ?.....children
11. How many sons and daughters do you have?.....  
Sons..... Daughters.....
12. Do you want to have any more children in the future?
- 1. Yes
  - 2. No (skip to Q14)
  - 3. Not sure (Skip to Q14)
13. How many sons and daughters that you want to have more?
- 1.....Son
  - 2.....Daughter
14. How many children do you think a family should have? .....
15. Have you ever discussed with your husband about using contraception?
- 1. Yes
  - 2. No
16. Do your husband agree with you for using contraception?
- 1. Yes
  - 2. No
  - 3. Not sure

**Part II. Knowledge on Contraception**

Please fill (√) in the blank that you think is appropriate.

17. What is contraception?

- 1. Birth control
- 2. Way to avoid abortion
- 3. Having only one child
- 4. Others (Please specify.....)

18. What kind of contraceptive methods do you know? (Can answer more than one)

- 1. Pill yes no
- 2. Condom yes no
- 3. IUD yes no
- 4. Tubel ligation yes no
- 5. Vasectomy yes no
- 6. Norplant yes no
- 7. Injection yes no
- 8. Safe period yes no
- 9. Others (Please specify.....)

Q.no	Statement	True	False	Don't know
19.	Oral pill can cause dizziness and nausea at beginning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	Injection can prevent pregnancy for three months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21.	Women can have children again by stopping to take pill or injection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22.	Injection should not be used in women who have diabetes and hypertension	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23.	Women still have regular menstruation while taking pill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24.	Breast feeding is effective method to control birth spacing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25.	Condom use can prevent pregnancy and STIs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26.	Safe period is the most effective method to avoid pregnancy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27.	Tubal ligation is the effective contraceptive method for women	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28.	Women can have children again after removing norplant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Part III. Attitude toward contraception**

Q.no	Statement	SA	A	NS	D	SD
29.	Contraceptive use can help a couple in selecting the number of children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30.	Birth spacing is good for mother's health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31.	Contraception should be taught before getting marriage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32.	Vasectomy is a safe method to prevent pregnancy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33.	Discussion on contraception is shameful among the couple	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.	To prevent pregnancy, the couples should use condom during having sex	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.	Oral contraceptive can be used safely to avoid pregnancy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36.	IUD method disturbs sexual intercourse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37.	Women can still work hard after inserting Norplant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38.	Most contraceptive methods are more Benefit than their side-effect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Part IV. Availability and accessibility**

Please fill (✓) in the blank that you think is appropriate.

39. From which source that you heard information about contraception?

(Answer as many as)

1. Relative/friends     2. Health personnel  
 3. NGO worker         4. Radio  
 5. Television             6. Drug seller  
 7. IEC                       8. Never heard about contraception  
 9. Others (specify...)

40. Do you know from where you can get contraception/contraceptive services?

- 1. Maesot hospital
- 2. Pharmacy
- 3. Private clinic
- 4 Health center
- 5. Mae Tao clinic
- 6. NGO
- 7. Don't know (skip to Q47)

41. How far is your house from the place to receive contraceptive service?

- 1. <10 minutes walking distance
- 2. 10-30 minutes walking distance
- 3.> 10 minutes by bicycle
- 4.> 15 minutes by public transport
- 5. >15 minutes by motorcycle
- 6. Others (Please specify...)

42. Do you think that going to contraceptive service convenient?

- 1. Convenient
- 2. Inconvenient
- 3. Not sure

43. How do you go to the service center?

- 1. Walking
- 2. Bicycle
- 3. Public Transport
- 4. Others (Please specify....)

44. Do you pay for contraceptive service?

- 1. Yes
- 2. No (skip to Q47)

45. How much do you pay? .....Baht

46. Is it expensive or not for contraceptive method?

- 1. Expensive
- 2. Not expensive

**Part V. Contraceptive use**

Please fill (√) in the blank that you think is appropriate

47. Have you ever use any contraceptive method?

1. Yes                      2.No (go to Q51 and 53)

48. Are you currently using contraception?

1. Yes                      2.No (go to Q52)

49. Which contraceptive method are you using now?

1. Pill                      2. Condom  
3. Injection              4. Tubel ligation  
5. Vasectomy              6. Norplant  
7. IUD                      8. Safe period  
9. Withdrawal              10. Others (specify.....)

50. Why did you use it?

1. Don't want baby    2. Poor economic condition  
3. Health not good    4. Others (Please specify.....)  
 (Stop interview after answering Question)

51. Why didn't you use contraceptive method? (for non-users)(answer as many as)

1. Leave it to nature    2. Want more children  
3. Fear of side-effect    4. Husband disapprove  
5. Not convenient to use    6. Don't know where service given  
7. Other (Please specify.....)

52. Why did you stop using contraceptive method? (for previous users)  
 (Answer as many as)

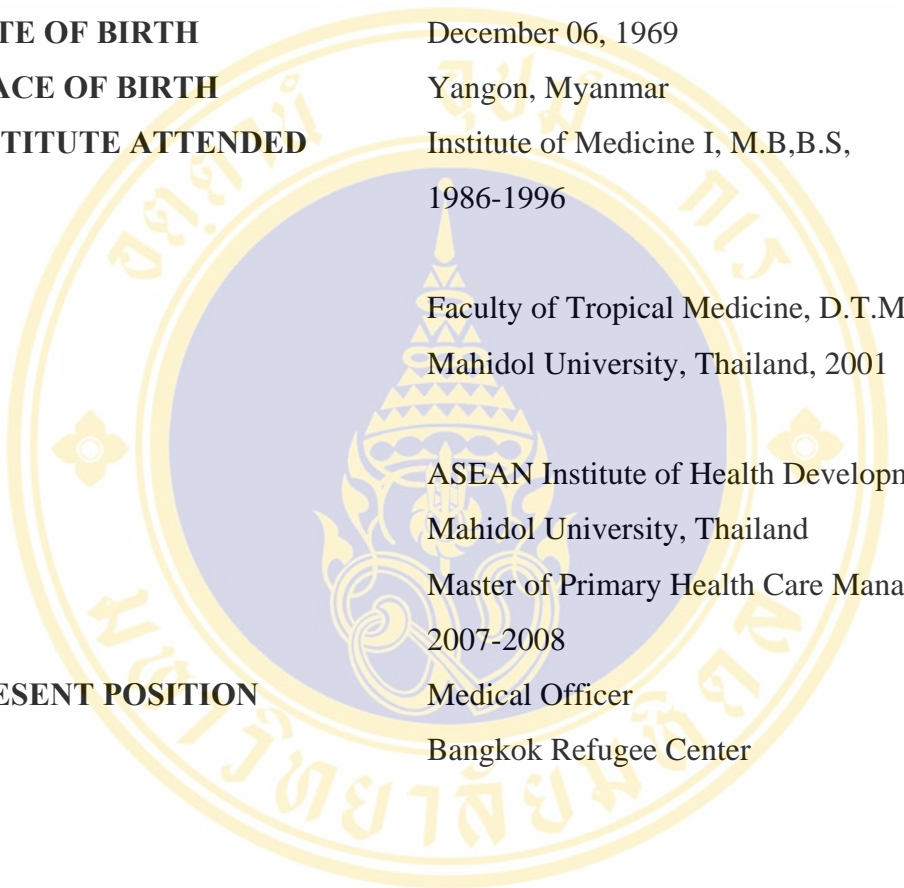
1. Leave it to nature    2. Want more children  
3. Fear of side-effect    4. Husband disapprove  
5. Not convenient    6. Don't know where service given  
7. Other (Please specify.....)

53. If you intend to practice contraceptive in the future, from where would you like to get contraceptive?

1. Maesot hospital  
2. Pharmacy  
3. Private clinic  
4. Health center  
5. Mae Tao clinic  
6. NGO

Stop interview.

## BIOGRAPHY



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